# MODEL EBS 180 7" CONCRETE FLOOR GRINDER



# **OPERATING MANUAL**



# **Operating Instruction**

# Important Safety Instructions

Important instructions and warning notices are allegorized on the machine by means of symbols:



Warning of general danger



Warning of dangerous voltage



Warning of hot surface



Danger of being ripped or cut

During work you should wear ear protectors, goggles, dust mask, protective gloves and sturdy work clothes!



Use ear protection



Wear safety goggles



Wear a dust mask



Wear protective gloves

### **Specifications**

#### Concrete Grinder EBS 180

Rated voltage:	110 V~
Power input:	2300 W

Frequency:

Rated speed:

Max. disc diameter:

Spindle connection:

Protection class:

Degree of protection:

Net weight:

40 - 60 Hz
6000 min<sup>-1</sup>
180 mm
M 14
II
IP 20
ca. 5.7 kg

Interference suppression: EN 55014 und EN 61000

### **Content of Delivery**

Concrete grinder with diamond grinding wheel (concrete), tool kit and operating instructions in a cardboard box. Floor guiding device in a cardboard box.

# **Application for Indented Purpose**

The concrete grinder has to be used only completely mounted according to the mounting instructions.

The concrete grinder is indented for professional use.

With an appropriate grinding wheel, the tool may be used for smoothing rough concrete, removing mould seams, residual mud, joint fillers and tile adhesives.

Only use grinding wheels recommended by the manufacturer.

These have a small weight and a high concentricity. Using other grinding wheels can cause an overload of the machine or damage of the bearings and danger to the user.

### **Safety Instructions**



Safe work with the machine is only possible if you read this operating instruction completely and follow the instructions contained strictly.

Additionally, the general safety instructions of the leaflet supplied with the tool must be observed. Prior to the first use, the user should absolve a practical training



Work concentrated and carefully. Keep your work place clean and avoid dangerous situations.



In order to protect the user, take precautions.



If the mains cable gets damaged or cut during the use, do not touch it, but instantly pull the plug out of the socket. Never use the tool with damaged mains cable.



The tool must neither be wet nor used in humid environment.

- Do not use the tool in an environment with danger of explosion.
- Do not drill into asbestos-containing materials.
- Modifications of the tool are prohibited.
- Never use the machine without dust guard.
- Always check the tool, cable and plug before use and plug before use.
   Have damages only repaired by specialists.
   Insert the plug into the socket only when the tool switch is off.
- When you work outside, the machine has to be used with a fault-current circuit breaker with max. 30 mA.
- The machine should only work under supervision of somebody. Plug and switch the machine off if it is not under supervision, in case of putting up and stripping down the machine, in case of voltage drop or when fixing or mounting an accessory.
- Switch the machine off if it stops for whatever reason. You avoid that it starts suddenly and not under supervision.
- Don't use the machine if a part of the housing is damaged or in case of damages on the switch, the cable or plug.
- Pay attention that the speed indicated on the grinding wheel meets or is higher than the max. speed indicated on the machine.
- Grinding wheels have to be stored and used carefully according to the instructions of the producer.
- Check the accessories before use. Do not use any products which are broken, cracked or damaged in another way.

- Before use, make sure that the tool is correctly fixed and fastened. Let it run idle for about 30 seconds in a safe position. If considerable vibrations occur or if other defects are recognised, switch off immediately.
- Always lead the mains and extension cable as well as the extraction hose to the back away from the machine.
- Power tools have to be inspected by a specialist in regular intervals.
- Never carry the machine at its cable.
- Do not touch rotating parts.
- Personen unter 16 Jahren dürfen das Gerät nicht benutzen.







- During use, the operator and other persons standing nearby have to wear suitable ear protectors, a dust mask and protection goggles.
- Make sure that persons in the work space are not endangered by particles flying around.
- Keep the handles dry, clean and free of oil and grease.
- Attention! The tool still runs for a little while after the machine was switched off.

For further safety instructions, please refer to the enclosure!

# **Assembly Instructions**

### Material

1x Motor EBS 180

1x Guiding System EBS 180

2x Socket Screw M10x20

2x Disc 10,5

2x Bush

4x Cap Nut M5

3x Cable Tie

# <u>Assembly</u>

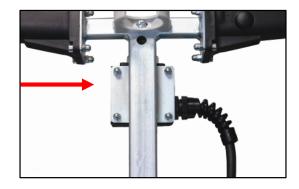
Put the disc and the bush on the socket screw.

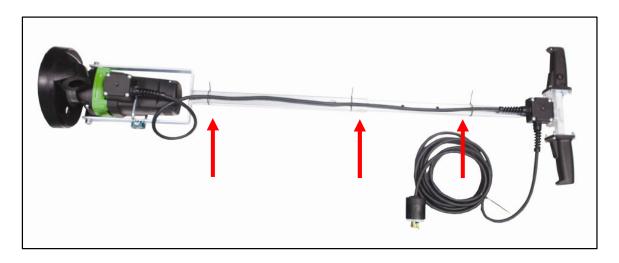


Screw on the guiding system with the two preassembled screws.



Screw on the switch-box with the 4 cap nuts (M 5).

