

Bona FlexiSand 1.5 Manual and safety instructions



AMO310001



Manual in original

Bona[®]

v1.0

Index

Technical data	3
Material specification	4
Safety instructions	5-7
Repairs, Service and Maintenance	8
Service	
Spare parts and exploded views	
Warranty	9
Bona FlexiSand in general	10-11
Normal use	
Risks	
Handling	12-16
Assembling the dust skirt	
Attaching a screen	
Attaching an abrasive	
Adjusting the handle shaft	
Attaching a vacuum cleaner	
Start and Stop the machine	
Transport position	
EU assurance of conformity	17

 BONA AB Sweden www.bona.com			
Machine type Floor sander Bona FlexiSand AMO310001	Year-week	Motor power: 1,5 kW	Insulation F
Machine No: YYWWAM031000X	Voltage: 230 V 50 Hz	Rated current: 8,5 A	Weight: 45 kg

Technical data

Motor type:	1 phase
Voltage (+/- 5%):	230VAC
Frequency:	50 Hz
Power:	1,5kW
Rated current:	8,5A
Safety devices	10A overload switch (manual reset), thermal protection in the motor (automatic reset)
Recommended fuse:	10A
Maximum allowed net impedance	0,387 Ω
Motor insulation class	F
Protection class:	IP31
Abrasive disc speed: (unloaded)	147 rpm.
Total weight:	45kg
Diameter of disc:	407mm
Hour counter	<99 999 hours
Height/Width/Depth	1170mm/ 490mm/ 640mm

Noise measurement according to EN ISO 3746:2010 & EN ISO 11202:2010

Noise level:	90 dB(A)
Calculated sound effect:	101,7 dB

Vibration measurements according to SS-EN ISO 5349-2:2001

	X	Y	Z
Vibrations RMS (m/s ²)	0,33	0,38	0,48
Vibrations vector sum (m/s ²)	0,73		

According to used standard SS-EN ISO 3746:2010 is the highest standard discrepancy for reproducing 3 dB defined, according to ISO 7574-1. According to Swedish Work Environment Authority the measure uncertainty at vibrations measurements estimated to 20-40%.

The thing that contributes to the measuring uncertainty is the transfer of vibrations to the accelerometer.

We congratulate you to the choice of your new Bona FlexiSand 1.5, a powerful and versatile machine for sanding, cleaning, buffing and oiling wooden floors! Equipped with a Diamond or PCD disc (accessories) it can also be used for the preparation of concrete floors, levelling compounds, cementitious screeds and so on. With the Bona Power Drive attached, you are able to perform direction-free sanding to bare wood. Four counter-rotating discs provide a high cut rate which can reach very close to the wall and as such reducing the need for edge sanding.

Carefully read through the entire user manual before you begin working with the machine. This machine is intended for professional or commercial use.

If anything is unclear, turn to your reseller with confidence or directly to Bona AB.








Material specification

Standard (included on delivery)

Nr.	Article	Article number
1	Bona FlexiSand	AMO310001
2	Bona Pad Drive	ASO312501
3	Rubber pad	ASO312007
4	Dust skirt	ASO312102
5	Dust tube	ASO316600
6	Extension cable, 10 m	ASO904023
7	Wheel protectors	ASO945391
8	Face mask- ear caps compl.	ASO991232
9	Box spanner (Tool)	ASO990819



