# Hammer drill

## Item No.: 28220

## Model No.: 2622


# Manual for use

Please read this manual carefully before using.

# 1. Technical Specifications

| | |
|---|---|
| Item No. | 28220 |
| Model No. | 2622 |
| Rated voltage | 230 V, 50 Hz |
| Rated power input | 800 W |
| Impact frequency at rated speed | 0-5500 bpm |
| No load speed | 0-1350 $min^{-1}$ |
| Impact energy | 2,8 J |
| Tool holder | SDS+ |
| Protection class | II |
| Length of electric cord | 2m |
| Drilling diameter, max.:<br>- Concrete<br>— Steel<br>— Wood | <br>26 mm<br>13 mm<br>30 mm |
| Sound power level $L_{WA}$ (dB(A)) | Rotary hammer mode:<br>$L_{WA}$: 105dB(A), K=3dB(A) |
| Sound pressure level $L_{PA}$ (dB(A)) | Rotary hammer mode:<br>$L_{pA}$: 94dB(A), K=3dB(A) |
| Vibration | Hammer drilling into concrete: $a_{h,HD}$= 14.0m/s2<br>Chiselling:<br>$a_{h,CHeq}$=13.3m/s2<br>K=1.5m/s2 |
| Weight | 3,2 kg |

# 2. Components and Controls


**Fig.1**

1. Quick change keyless chuck
2. SDS-plus quick change chuck
3. SDS-plus tool holder
4. Dust protection cap
5. Locking sleeve
6. Lock ring for rapid-change chuck
7. Rotational direction switch
8. Lock-on button for On/Off switch
9. On/Off switch
10. Release button for mode selector switch
11. Mode selector switch
12. Button for depth stop adjustment
13. Depth stop
14. Auxiliary handle

# 3. 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.Using any tool can be dangerous. Always select the right tool for the job.

## 3.1 Work area safety

- **Keep working 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, gasses or dust.** Power tools create sparks that may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

## 3.2 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 the 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 ground fault circuit interrupter (GFCI) or an earth leakage circuit breaker (ELCB).** Use of a GFCI or an ELCB reduces the risk of electric shock.

## 3.3 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.
- **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 energizing 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 that is 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 jewelry. Keep your hair, clothing, and gloves away from moving parts**. Loose clothes, jewelry, 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.

## 3.4 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 is designed.
- **Do not use the power tool if the switch does not turn it on or 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, 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.

### 3.5 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.

# 4. Power Tool-specific Safety Warnings

- **Wear hearing protection.** Exposure to noise can cause hearing loss.
- **Use the auxiliary handle supplied with the power tool**. Loss of control over the power tool can cause personal injury
- **Use suitable detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance.** Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
- **When working with the power tool, always hold it firmly with both hands and provide for a secure stance.** The power tool is guided more secure with both hands.
- **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- **Do not work materials containing asbestos.** Asbestos is considered carcinogenic.
- **Take protective measures when dust can develop during working that is harmful to one's health, combustible or explosive.** Example: Some dusts are regarded as carcinogenic. Wear a dust mask and work with dust/chip extraction when connectable.
- **Keep your workplace clean.** Blends of materials are particularly dangerous. Dust from light alloys can burn or explode.
- **Always wait until the power tool has come to a complete stop before placing it down.** The tool insert can jam and lead to loss of control over the power tool.
- **Do not use the power tool with a damaged cord. Do not touch the damaged cord and pull the plug from the outlet when the cord is damaged while working**. Damaged cords increase the risk of an electric shock.

# 5. Assembly

- **Before any work on the power tool itself, pull the mains plug.**

## 5.1 Auxiliary Handle

- **Operate your power tool only with the auxiliary handle ⑭.**

### Rotating the Auxiliary Handle

The auxiliary handle⑭ can be set to any position for a secure and low-fatigue working posture.

Turn the bottom part of the auxiliary handle⑭ in counterclockwise direction and swivel the auxiliary handle⑭ to the desired position. Then re-tighten the bottom part of the auxiliary handle⑭ by turning in clockwise direction.

Pay attention that the clamping band of the auxiliary handle is positioned in the groove on the housing as intended for.

### Adjusting the Drilling Depth

The required drilling depth can be set with the depth stop⑬.

Press the button for the depth stop adjustment⑫ and insert the depth stop into the auxiliary handle⑭.

The knurled surface of the depth stops⑬ must face downward.

Insert the SDS-plus drilling tool to the stop into the SDS-plus tool holder③. Otherwise, the movability of the SDS-plus drilling tool can lead to incorrect adjustment of the drilling depth.

