



# OPERATING MANUAL BMG-435WD

## VERSION 2.2

**EC DECLARATION OF CONFORMITY**

in accordance with Appendix II sub A of Directive 2006/42/EC

**BLASTRAC B.V.**

Utrechthaven 12  
NL - 3433 PN NIEUWEGEIN  
Tel: 0031 (0)30 601 88 66  
Fax: 0031 (0)30 601 83 33  
Info@Blastrac.nl  
The Netherlands

Declare under our sole responsibility that the machine as described below  
Conforms with the Health and Safety requirements of the European Directive of the machine Safety.

In case of changes to the machine without our written authorization this declaration loses its validity.

**Model:**            **BLASTRAC**    **BMG-435WD**            **Serial number: xxxxH**

1. satisfies the conditions set out in the Machine Directive (Directive 2006/42/EC); Low voltage directive (2006/95/EC, as last amended; EMC directive 2004/108/EC, as last amended)
2. satisfies the following harmonized standards:  
NEN-EN 349, NEN-EN 418, NEN-EN 294 and NEN-EN 60204

Nieuwegein 01-07-2010

  
Michiel Kalisvaart





## Table of contents

|                                     |           |
|-------------------------------------|-----------|
| <b>EC Declaration of Conformity</b> | <b>02</b> |
| <b>1. Introduction</b>              | <b>04</b> |
| <b>2. Machine description</b>       | <b>04</b> |
| Application                         |           |
| Accessories                         |           |
| <b>3. Safety</b>                    | <b>05</b> |
| Safety precautions                  |           |
| Safety regulations                  |           |
| Safety instructions                 |           |
| <b>4. Initial operation</b>         | <b>07</b> |
| Checkpoints of electrical safety    |           |
| Checkpoints of machine safety       |           |
| Removing the diamond wings          |           |
| Mounting the diamond wings          |           |
| Diamag                              |           |
| <b>5. Operating</b>                 | <b>08</b> |
| Switch on the machine               |           |
| Switch off the machine              |           |
| Operating during grinding           |           |
| <b>6. Maintenance</b>               | <b>09</b> |
| <b>7. Technical data</b>            | <b>10</b> |
| <b>Contact</b>                      | <b>11</b> |



## 1. Introduction

It is important that all persons who are working or maintaining this machine will read the manual carefully and understand it fully. Keep this manual near to the machine, so it can always be consulted. Only authorized and trained personnel may operate this machine.

## 2. Machine description

The BMG-435WD is a small electrical driven planetary grinding machine. This is a three headed machine for levelling and polishing of floors.

The patented drive system makes sure that this machine is very easy to handle.

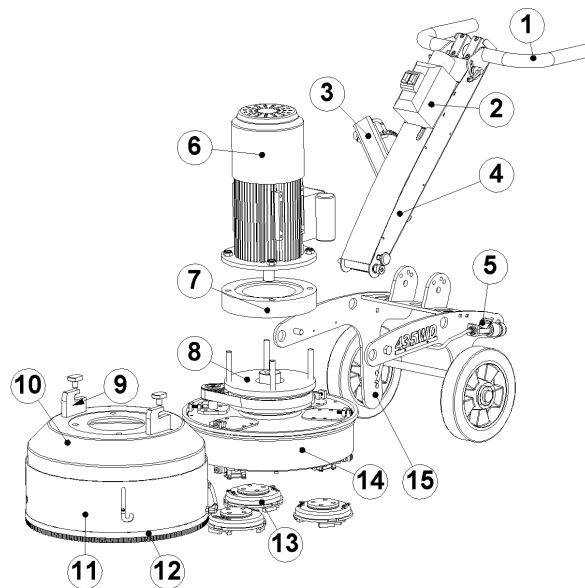
The machine is simple to dismantle for ease of transportation.

Due to the water hose connection, it is possible to grind wet.