Drive plates / Accessories

	Article	Application	Recommended abrasives/equipment
	Bona Pad Drive, 16" Standard Included on delivery Art. nr. ASO312501	Standard drive plate for a wide variety of jobs. Equip with a suitable pad for cleaning, oiling, buffing and fine sanding of untreated and treated wood.	Bona Nylon Pads Bona Screen Bona Scrad System Bona WoolPad Bona Cloths
	Bona Power Drive 4 x 150 mm Art. nr. ASO312540	Geared drive plate for high power wood sanding. Removes old lacquer and paint coatings while flattening the surface for a perfectly smooth finish.	Bona 8700 Abrasives Bona 8300 Abrasives
	Bona Quattro Disc 4 x 150 mm Art. nr. ASO312530	Fine sanding of wooden floors. Suitable as a final finish after belt sanding.	Bona 8300 Abrasives Bona Diamond Abrasives
	Bona Multi Disc 6 x 125 mm Art. nr. ASO312520	Fine sanding of wooden floors. Suitable as a final finish after belt sanding.	Bona 8300 Abrasives Bona Diamond Abrasives
	Bona PCD Disc 5 segments included Art. nr. ASO312560	For removing residue from concrete and other hard surfaces. Effective for removal of old adhesive, carpet foam backing, epoxy, paint etc.	PCD segments
	Bona Diamond Disc 5 segments included Art. nr. ASO312550	For removing sinter layers from screeds, leveling compounds and concrete. Can also be used for smoothing the surface after using a PCD Disc.	Diamond segments
	LED Lamp Art. nr. ASO319000	For better visibility while sanding. The sanding result becomes easier to see.	N/A

Safety instructions



DANGER means that you or other staff can suffer a serious injury or death if THE INSTRUCTIONS MARKED WITH **DANGER** ON THIS MACHINE OR IN THESE USER INSTRUCTIONS are ignored or are not followed. Read the entire user manual before you use the machine.



WARNING means that you or other staff can suffer an injury if the instructions marked with **WARNING** on this machine or in this user manual are ignored or not followed. The machine or other property may also be damaged if instructions marked with **WARNING** are ignored.

Read through the safety instructions carefully and inform your employees and users, so no one comes to harm when using the machine. Then save the instructions!

The manufacturer is not liable for personal injury or machine damage due to incorrect operation of the machine!

The machine may only be used by authorized persons that have been trained in its function.

Voltage: Make sure the voltage stated on the machine's rating plate corresponds to the voltage in the power outlet before you start the machine.

NOTE! It is obligatory to read and understand the user manual before the machine is used.



Under adverse conditions, a mixture of dust and air can be explosive. Sanding/polishing of wooden floors can create an environment that can be explosive. The safety routines below must be followed.

Cigarette lighters, control lamps and all other sources of ignition can cause explosions if they are active during sanding. All sources of ignition should be extinguished or if possible removed completely from the work area.

In work areas with poor ventilation, an explosive environment can occur if certain flammable materials, that is to say solvents, thinners, alcohol, fuel, certain polishes, wood dust and other flammable materials are in the atmosphere. Floor grinders can cause slightly flammable materials and vapors to burn. Read the manufacturer's label on all chemicals to be used so that you can determine the flammability. Ensure that the work area always has good ventilation.



Hitting a nail during sanding can produce sparks and cause explosion or fire. Always use a hammer to pound in any metal pieces before sanding the floor. Always keep a fire extinguisher (ABC-class or water) available.

Use of a machine that is not complete or that is not fully mounted can result in personal injury or damage to property. Never use these machines before they are fully mounted. Ensure that all fastening devices are fixed. Make adjustment as per the machine specifications.



Never remove or disable the earth lead in the electric cable.

Consult an electrician if the earth lead is missing or if you suspect that your circuit is not properly earthed.

There is a risk of electric shock if the machine is used in a circuit that breaks repeatedly or is under dimensioned. Allow an authorized electrician to control the fuse, breaker or the power supply.

There is a risk of personal injury if the grinder runs over and damages the cord. Ensure that the cord does not come into contact with the sanding disc. Always lift the cord over the machine and grind in a direction away from the cord. Do not pull the machine by the cord.

Always use an earth fault breaker that breaks the current immediately in the event of a fault in the electrical system or in the extension cord.