Pull out the depth stop until the distance between the tip of the drill bit and the tip of the depth stop correspond with the desired drilling depth.

## 5.2 Selecting Drill Chucks and Tools

For hammer drilling and chiseling, SDS-plus tools are required that are inserted in the SDS-plus drill chuck.

For drilling without impact in wood, metal, ceramic and plastic as well as for screwdriving and thread cutting, tools without SDS-plus are used (e. g., drills with cylindrical shank). For these tools, a keyless chuck or a key type drill chuck are required.

Note: Do not use tools without SDS-plus for hammer drilling or chiseling! Tools without SDS-plus and their drill chucks are damaged by hammer drilling or chiseling.

The SDS-plus quick change chuck② can easily be replaced against the quick change key- less chuck① provided

## 5.3 Removing/Inserting the Quick Change

### Removing the Quick Change Chuck

Pull the lock ring for the quick change chuck⑥ toward the rear, hold it in this position and pull off the SDS-plus quick change chuck② or the quick change keyless chuck① toward the front.

After removing, protect the replacement chuck against contamination.

### Inserting the Quick Change Chuck

Before inserting, clean the quick change chuck and apply a light coat of grease to the shank end.

Grasp the SDS-plus quick change chuck② or the quick change keyless chuck① completely with your hand. Slide the quick change chuck with a turning motion onto the drill chuck mounting until a distinct latching noise is heard.

The quick change chuck is automatically locked. Check the locking effect by pulling the quick change chuck.

## 5.4 Changing the Tool

The dust protection cap④ largely prevents the entry of drilling dust into the tool holder during operation. When inserting the tool, take care that the dust protection cap④ is not damaged.

- **A damaged dust protection cap should be changed immediately. We recommend having this carried out by an after-sales service.**

### Inserting SDS-plus Drilling Tools

The SDS-plus drill chuck allows for simple and convenient changing of drilling tools without the use of additional tools.

Insert the SDS-plus quick change chuck②.

Clean and lightly grease the shank end of the tool.

Insert the tool in a twisting manner into the tool holder until it latches itself.

Check the latching by pulling the tool.

As a requirement of the system, the SDS-plus drilling tool can move freely. This causes a certain radial run- out at no-load, which has no effect on the accuracy of the drill hole, as the drill bit centers itself upon drilling.

### Removing SDS-plus Drilling Tools

Push back the locking sleeve⑤ and remove the tool.

### Inserting Drilling Tools without SDS-plus

**Note**: Do not use tools without SDS-plus for hammer drilling or chiseling! Tools without SDS-plus and their drill chucks are damaged by hammer drilling or chiseling.

Insert the quick change keyless chuck①**.**

Firmly hold the retaining ring⑥ of the quick change chuck. Open the tool holder by turning the front sleeve⑤ until the tool can be inserted. Tightly hold the retaining ring⑥ and firmly turn the front sleeve⑤ in the direction of the arrow until a distinct latching noise can be heard.

Check the tight seating by pulling the tool.

**Note:** If the tool holder was opened to the stop, then the latching noise possibly may be heard while closing the tool holder and the tool holder will not close.

In this case, turn the front sleeve⑤ once in the opposite direction of the arrow. Afterwards, the tool holder can be closed (tightened) again.

Turn the mode selector switch⑪ to the “Drilling” position.

### Removing Drilling Tools without SDS-plus

Firmly hold the retaining ring⑥ of the quick change chuck. Open the tool holder by turning the front sleeve⑤ in the direction of the arrow until the tool can be removed.

# 6. Operation

## 6.1 Starting Operation

• **Observe correct mains voltage! The voltage of the power source must agree with the voltage specified on the type plate of the power tool.**

### Setting the Operating Mode

The operating mode of the power tool is selected with the mode selector switch⑪.

**Note:** Change the operating mode only when the machine is switched off! Otherwise, the machine can be damaged.

To change the operating mode, push the release button⑩ and turn the mode selector switch⑪ to the requested position until it can be heard to latch.

Position for **hammer drilling** in concrete or stone

Position for **drilling** without impact in wood, metal, ceramic and plastic as well as for screwdriving and thread cutting

**Vario-Lock** position for adjustment of the chiseling position

The mode selector switch⑪ does not latch in this position.

Position for **chiseling**

### Reversing the Rotational Direction

The rotational direction switch⑦ is used to reverse the rotational direction of the machine. However, this is not possible with the On/Off switch⑨ actuated.