### Application

The BMG-435WD can be used on almost any floor to plane, to make ready for coatings, or to remove coatings or glue residues.

|   |                       |    |                  |    |                           |
|---|-----------------------|----|------------------|----|---------------------------|
| 1 | Steer                 | 6  | Motor            | 11 | Floating shroud           |
| 2 | Switch                | 7  | Fill up block    | 12 | Brush for floating shroud |
| 3 | Swing arm for hose    | 8  | Drive mechanism  | 13 | Diamond plate holders     |
| 4 | Steer arm             | 9  | Hinge plate      | 14 | Housing                   |
| 5 | Water hose connection | 10 | Protection cover | 15 | Wheel frame               |



### Accessories

There are several types of wings that may be used on this machine.

|              |                                 |
|--------------|---------------------------------|
| BG707301     | Wing red box 9 pieces 18/20     |
| BG707302     | Wing red box 9 pieces 30/40     |
| BG707303     | Wing red box 9 pieces 60/80     |
| BG707304     | Wing red box 9 pieces 120/150   |
| BG707311     | Wing green box 9 pieces 18/20   |
| BG707312     | Wing green box 9 pieces 30/40   |
| BG707313     | Wing green box 9 pieces 60/80   |
| BG707314     | Wing green box 9 pieces 120/150 |
| BG707321     | Wing blue box 9 pieces 18/20    |
| BG707322     | Wing blue box 9 pieces 30/40    |
| BG200997/set | Wing PCD split                  |
| BG200999/set | Wing PCD 2 x ¼                  |



### 3. Safety

Before operating the machine, the personnel who are going to use it must be familiar with the safety instructions given in this manual.

Keep this manual near to the machine, so that it may be consulted.

#### Safety precautions

- The surface to be treated must be swept clean to remove stones, screws etc.
- Never use the machine when the surface is not clear and if there is a risk of tripping.
- Make sure there is not any water on the surface to be treated.
- Remove any trailing electrical cables and or dust hoses from the surface to be treated
- Always use a dust collector
- Don't get disturbed during the activities.

#### Safety regulations

- Persons who are not operating the machine must not be permitted to stay in the surrounding area of the machine.
- Do not change anything on the machine. Always use cables that are approved and safety earthed. Make sure that the machine is equipped with an earthed connection, do not change this and always use earthed cables with an earthed plug.
- Connect main power supply cable to an installation with an earth leakage circuit breaker.
- Inspect and test the electrical components regularly. The electrical components have to satisfy the requirements that apply to these components.
- Always call a skilled electrician or your distributor when you have questions about the safety of the electrical components.
- Work on electrical equipment or operating materials may only be undertaken by a skilled electrician or by trained persons under the guidance and supervision of a skilled electrician as well as in accordance with the electrical engineering regulations.
- Pull out the main plug during inspections and maintenance on the machine.
- Never operate the machine when the surface is wet.
- Never use the machine in the rain.
- The machine contains rotating parts; because of this never pull the machine backwards with a turning motor.

The following sticker is placed on the machine.



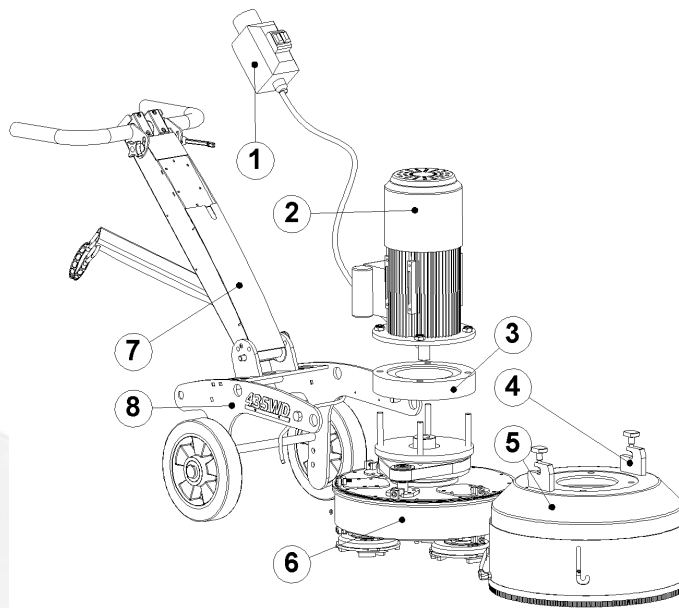
Meanings of these symbols are:

- Ear protection is obligatory
- Safety glasses with lateral protection are obligatory.
- CE-mark on this machine
- Safety shoes obligatory.
- Consult the manual before operating the machine

Personnel must tie back long hair and not wear loose clothing or jewelry including rings.  
Wear gloves and dust mask whilst operating the machine.