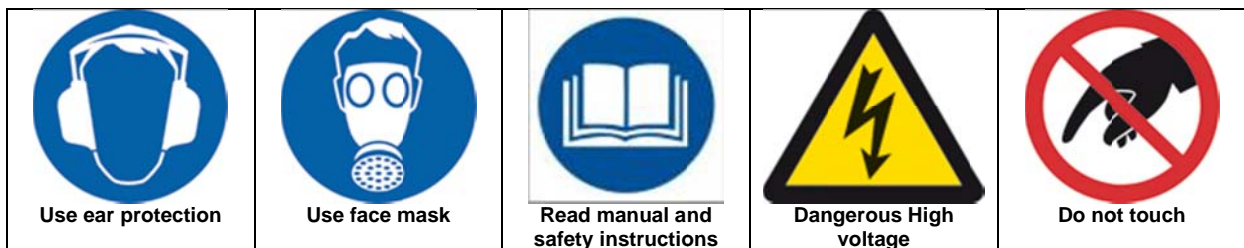
In order to prevent unintentional start of the machine, the power cord must be removed when the machine is not used and during service.

Movable parts of the machine can cause serious personal injury and/or material damage. Keep hands, feet and loosely fitting clothing away from all movable parts of the grinder.



Because dust from sanding (i.e. red lead, certain types of wood and metals) are hazardous to health, a face mask of at least class P2 must be used.

There is a risk of damage to the eyes and/or body if protective clothing and/or protective equipment is not used during sanding. Always use protective glasses, protective clothing, ear protection and a face mask of at least class P2 during sanding.



For minimized dust environment use a vacuum cleaner intended for wooden dust.

The air flow on the vacuum cleaner should at least be 245m³/h.

We strongly recommend Bona DCS system for best result.

Store contained wooden dust outdoors in a safe place, due to the risk of fire. Never leave contained wooden dust without supervision.

Always keep a fire extinguisher (ABC-class or water) available.

Take precautionary measures to ensure that the machine is not damaged during transport.

Be careful with cords. Use the correct power cord with the correct length (see accessories list). Never carry the machine by the cord. Never pull power cords from the machine or wall socket with strong movements. Protect the power cords against heat, oil and sharp edges. Power cords longer than 10m should not be used.

Remove the power cord from the machine when it is not in use. Ensure that the machine does not start unintentionally. Never carry a connected machine. Ensure that the breaker is not on once the machine is connected to a power socket. Never use the machine if the start handle does not function as it should.

Inspect the machine regularly. If you discover damaged parts, replace them at once. If necessary, contact the manufacturer, an authorized reseller or service partner.

WARNING

Because of this construction is in many ways unique use of other spare parts and accessories than Bona original spare parts can cause a risk of personal injury and/or damage to the machine.

Ensure that the machine is always in good condition. Keep the machine clean for better and safer use. Follow the instructions concerning the replacement of accessories. Inspect the power cords regularly. Repair or replace defective parts if they are damaged.

Store the machine in a dry and locked area when not in use.

Do not forget to put on the tool before you start the machine. Always check that the sanding paper is correctly adjusted before you begin sanding.

Keep unauthorized persons away from the work site. Do not allow unauthorized persons to come into contact with the machine or power cords.

Do not misuse the machine. The machine works better when it is used according to its capacity and design. Allow the motor to “rest” during periods of heavier use. The motor will cool better, thus increasing its lifespan.

WARNING

Never use a machine for anything else or use others accessories than described in this manual.

Service or repairs performed by unauthorized persons can cause damage or accidents. If service and repairs are performed by unauthorized persons, the warranty may become invalid. Service and repairs must be performed by Bona AB or retailers authorized by Bona AB.

Be aware when you work. Use common sense. Do not use the machine if you are tired, have consumed alcohol or have taken medication that can affect your judgment or your body control. Due to the potential fire hazard involved with sanding dust, smoking is not permitted while sanding.

Always use an earth leakage circuit breaker



Maintenance, Service and Repairs

Always disconnect the power cable to the machine before it is cleaned, tools are changed, maintenance is performed or when worn parts are replaced.

Maintenance

In order to keep the machine in a safe and functioning condition maintenance machine regularly.

Daily maintenance

- Remove accessories when not in use.
- Use compressed air and a vacuum cleaner to remove dust after each use.
- Wipe the machine and cord off with a clean cloth.
- Check start and stop function
- Check cord and plug.

