

SPECIFICATIONS

Model	BP 400E
Power input	1200 W
No load speed	120-250/280 min ⁻¹
Electronic speed preselection	yes
Constant electronics	yes
Reversing	no
Protective clutch	yes
Max. impact rate	1170-2435/2800 min ⁻¹
Impact energy	4 - 8/11 J
Capacity in concrete:	
drill bit	40 mm
core cutter	100 mm
Chisel positions	44
Fixing of the tool	SDS ^{max}
Weight	7,8 kg
Safety class	II 

This power tool is supplied from single-phase alternating current mains only. It is double insulated according to EN 50144, IEC 60745 and can be connected to grounded or not grounded sockets. This power tool is radio suppressed in compliance with EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3 for radio interference.

DESIGNATION

This power tool is designed for impact drilling and chiselling in masonry, concrete and rocks with high efficiency.

MAIN COMPONENTS

1. Protective ring
2. Locking clutch
3. Screw
4. Depth gauge
5. Ventilation slots
6. Operation mode selector
7. ON/OFF switch
8. Regulator of rotational frequency
9. Overload indicator
10. Indicator for outwearing of brushes
11. Ventilation slots
12. Brush cover
13. Screw
14. Auxiliary handle

ACCESSORIES TO BE USED WITH THIS POWER TOOL

- SDS Max drill bits for concrete Ø12 to Ø40 mm
- SDS Max core cutters up to Ø100 mm
- SDS Max pointed chisels up to 600 mm long
- SDS Max chisels up to 80 mm wide
- SDS Max grooving chisels up to 32 mm wide



**FOR YOUR SAFETY
READ BEFORE USE!**




Attention, dangerous operation!

The small chip and particles separated while operating the power tool, as well touching the rotating parts of the machine could cause severe physical injuries, and noise loading from continuous operation could damage the operator's hearing if the below-mentioned instructions and those in the enclosed Safety Instructions are not observed.

Safety operation instructions and precautions

Before starting to operate the power tool, it is necessary to check the following:

- Make sure power supply voltage corresponds to the value indicated on the nameplate with technical data of the tool.
- Always check the position of ON/OFF switch. The power tool must be connected to the power supply socket only when this switch is in OFF position.

 **While operating with chisel, the operation mode selector 6 must be always in “hammer” position!**

DURING CARRYING OUT ANY WORK, PLEASE DO OBSERVE THE FOLLOWING SAFETY REQUIREMENTS:

- Unplug the machine prior to any adjustment, repair or maintenance or in case of mains drop out.
- Keep the cord away from the operating scope of the power tool.
- Do not carry and do not hang the power tool by the cord.
- In case the supply cord is damaged, it must be replaced with a special cord or assembly, available from the manufacturer or its service agent, in order to avoid hazard due to the replacement.
- Bind long hairs at the back and wear tight clothing.
- During operation, always hold firmly the machine with both hands. If the operating tool blocks, its rotation is aborted by the built-in protective clutch.
- Your body always must be in steady and stable position.
- Always use the auxiliary handle 14.
- Fix the processed detail in appropriate way.
- Use only extension cords designed for operation outdoors and appropriately marked.
- The power tool must not be operated outdoors in rainy weather, in moist environment (after rain), or in close vicinity with easily flammable liquids and gases. The working place must be well lit.

- Noise emission and vibration levels: The values, typical for the device, measured in accordance with EN 50144 are:

Sound pressure level	- 96 dB (A)
Sound power level	- 109,5 dB (A)
Weighted acceleration	- 14 m/s ²




Wear ear protectors!



Always wear protective glasses.

OPERATING DIRECTIONS

idden electric installations, gas pipes or water pipes!


 **Apply moderate pressure during operation (approximately 150-200N)! Higher pressure will not increase efficiency when drilling and chiselling, but it will lead to decreasing the operation life of the machine.**

Switching on - switching off

Switching on: Push and hold down switch 7.

Switching off: Release switch 7.

At low temperatures, demolishing with the power tool must begin only after it was operated for about 3 minutes at no-load mode.

 **Overloading the machine with 30% will cause lighting the red light-emitting diode 10. The machine must not operate continuously in this mode.**

Selecting the speed, frequency and impact energy

This is achieved by rotating the regulator 8 to position appropriate for the processed material. The constant electronics maintain the speed, the frequency and the impact energy constant, independently of the load, thus ensuring steady operation mode. It is recommended to use the operation modes listed in the table.

Application	Position of the regulator	Rotation speed	Impact rate	Single impact energy
Render / light construction materials	A-B	120-145 min ⁻¹	1150-1450 min ⁻¹	4-5 J
Chiselling tiles	C	175 min ⁻¹	1700 min ⁻¹	6 J
Bricks	D	200 min ⁻¹	1950 min ⁻¹	7 J
Drilling in concrete	E-F	225-250 min ⁻¹		8 J
Chiselling concrete	G		2800 min ⁻¹	11 J

Rotating the regulator 8 from position A to position F causes increasing the speed, the frequency and the impact energy. The indicator 9 blinks with green light.