**Safety instructions**

- Make sure the machine is clean and that the handgrips are dry and free of grease and oil.
- Make sure the dust seal is in good condition, this to reduce the dust.
- Pull out the main plug when changing the diamond wings
- The BMG-435WD weights 115 kilogram. Use appropriate appliances as a lift or crane.
- Lift the machine with a rope on the frame (8)
- Or detach the machine into parts and lift these parts.





## 4. Initial operations

Before using the machine it is important to inspect the machine.  
It is not permitted to use the machine if the machine safety is not according the checkpoints below.

### Checkpoints of electrical safety

- Use only extension cables for extending the main cable that are sized and marked in accordance with the overall power consumption of the machine.
- Electrical cables must be rolled entirely off of the reels.
- Any damage to electric cables is not permitted
- Use an electrical power supply connection with earth connection

### Checkpoints of machine safety

Check if:

- The safety functions and operating functions work correct.
- The flexible coupling is not deformed or damaged
- The diamond / multiflail disc is not damaged
- There are no damages on the electrical components.
- There are not any loose nuts or bolts
- There is not any damage to the dust hose and if it is connected correctly.

### Removing the diamond wings

- Make sure the power supply plug is out of the machine
- Lay down the machine so it is lying on the handle. Make sure the machine will not fall back down. A second person can stands on the handle to make sure it will not fall back down.
- Loose the adapter plates (9) from the diamond plate holders (1) and remove the 9 bolts (3) with an appropriate key so the diamond wings (4) can be removed.

### Mounting the diamond wings

- Make sure the power supply plug is out of the machine
- Lay down the machine so it is lying on the handle. Make sure the machine will not fall back down. A second person can stands on the handle to make sure it will not fall back down.
- Mount the diamond wings (4) to the adapter plates (9) with an appropriate key and fix the adapter plate (9) to the diamond plate holder (1)

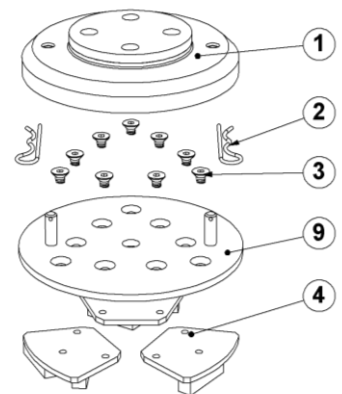


### DIAMAG

When using DIAMAG adapter plates, you can replace the diamond wings without using any tools!

Because of the specially designed heat resistant magnets and fixation pins, the diamond tools are fixed onto the plate, but can still very simply be replaced by hand.

Contact your Blastrac distributor for more information  
or check **WWW.DIAMAG.EU**





## 5. Operating

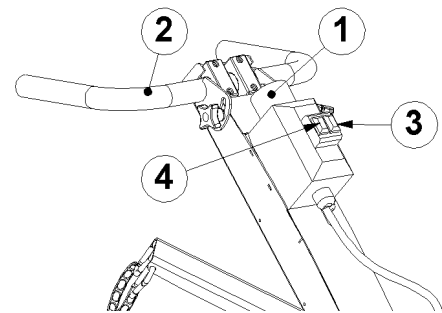
During operating the BMG-435WD, the following additional safety instructions must be followed closely.

### Switch on the machine

- Turn on the dust collector before switching on the machine and connect the dust hose to the machine.
- Connect the power supply to the machine (1)
- Stand behind the machine.
- Push down the handle of the machine (2) so that the machine is off the ground.
- Push the green button (3) on the electrical box.
- Check the direction of rotation of the 400 volt version. The machine must turn counter clockwise. (the fan of the motor is turning clockwise if the motor turns counter clockwise)
- If the motor turns the wrong direction, turn the switch in the electrical inlet (1) and restart the machine.
- Let down the machine till the diamond wings hit the floor
- Start grinding

### Switch off the machine

- Push the red button (4) on the electrical box
- Wait until the machine stops rotating before laying down the machine on the handle
- Pull out the power supply
- Shut down the dust collector.



### Operating during grinding

This machine will always have an even grinding result because of the planetary system. However it is advised to keep the machine constantly in movement for an optimum grinding result.



## 6. Maintenance

Work only with original Blastrac parts.

Check regularly to see if the diamond wings are in good condition. Replace immediately when these are damaged or worn out.

Prevent premature wear by keeping the machine as dust free as possible, for this reason clean the machine regularly with a dust collector (vacuum cleaner) especially the upper drive.

Clean the machine every day with air and non-aggressive materials. Never use a high pressure water cleaner to clean the machine.