Every 250 work hours or at least once a year control of

- Wheels
- Cable stand
- Dust skirt
- Micro switches
- Motor and gearbox
- Handle shaft function including hydraulic system

Service

Bona FlexiSand 1.5 is a high quality machine and is tested by authorized test staff at the factory before delivery. However, electrical and mechanical parts wear down and age during long-term use.

Only Bona's original parts may be used because the machine is considered unique, otherwise safety functions can become impaired.

When you contact us in the event of a fault or to order spare parts, always specify the type and serial number of your machine.

This information is located on the type sign of the machine.

The machine may never be cleaned using a high pressure washer or hose.

Spare parts and exploded views

On the Internet, you will find a list of spare parts and exploded views for Bona FlexiSand and other machines in our product range.

The address is: <http://spareparts.bona.com/>

During the factory warranty period, repairs may only be carried by staff at Bona AB or staff approved by Bona AB.

Other repairs (after the warranty period) of mechanical or electrical parts on the machine may only be carried out by Bona AB approved staff or authorized technician who has experience and knowledge concerning safety regulations.

Warranty

24 month factory warranty (from the date of invoice) against material and manufacturing faults.

In the event of a warranty claim, the machine or the agreed part must be returned to us or our dealer with paid freight for warranty testing and for potential warranty repair or replacement.

During the factory warranty period, repairs may only be carried by staff at Bona AB or staff approved by Bona AB.

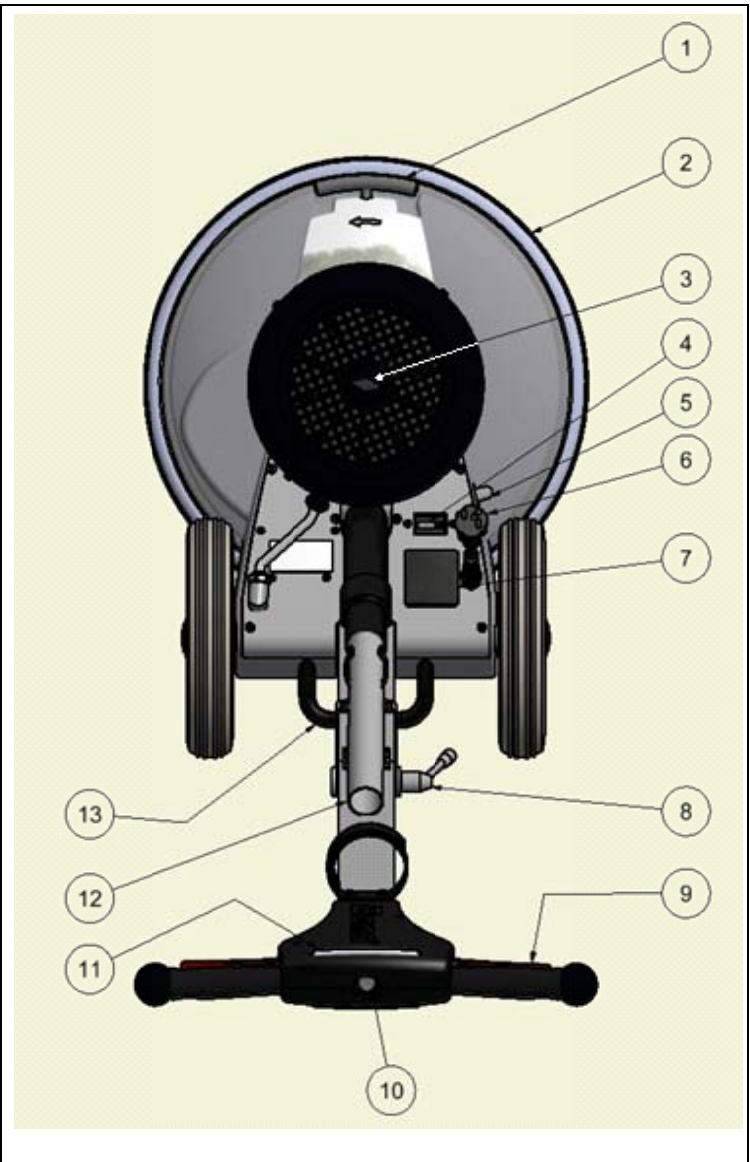
We do not undertake any other form of compensation or liability to damages.