Operation mode "High Power" can be chosen by rotating the regulator 8 in position G. The mode is distinguished with increased impact energy up to 11 J. The indicator 9 emits constant green light.

⚠ Using "High Power" operation mode is recommended only when chiselling (hammer mode), and for short-time operation in impact drilling mode. Continuous operation at impact drilling mode leads to quick fatigue and increased wearing out of the machine.

Selecting the operation mode

The switching of operation modes can be performed when the machine is not operating.

This rotary hammer can be used in two operation modes:

- Impact drilling - for drilling masonry, concrete, etc.

- Hammer mode - for chiselling and demolition.

For operation without fatigue during chiselling and demolition, the accessory can be fitted and fixed (at intervals of 8 degrees) in the desired angular position (see "Changing the chisel position").

Turn the operation mode switch 6 to the desired position:

- (1) - Impact drilling
- (2) - Changing the chisel position
- (3) - Hammer mode

Inserting of SDSmax tool

Clean and grease the shank of the accessory, before placing it into the socket!

While inserting the tool, retain the locking clutch 2 in upper (front) position.

Insert the tool into the spindle loosely.

Rotate the tool into the spindle until the grooves coincide.

After the grooves have matched, push the tool to the end (until the fixing mechanism produces an audible "click"). Check whether the tool is firmly fixed by pulling it out strongly.



During operation with a chisel, switch 6 must always be in position "hammer".

Removing the SDSmax tool (accessory)

Push the locking clutch to the end.

Take out the tool.

Changing the chisel position

- Insert the tool in the socket as it is described in point "Inserting the SDS^{max} tool".

- turn the operating mode switch 6 in position "Changing the chisel position" (in intermediate position ±90° to both operating modes).

- turn the tool by hand to the desired position.

- turn the operating mode switch 6 in position "hammer", and then turn the tool slightly to the left and to the right until it is locked.

Longer operation life of the rotary hammer and higher efficiency can be achieved only with well-grinded accessories (chisels).

Auxiliary handle

Always use the auxiliary handle.

Loosen the handle by turning it to the left. Turn the handle in the most convenient for work position, and then tighten it well.

Do not carry the machine by a loose auxiliary handle.

You can fix the drilling depth through depth gauge 4. The depth gauge 4 can be fixed by screw 3.

Maintenance and repair

These models drilling machines do not need any special maintenance.

For safety operation, keep the machine and ventilation slots always clean.

Always clean the ventilation slots 5 and 11 and the socket of the tool after work.

- Preventive maintenance

The power tool shall be submitted periodically to SPARKY authorised service centre for preventive maintenance. Preventive checks will boost the life of your power tool.

First check - after approximately 70 h operation. The functioning of the machine shall be evaluated and if necessary the machine shall be checked.

Second check - after approximately 140 h operation or upon the event of brushes wearing out.

The machine shall be cleaned thoroughly and checked. Ascertained or potential faults shall be eliminated (brushes and O-ring sealings shall be replaced).

Third check - after approximately 250 h operation or upon the event of brushes wearing out.

The machine shall be cleaned thoroughly and checked. Ascertained or potential faults shall be eliminated (brushes and O-ring sealings shall be replaced).

Fourth check - after approximately 350 h operation or upon the event of brushes wearing out.

The machine shall be cleaned thoroughly and checked. Ascertained or potential faults shall be eliminated (brushes and O-ring sealing shall be replaced).

- Built-in protection against dust

The protective ring 1 reserves the socket of the tool from contamination during operation. When insert the tool attend to not damage the protective ring.



Replace the protective ring immediately if it is damaged!

To replace the protective ring 1, pull the locking clutch 2 backward. Grip the protective ring and pull it out inclined. Place on the spindle the new protective ring slightly inclined and press it hard.

- Indication "Service maintenance"

When the red light-emitting diode 10 starts blinking while the machine continues to operate normally, replacing the brushes is necessary. After about 8 hours operation, the brushes wear out completely and the switching off activates. The machine stops, and the indicator continues to blink with red light. Deliver the machine in authorized service for replacement of brushes and preventive maintenance.

If the machine does not operate before the warning period of 8 hours is over, and the red light-emitting diode 10 blinks, that means there is no power supply to the machine or the automatic switching off or the cord are damaged.

Warranty

The guarantee period for SPARKY power tools is determined in the guarantee card.

Faults due to normal wear, overloading or improper handling will be excluded from the guarantee.

Faults due to defective materials implemented as well as defects in workmanship will be corrected free of charge through replacement or repair.

The complaints for defective SPARKY power tools will be recognised if the machine is sent back to the dealer or is presented to the authorised warranty service centre undismantled, in its initial condition.



Environmental Protection

The machine, accessories and packaging should be sorted for environmental-friendly recycling.

These instructions are printed on recycled paper manufactured without chlorine.

The plastic components are labelled for categorised recycling.