

BMGE-520**Grinding & polishing Machine Owner's Manual**

PERFORMANCE • EFFICIENT • RELIABLE

Your Model #: _____

Your Serial # : _____

1. SAFETY

1.1 Organisational measures



The Operating Instructions are to be kept near the location where the machine is Being operated, and must be within reach at all times

In addition to these Operating Instructions general and legal regulations regarding accident prevention and environmental protection must be complied with as per local regulations.

Such duties may, for example relate to the handling of hazardous substances, or to the provision and wearing of personal protection equipment, as well as compliance with traffic regulations.

The Operating Instructions must be supplemented by other instructions, including the duty to supervise and report incidents relating to particular working practices, for example work organization, work procedures and personnel safety.

Personnel entrusted with working with the machine must read the Operating Instructions before starting work, in particular the Safety Instructions chapter. To read these instructions after work as commenced is too late. This particularly applies to incidental activities such as setting up the equipment, carrying out maintenance work or training staff to work with the machine.

From time to time the working practices of the operators are to be checked by a supervisor especially to the items regarding awareness of safety, and hazards.

Operators must tie back long hair, and not wear loose clothing or jewellery including rings. There is a risk of injury through items getting caught, or being drawn into moving machinery.



Use personnel protection equipment if necessary or required by local regulations! Take notice of all safety and hazard notices on the machine!

All safety and hazard notices at or on the machine must be kept complete and legible!

If safety-critical changes occur to the machine or its working method, the machine must be shut down immediately! The cause of the fault must be established, and rectified.

This applies in particular to the fitting and adjustment of safety devices.

Spare parts must comply with the technical requirements specified by the manufacturer. This is always guaranteed if original spare parts are used.

To perform maintenance work correctly it is imperative to be equipped with the proper tools for the task in question.



The location and the operation of fire extinguishers must be made known on each work site!

Take note of the facilities for reporting of, and fighting fires!

1.2 Personnel selection and qualification

Fundamental duties:

Work on the machine may only be undertaken by trained personnel.

Only trained personnel may be employed. Note the statutory minimum age! Specify clearly the responsibilities of personnel for operation, setting up, servicing and maintenance work!

Make sure that only authorized personnel operate or work on the machine!

Define responsibilities of the machine operator, with regard to traffic safety regulations, and inform him not to take instructions from third parties who may not be complying with the local safety requirements!

Personnel who are being trained to operate equipment, may only use the machine under constant supervision of an experienced person!



Work on electrical equipment, may only be undertaken by a skilled electrician or by trained persons under the supervision of a skilled electrician, in accordance with the local electrical engineering regulations

1.3 Safety precautions applicable to some operating sequences

DO not allow any method of working that impairs safety!

Recognised official procedures have to be used, to ensure the machine is operated in a safe, and best conditions.



Only operate the machine when all safety devices, and related safety equipment, are present and operational!

Check the machine visually for any damage and defects at least once a day!

In the event of operational malfunctions the machine must be shut down immediately and secured!



Secured the work area around the machine in public areas providing a safety distance of at least 2 m from machine

Faults must be immediately rectified!

Carry out the switch on, and switch off, operations in accordance with the operation manual!

Before switching on the machine make sure that no-one can be endangered when the machine starts up!



All persons in the proximity of the machine, must wear ear protectors and safety shoes. In addition the machine operator, must wear close-fitting protective clothing



Use only extension cables, that are used for extending the main cable, that are sized and marked in according with the overall power consumption of the machine and the valid VDE guidelines

1.4 Special work within the scope of use of the equipment and maintenance activities as well as repairs during operation

Mechanical servicing work:

Put the machine in the **Safety off position** before carrying out any servicing work on the machine.

Follow any special safety instructions in the chapters on servicing the machine.

Adjustment, servicing and inspection work on the period of time limits, specified in these Operating Instructions as well as any information on the replacement of parts and equipment must be undertaken and/or complied with!

These activities may only be undertaken by qualified personnel.

The operator must to be given information about maintenance and work procedures, before starting the cleaning process!

Procedures that are related to normal operation. Methods of tools adjustment on the machine, and its safety devices, all “ON and OFF” functions that have to be carried out according to the operation manual, and methods for maintenance and repair.

If the equipment is switched off in order to carry out maintenance, repair, or adjustment it must be secured against unintended restart.

Switch OFF and disconnect it from the power supply.

Always dispose the contents of the dust bin or of a connected dust collector before loading the machine onto a vehicle.

Observe the local waste disposal regulations, in uncertain situations ask the next higher authority.

Do not use any aggressive cleaning materials!

Use lint-free cleaning cloths!

Always make sure to tighten any screw connections that are loosened during servicing and maintenance work!

If safety devices need to be taken off or dismantled during service and repair, these safety devices must be reinstalled, and inspected immediately after completion of the servicing and repair work.

Make sure that process materials and replaced parts are disposed of safely and in an environmentally friendly manner!



Work on electrical equipment, may only be undertaken by a skilled electrician or by trained persons under the supervision of a skilled electrician, as well as in accordance with the local electrical engineering regulations

Make sure that electrical components used for replacement purposes comply with original parts and are correctly adjusted if necessary.

1.5 Definition of the Safety off position

Definition:

The machine is in a safe condition where it cannot be of any hazard.

Putting the equipment in the Safety off position involves:

- * **Switch off the machine.**
- * **Switch off the dust collector (if being used).**
- * **Wait for all drives to stop.**
- * **Pull out mains plug.**
- * **Secure against unintended restart.**

1.6 Particular dangerous aspects of the equipment



Any machine, if it is not used according to the regulations, may be hazardous for operating, setting-up, and service personnel. The operating authority is responsible for compliance with the safety regulations during operation and maintenance, and for the use of safety devices supplied with the machine, as well as the provision of appropriate additional safety devices!