THE WARRANTY DOES NOT COVER:

- Consumable materials such as wheels, electric cables, abrasives, lamps, etc.
- Indirect damage, damage and errors that occur due to external damage, accidents, repairs performed outside of our knowledge and approval, or damages for another reason outside of our control.
- Transport damage or transport costs will not be compensated. In the event of transport damage it is up to the receiver to contact the relevant transport company for compensation.
- Case of incorrect use, overloading, carelessness or poor maintenance
- With the use of parts produced by another company outside of our control.
- Electrical components, if the voltage variations are beyond those set out in the technical specification
- If payment for the machine is not made according to agreement

Bona FlexiSand 1.5 in general

1	Front Handle
2	Dust skirt
3	Placement of lamp (accessory)
4	Hour meter
5	Overload protection
6	Power inlet
7	Power outlet
8	Lock for foldable shaft
9	Start handle
10	Lock button for height adjustment
11	Buttons for the switch lock
12	Attachment for vacuum cleaner
13	Back Handle



The operation of Bona FlexiSand 1.5 is subject to applicable national regulations.

Beyond the user manual and the applicable rules for the country for preventing accidents, the applicable technical trade provisions for safety and professional work methods must be followed.

Normal use

Bona FlexiSand 1.5 is only intended for indoor use at temperatures between +10°C (50°F) and +35°C (95°F) and in good lighting.

When you work with the machine, be observant of the surroundings and particularly persons nearby. Do not use the machine around children. The manufacturer is not responsible for injuries that occur via such use. In this case, the user assumes full risk.

In addition to the normal usage instructions, the manufacturer's care and maintenance instructions must also be followed.

The manufacturer is not liable for any damage to the machine resulting from prohibited changes.

The manufacturer is not liable for damage to the machine or to the floor covering to be sanded.



The machine is only intended for work on level surfaces with a maximum slope of 2%. The machine is not intended for pure concrete sanding. Never run the machine over power cables. Risk of short circuit.

The user is expressly obliged only to use the machine in accordance with this manual. If the machine is used in any other manner, this is solely at the user's own risk. The manufacturer's liability ceases fully in this case.

The machine may not be used in areas where explosive or flammable substances are stored or manufactured (such as petrol, thinners, fuel oil, solvents, etc.).

The machine's electrical components and mechanical parts can cause these substances to ignite.

Never work with worn, damaged or incorrect equipment, which can cause damage to the floor.

Always use earth fault breaker!

The power cable with extension may not exceed 10 m.

Risks

When the machine is not in use, the power cable must be disconnected from the wall socket in order to prevent damage to the floor and unlawful use.

For transport in lifts, the applicable user and safety instructions must be followed, especially where load capacity is concerned.

In order to prevent unauthorized use of the machine, it must always be stored in a suitable location.

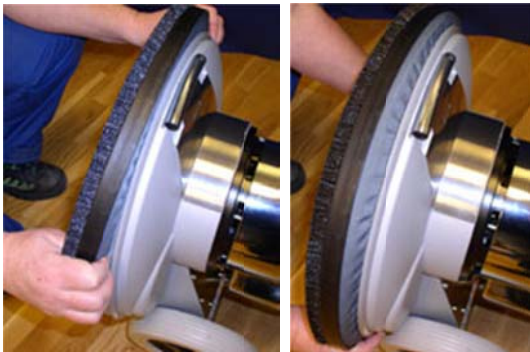
Regularly check the power cable and the machine for wear or aging.

Handling

The Bona FlexiSand 1.5 can be used for many different sorts of floor preparation/sanding depending on the type of drive plate mounted to the machine (see page 4 for different drive plates and uses). As a standard, one Pad Drive is included on delivery which can be used to drive nylon pads, screens and abrasives a.s.o. Always use a soft pad underneath the Pad Drive before attaching screens and abrasives. Never use the Pad Drive directly towards the floor.