Store the cleaned and dry machine in a dry and humid free room. Protect the electrical motor from moisture, heat, dust and shocks.

All repair work must to be done by qualified Blastrac personnel, this to guarantee a safe and reliable machine.

Any guarantee on the machine is automatically void when:

- Non original Blastrac parts and or diamond discs have been used
- Repair work is not done by qualified Blastrac personnel
- Changes, add on's or conversions are undertaken without the written permission from Blastrac BV.

## 7. Technical data

|                       | <b>BMG-435WD<br/>1x230V</b>                                  | <b>BMG-435WD<br/>3x230V</b> | <b>BMG-435WD<br/>3x400V</b> | <b>BMG-435WD<br/>1x110V</b> |
|-----------------------|--------------------------------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Power consumption     | 2,2 kW                                                       | 3,0 kW                      | 3,0 kW                      | 2,2 kW                      |
| Electrical connection | 230V / 50 Hz                                                 | 3x230V<br>50/60Hz           | 400V / 50Hz                 | 110V / 50 Hz                |
| Amperage              | 12,9A                                                        | 11,8A                       | 6,0A                        | 28,0A                       |
| Diameter diamond disc | Ø 155 mm                                                     | Ø 155 mm                    | Ø 155 mm                    | Ø 155 mm                    |
| Working width         | 435 mm                                                       | 435 mm                      | 435 mm                      | 435 mm                      |
| Rotation speed        | 720 min <sup>-1</sup>                                        | 720/860min <sup>-1</sup>    | 720 min <sup>-1</sup>       | 720 min <sup>-1</sup>       |
| Length                | 1310 mm                                                      | 1310 mm                     | 1310 mm                     | 1310 mm                     |
| Width                 | 460 mm                                                       | 460 mm                      | 460 mm                      | 460 mm                      |
| Height                | 930 mm                                                       | 930 mm                      | 930 mm                      | 930 mm                      |
| Weight                | 115 kg                                                       | 115 kg                      | 115 kg                      | 115 kg                      |
| Noise level           | 75dB(A)                                                      | 75dB(A)                     | 75dB(A)                     | 75dB(A)                     |
| Dust hose connection  | 51 mm Ø                                                      | 51 mm Ø                     | 51 mm Ø                     | 51 mm Ø                     |
| Suitable filter unit  | Contact Blastrac BV<br>We will assist you with a good advice |                             |                             |                             |

Design and specifications are subject to change without notice by Blastrac BV



**Headquarter**  
**Blastrac The Netherlands**

Utrechthaven 12  
NL – 3433 PN Nieuwegein  
Tel – 0031 30 601 88 66  
Fax – 0031 30 601 83 33  
Info@blastrac.nl

**Blastrac United Kingdom**  
Unit 2, Outgang Lane, Dinnington  
Sheffield, South Yorkshire  
GB – S25 3QY, England  
Tel – 0044 1909 56 91 18  
Fax – 0044 1909 56 75 70  
Info@blastrac.co.uk

**Blastrac France (ZI)**  
29, Avenue des Temps Modernes  
F – 86360 Chasseneuil du Poitou  
Tel – 0033 549 00 49 20  
Fax – 0033 549 00 49 21  
Info@blastrac.fr

**Blastrac Poland**

Golina, Dworcowa 47a  
PL – 63-200 Jarocin  
Tel – 0048 627 40 41 50  
Fax – 0048 627 40 41 51  
Info@blastrac.pl

**Blastrac Germany**  
Richard Byrd Straße 15  
D – 50829 Köln (Ossendorf)  
Tel – 0049 221 70 90 32 0  
Fax – 0049 221 70 90 32 22  
Info@blastrac.de

**Blastrac Italy**

S.S. 10 Padana Inferiore, 41  
IT – 29012 Caorso (PC)  
Tel – 0039 0523 81 42 41  
Fax – 0039 0523 81 42 45  
Info@blastra.it

**Blastrac Spain**

Calle Copernico, 16  
Nave 2  
E – 28820 Coslada  
Tel – 0034 91 660 10 65  
Fax – 0034 91 672 72 11  
Info@blastrac.com.es

**Blastrac Ukraine**

Nezalezhnosti 14, of. 21  
UA – 07400 Brovary  
Tel – 0038 44 222 51 28  
Fax – 0038 44 277 98 29  
Info@blastrac.com.ua