1.7 Electrical engineering regulations



Work on electrical equipment, may only be undertaken by skilled electrician or by trained persons under the supervision of a skilled electrician, as well as in accordance with the local electrical engineering regulations.



Use only extension cables, that are used for extending the main cable, that are sized and marked in accordance with the overall power consumption of the machine and the valid VDE guidelines

The electrical equipment for the plant must be inspected regularly. Defects such as loose connections or scorched cables must be rectified immediately. Call a skilled electrician or our Customer Services.

A second person must be in attendance whilst the electrical engineer is working on the equipment.

The work area must be secured against any third party entering the work area, by means of a red and white safety chain and a danger sign. Use only tools that insulated against electricity.

Only start work after you are familiar with the electrical engineering regulations that apply to the local area.

Only use voltage seekers that comply with the regulations when troubleshooting. From time to time check voltage seekers to ensure that they are operationally efficient.

2. OPERATING RANGE AND CORRECT USAGE

BM-GE-520 grinding & polishing machine is exclusively design to grind and polish for horizontal surface. It is not design for other purpose. The manufacture will not be liable for damage or injury resulting from such kind of incorrect usage. In these case the user assumes all risks

3. BEFORE SWITCH ON THE MACHINE

3.1 Range of the application

- * To remove undulated concrete surface
- * To prepare the surface for coating
- * To polish the surface
- * To remove the coating defects
- * To remove glue residue
- * To remove the coating from wood floors
- * To renovate wood floor for new coating

3.2 Handle adjust

Before switch on the BM-GE-520 machine the operator should adjust the handle. The user can press the bar to adjust the handle on a comfortable operation level. Please see the figure:



3.3 Polish pad or grind wheel install

According to the request operator should install the polish pad or diamond grinding wheel on the machine. Polishing pad just be easy stick on the adaptor. Diamond wheel should use bolt & nut to tighten on the adaptor.



3.4 Electrical wire connect

Before switch on the machine operator should connect the electrical wire to plug.
The plug locates on the back of the control panel.



3.5 Add water and check water release valve

Operator should add the water in the machine water tank before working



Operator should check the water release valve which on the handle bar work properly



3.6 Working height adjust

Operator can rotate the wheel to adjust the working height to meet the running request



3.7 Check horizontal level

Operator must check the machine horizontal level before running the machine to gurrante the grinding result.



3.8 Dust collector connect

If BM-GE-520 machine with a dust collector, operator should connect the pipe to the machine.



4. INITIAL OPERATION

4.1 Preparation for initial operation

- * Put BM-GE-520 machine and filter units on to the surface to be processed
- * Fit the appropriate diamond grinding cap wheel or polishing pad that is required for this particulate process.
- * Using correct cable wire, connect the machine and the dust connect to the power supply Point, these electric supply points should be protected and equipped with a FL-switch. (Residual current operated device).
- * Check the extension cable for external damages
- * Check the dust hose damages
- * Connect the grinding machine and dust collector units with the flexible hose. Use hose clamps at the connectors.
- * Make sure the dust bin of the dust collector units is empty



If problem with the current supply arise during the assembly or the start up, call qualified person for help. Work on electrical equipment may only be undertaken by a qualified personnel.

4.2 Switched on the machine

- * Connect the machine to the electric inlet with a extension cable
- * Press down the handle until the polishing pad or diamond cup wheel rises approximately 10 cm from the ground.
- * Rotate the speed adjust bottom to right speed
- * Then let down the grinding disc on the surface and begin the work. Move the machine forwarder or reverse dependent on the work.

4.3 Speed adjust

Operator can adjust the speed with the speed the adjust wheel, on the control panel will display the blades rotate speed. Maximum blades speed is 600RPM





BM-GE-520 machine has been setup the motor and control panel in factory the operator not allow to setup by himself. The damage or injury cause from the operator setup the control panel by themselves will be assumed by the operator

4.4 Switched off the machine

Rotate the speed adjust button to decrease the speed to 0 RPM, then press the stop switch button.



In case of emergency or operating trouble, like vibrations or strong noises, switch the machine off immediately by hitting on the OFF- button.

The machine has to be into “SAFETY OFF POSITON” before starting repair works or carry out some inspection and some maintenance.



Operator should pay attention on the grind horizontal result and water lubrication when running BM-GE-520 machine.

5. TRANSPORT AND STROAGE

5.1 Carry bar

There are 4 carry bars with BM-GE-520 machine, it is tighten on the handle. If you need lift the machine just put the bar in the hole on the machine.



5.2 Before storage

- * Clean the machine and cover it with a plastic foil
- * Protect the electric motor from moisture, heat, dust and shocks
- * Drain the oil from the gear-box and refill when use again.

6. TROUBLE SHOOTING

Fault	Possible cause	Way to solve
excessive Vibration	imbalance due to worn or broken grinding tools	replace all worn or broken parts
	belt is too tight	release the tension of the belt
unusual noise	defective bearing	Check & replace the bearing
	wrong tension of the belt	check the tension of the V belt, replace if necessary
	debris deposit on coupling	clean the coupling
	worn or broken the gear in gear-box	check the gear, replace the gear if necessary
reduced or no grinding performance	grinding tools have reached maximum wear	replace the worn parts
	wrong grinding tool for the application	replace the tools with appropriate grinding tools
	too low tension of the belt	re-tension the belt
motor didn't work	missed power phase	check the inlet power then start again
	control system wrong setup	re-setup the control system
	defective component	find the defect parts then replace it
motor triggers while running	motor protections switch triggered because of overload	reduce the load
	motor have a defect	check the motor