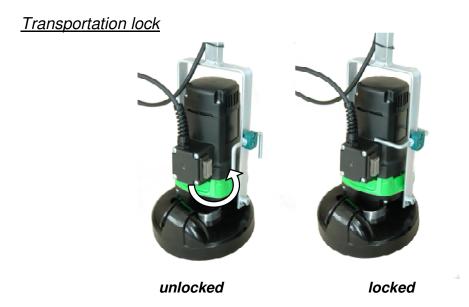




Fix the line cord with the cable ties.

After that cut off the overstanding ends of the cable ties

Make sure that the switch on the floor grinding device is in OFF-position .



For transport rotate the lock clamp to the motor housing, to avoid a topple down and demolish of the machine.



#### **Electrical Connection**

Before starting the machine check the correspondence between voltage and frequency according to the data mentioned on the identification plate. Voltage differences from + 6% and - 10% are allowed.

The grinder is made in protection class II.

Only use extension cables with a sufficient cross-section. A cross-section which is too small could cause a considerable drop in performance and an overheating of machine and cable.

The tool includes a start-up speed limiter to prevent fast expulsion fuses from unintended responding.

### Switching on and off

Switching-on: press the switch of "I" Switching-off: press the switch of "0"



#### Attention!

In case of every automatic stop of the machine or mains failure, press the switch of "0". Consequently, you can avoid an unintentional restart of the machine (physical hazard).

#### **Overload Protection**

In order to protect the operator, motor and drill bit, the concrete grinder is equipped with an electronic and thermal overload protection.

Electronic: In case of overload caused by a grinding pressure which is

too high, the electronics react by switching off the machine. You can continue working after having pressure relief and

switching OFF and ON the power tool again.

Thermal: In case of permanent overload, a thermocouple protects the

motor against destruction. In this case, the tool switches off automatically and can only be restarted after a certain cooling period (approx. 2 minutes). The cooling period depends on the heating of the motor winding and the

ambient temperature.

# **Changing the Diamond Grinding Wheel**









#### Attention!

The grinding wheel might heat up enormously during operation. You could burn your hands or get cut or ripped by the segments. Therefore, always use protective gloves when changing the grinding wheel. Before any work on the tool, disconnect the plug from the mains!



Push the protection hood as far as upwards that you can put the jaw wrench, size 32 (1) between gearbox and grinding wheel on the keyholes of the driving disc.

Use the face spanner (2) to unscrew the driving nut. Then remove the mounted grinding wheel respectively mount the new one.

The assembly works the other way round!

Let the machine run for a short period of time and in a safe position. If the machine does not run easily, stop working immediately.

# Use only original accessory!

#### **Dust Extraction**

Dust which occurs during your work is hazardous to health. That is why the EBS 180 must be used with a vacuum cleaner, and a dust mask has to be worn. The suitable Wet/Dry Vacuum Cleaner DSS 1225 is available as accessory. It can directly be attached to the connection on the dust hood.

#### **Instruction for Use**

Switch the machine on and put it carefully on the surface you want to work on. Hold the tool with both hands and work with circular or linear movements.

For best working results: Don't put too much pressure on the surface you want to work on.

For grinding works right into edges of the wall one segment of the dust guard can be removed by means of the chucking device. This allows grinding on surfaces which are usually hard to reach.

Attention! All other grinding works have to be done with the complete dust guard.

#### **Care and Maintenance**



Before the beginning of maintenance or repair works you have to disconnect the plug from the mains.

Repairs may be executed only by appropriately qualified and experienced personnel. After every repair the machine has to be inspected by an electric specialist.

Due to its design, the machine needs a minimum of care and maintenance. However, the following points always have to be observed:

- Always keep the power tool and the ventilation slots clean.
- During work, please pay attention that no particles get inside the machine.
- In case of failure, a repair has to be carried out by an authorised service workshop.

#### **Environmental Protection**



# Raw material recycling instead of waste disposal

To avoid damages on transportation, the power tool has to be delivered in a sturdy packing. Packaging as well as unit and accessories are made of recyclable materials and can be disposed accordingly.

The tool's plastic components are marked according to their material, which makes it possible to remove environmental friendly and differentiated because of available collection facilities.

### Only for EU countries

Do not dispose of electric tools together with household waste material!



In observance of the European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

#### **Noise Emission / Vibration**

The indication of noise emission is measured according to DIN 45 635, part 21. The level of acoustic pressure on the work place could exceed 85 dB (A); in this case protection measures must be taken.



# Wear ear protectors!

The typical hand-arm vibration is below 2.5 m/s². Measured values determined according to EN 60 745.

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 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.

### **Dust protection**

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 industrial vacuum cleaner DSS 1225/1250 for wood and/or minerals together with this tool.
- The work place must be well ventilated.
- The use of a dust mask of filter class P2 is recommended.

# Warranty

According to our general terms of delivery for business dealings, suppliers have to provide to companies a warranty period of 12 months for redhibitory defects (to be documented by invoice or delivery note).

Damages due to natural wear, overstressing or improper handling are excluded from this warranty.

Damages due to material defects or production faults shall be eliminated free of charge by either repair or replacement.

Complaints will be accepted only if the tool is returned in non-dismantled condition to the manufacturer or an authorized Eibenstock service centre.

# C ∈ Declaration of Conformity

On sole responsibility we declare that this product is in conformity with the following standards and standard documents:

EN 60 745, EN 55 014, EN 61 000, according to the regulations 2006/95/EC, 89/336/EEC, 98/37/EC

Elektrowerkzeuge GmbH Eibenstock Lothar Lässig

24.09.2008