- **Right rotation:** Turn the selector switch for drilling/hammer drilling⑦ on both sides to the stop in the position R.
- **Left rotation:** Turn the selector switch for drilling/hammer drilling⑦ on both sides to the stop in the position L .

Set the direction of rotation for hammer drilling, drilling and chiseling always to right rotation.

### Switching On and Off

To **start** the machine, press the On/Off switch⑨.

To **lock** the On/Off switch, keep it pressed and additionally push the lock-on button⑧.

To **switch off** the machine, release the On/Off switch⑨**.** When the On/Off switch⑨ is locked, press it first and then release it.

### Setting the Speed/Impact Rate

The speed/impact rate of the switched on power tool can be variably adjusted, depending on how far the On/Off switch⑨ is pressed.

Light pressure on the On/Off switch⑨ results in low speed/impact rate. Further pressure on the switch increases the speed/impact rate.

### Overload Clutch

· **If the tool insert becomes caught or jammed, the drive to the drill spindle is interrupted. Because of the forces that occur, always hold the power tool firmly with both hands and provide for a secure stance.**

· **If the power tool jams, switch the machine off and loosen the tool insert. When switching the power tool on with the drilling tool jammed, high reaction torques can occur.**

## 6.2 Working Instructions

### Changing the Chiseling Position (Vario-Lock)

Insert the chisel into the tool holder.

Turn the mode selector switch⑪ to the “Vario-Lock” position (see “Setting the Operating Mode” ).

Turn the tool holder to the desired chiseling position.

Turn the mode selector switch⑪ to the chiseling position. The tool holder is now locked.

For chiseling, set the rotation direction to right rotation.

### Inserting Screwdriver Bits

·**Apply the power tool to the screw/nut only when it is switched off.** Rotating tool inserts can slip off.

To work with screwdriver bits, a universal bit holder with SDS-plus shank (accessory) is required.

Clean the shank end of the adapter shank and apply a light coat of grease.

Insert the universal bit holder with a turning motion into the tool holder until it automatically locks.

Check the locking effect by pulling the universal bit holder.

Insert a screwdriver bit into the universal bit holder. Use only screwdriver bits that match the screw head.

To remove the universal bit holder, pull the locking sleeve⑤ toward the rear and remove the universal bit holder out of the tool holder.

# 7. Meaning of symbols on labels


| | |
|---|---|
| CE | Meets relevant EU requirements. |
| | Electrical waste, see below. |
| | Second class protection equipment.<br>Double insulation. |
| | Use certified eye and ear protection with a sufficient level of protection. |
| | Read the instructions before use. |

# 8. Disposal of waste

## Packaging materials

Dispose of packaging materials in the appropriate container for sorted waste.

## Unusable power tool

According to EU Directive 2012/19, unusable electrical equipment must not be disposed of in municipal waste, but must be submitted for environmentally friendly disposal to the collection of electrical equipment. Information on collection points for electrical equipment and collection conditions can be obtained at the municipal office or from the seller.

# EC Declaration of Conformity

Manufacturer Levior s.r.o. • Tovačovská 3488, CZ-750 02 Přerov declares that the subsequently marked devices, based on their concept and construction, as well as the designs listed on the market, meet the requirements of the European Union listed below. This declaration is issued under the sole responsibility of the manufacturer.

**Subjects of declaration-product identification:**

Product: Hand Held Hammer Drill

Model No.: 2622

Item No.: 28220

comply with the following harmonized standards, including their amending annexes, if any, by which conformity with the following harmonization provisions is declared:

**2006/42/EC:**

EN 62841-1:2015; EN IEC 62841-2-6:2020+A11; AfPS GS 2019:01 PAK

**2014/30/EU:**

EN 55014-1:2017+A11; EN 55014-2:2015; EN IEC 61000-3-2:2019; EN 61000-3-3:2013+A1

**2011/65/EU (EU) 2015/863**

The completion of technical documentation 2006/42/EC was performed by Ondřej Marek with his registered office at the manufacturer's address.

The technical documentation (2006/42/EC) is available at the manufacturer's address.

**Place and date of issue of the EC declaration of conformity:** Přerov, 30.5.2023

Person authorized to draw up the EC declaration of conformity on behalf of the manufacturer (signature, name, function):

LEVIOR s.r.o.®
Tovačovská 3488/28, 750 02 Přerov
IČO 61973939 DIČ CZ61973939
tel.: 581 746 256-8, fax: 581 746 255

Ondřej Marek

managing director Levior s.r.o.