For instructions on using the other drive plates see separate instructions.

Assembling the dust skirt



Place the dust skirt in the intended notch on the rubber strip.

NOTE! Never use the dust skirt when oiling. Always remove the skirt when transporting the machine!

Working with Sanding Screens (Diameter 407mm (16"), Grit size P60-P220)



1. Place the sanding Screen on the floor.



2. Place a 16" pad over the Screen.



3. Mount the Pad Drive.
NOTE! Mount counterclockwise!



4. Place the machine over the pad.

Working with abrasives (Diameter 407mm (16"), Grit size P16-P220)



1. Mount the Pad Drive and loosen the center screw.
NOTE! Loosen clockwise!



2. Mount the rubber pad.





3. Hold the abrasive in place.



4. Insert and tighten the centre screw.
NOTE! Tighten counter clockwise!

Adjusting the handle shaft

 <p>1. Press the button located on the top of the handle.</p>	 <p>2. Lower the handle shaft to the desired position. The lower the position, the easier the machine will be to handle. Arms should be relaxed. Release the button.</p>
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Attach a vacuum cleaner.

For minimized dust release connect a vacuum cleaner to the Bona Flexisand. We strongly recommend the Bona DCS system for best results.

Attach the vacuum cleaner hose to the dust tube on the Bona FlexiSand 1.5.

The air flow on the vacuum cleaner should be at least 245m³/h.



<p>1.</p> 	<p>2.</p> 
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Starting the machine

1. Press the button located on the top of the handle.



2. Lower the handle shaft to the desired position. The shaft must be lowered at least 10° or the machine will not start.



3. Press one of the buttons for the switch lock.



4. Then press the start handle to start. Once the start handle is pressed down the switch lock button can be released.

If the machine becomes difficult to handle, release the start handles and the machine will stop directly!

WARNING

*If you have not operated a Bona FlexiSand 1.5 previously!
Ensure that no one or nothing is nearby before you start the machine.*

Transport position

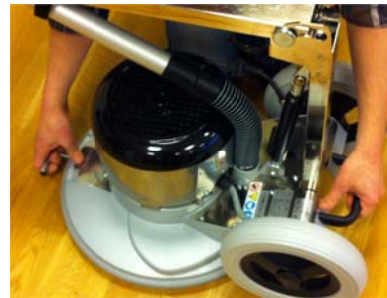
1. Tip the machine backwards and remove the dust skirt.



2. Remove the drive plate.



3. Raise the handle to an upright position, pull out the front carry handle and fold the handle shaft.



4. Grip the machine as per the photo.

NOTE! Always remove the dust skirt and the sanding disc before transportation!

When transporting the machine on a vehicle, make sure that the machine is securely fasten through the wheels to avoid movement!



Manufacturer

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EU assurance of conformity

We hereby guarantee that Bona FlexiSand 1.5 with article number:

- AMO310001

Fulfill the requirements in the Council's directives:

- 2006/42/EC (MD)
- 2006/95/EC (LVD)
- 2004/108/EC (EMC)

The following norms have been used as guidelines when designing the machines:

EN ISO 14121-1	Machine safety – Principles for risk assessment
EN ISO 12100 -1,-2	Machine safety – Fundamental terms, general construction principles
EN ISO 13857	Machine safety - Safety distances to prevent hazard zones being reached by upper and lower limbs
EN 61000-3-11	Electromagnetic compatibility (EMC) – Limits, Limitation of voltage changes, voltage fluctuations and flicker
EN 55014-1:2006 +A1:2009	Electromagnetic compatibility (EMC) - Electrical household appliances, electrical tools and similar articles
EN ISO 60335-1:2012	Household and similar electrical appliances - Safety - Part 1: General requirements
EN ISO 60335-2-67:2012	Household and similar electrical appliances - Safety - Part 2-67: Particular requirements for floor treatment machines for commercial use

Fjugesta, 06 February 2013
Anders Schön
Site Manager
Telefon nr: +46 40 387 387

Sign:

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(The undersigned is authorized to compile the technical documentation)

