

OPERATION MANUAL

MACHINE-TYPE: JBF HD 38/50
MACHINE-NUMBER: 2227
YEAR: 2012

**Should you have further questions please do not hesitate
to contact us anytime**

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1 CONTENTS



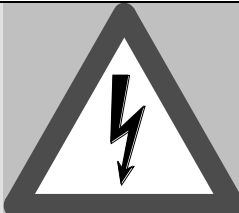
1	CONTENTS.....	2
2	Description of Symbols	4
3	General	5
3.1	Product liability and responsibility.....	5
3.2	Copy Right	5
3.3	Convention, intended use	6
3.4	Organisational measure	7
3.5	Personnal selection and qualification; basic responsibilities.....	8
4	Security informations.....	9
4.1	Normal mode	9
4.2	Special jobs in case of using the machine and maintenance as soon as fault clearance in work cycle; removal	10
4.3	Reference to special dangers	11
5	Function of the machine	12
6	Technical Data	12
7	Shreddable Material and warranty details.....	13
8	Machine Set-up.....	14
9	Operation Manual	17
9.1	Mounting information:	17
9.2	Operating information:	17
9.3	Operating	17

9.4	Cleaning	20
9.5	Fault clearance	20
10	Change of lubricants.....	21
10.1	Driving box	21
10.2	Stationary housing application	21
10.3	Cylindrical gears	22
11	Declaration of EC-Conformity	23
12	Reference to product liability	24
13	Reference to inexperienced use of the machine:	24
14	Production and Service:	24

Appendix:

- Description of the control unit
- Main power schemes
- Electrical parts list
- Data
- Spare parts manual
- Description of

2 Description of Symbols

	<p>Information! Important advice for application</p>
	<p>Attention! Danger of destruction or damaging of device, machine or factory</p>
	<p>Danger! Danger for life or physical condition</p>

3 General

3.1 Product liability and responsibility

Generally these are the common terminology and delivery conditions

Warranty and Liability claims are excluded, if there are one or more of the following reasons:

- The machine is used to destroy items that are not suitable and should only be used for its intended purpose
- Incorrect mounting, set-up, handling or servicing of the machine by unauthorized or untrained personnel
- The machine was designed for safe operation by “one able bodied person only” and is not designed to be used by children.
- No other works may be performed on the machine while it is operational i.e. Cleaning or Servicing
- Using the machine:
 - With damaged safety device
 - If the safety device is not mounted correctly
- Non observance of the references in terms of:
 - Transportation
 - Mounting
 - Set-up
 - Service
- Unauthorized constructional changing of the machine
- Unauthorized intervention in control
- Using of unapproved parts or replacement parts in case of repairs
- Faulty repairs by non authorized personnel

3.2 Copy Right

The Operation Manual and all associated documentation is copyrighted property of JBF Maschinenbau GmbH. They should only be used by our customers and the operators of our products.

Without our explicit permission it is not allowed to copy these documents or hand over to a third party, especially to our competitors.

3.3 Convention, intended use

3.3.1

- The machine is built according to state of the art principles and to accepted safety-related regulations
- Nevertheless when using there are potential dangers to the operator
- Respectively safety is paramount when operating the equipment or handling all materials.

3.3.2

- Only use the machine if it is in good technical order and condition
- Use the machine in a safety conscious manor and in full compliance with the operation manual
- Always check and report any malfunctions of the unit especially regarding damage to safety switches and interlocks which must be repaired immediately by a qualified engineer
- The machine must only be used:
 - For intention that it was originally constructed and built for
 - For the purpose as detailed in operator manual
 - For industrial and commercial use only
- An other use as specified above is not recommended
- The manufacturer or supplier is not liable for any damages if not used or maintained in the correct manner
- The operator bears the full risk of any such damages
- The operator must be suitably trained on the equipment, have full knowledge of the operation manual and be aware of all safety, usage and maintenance requirements.

3.4 Organisational measure

- ❖ The operation manual is always to be placed readily available by the machine.
- ❖ In addition to the operation manual users are to observe:
 - General legal requirement and regulations
 - Full accident prevention regulations
 - environment protection regulations
 - All necessary personal protective equipment is to be provided to operators by the operating company.
- ❖ Local and internal instructions are to be respected and adhered to
- ❖ The operating personnel are required before starting any work on the equipment:
 - To respect the basic rules for job safety and accident prevention.
 - To read, understand and acknowledge all aspects of job safety pertinent to the operation of the equipment.
- ❖ The operating company is required to check all safety requirements of all working personnel.
- ❖ It is forbidden for any personnel working on or near the equipment to have long, untied hair, loose clothing or jewellery, or any other items that may potentially become attached to the equipment in case of:
 - Risk of injury
 - Getting caught whilst near or feeding into the machinery
- ❖ Personnel must be provided and wear suitable protective clothing
- ❖ All safety and hazard notifications on the machine or in the instructions must be respected
- ❖ All safety and hazard signs on the machine must be in readable state
- ❖ In the case of any security or safety related issues, or if any changes are noted in performance relating to the machine, the unit must be stopped immediately and reported and recorded both to a suitable responsible person internally, and in turn to the suppliers
- ❖ Without of the consent and approval of the supplier:
 - No modifications must be made to the machine
 - No mountings are to be made to the height of the machine or that will change the operating height of the operator

- The operator must not stand higher than the machine when feeding items into the machine and must never stand on any raised platform such as a pallet or box placed in front of the machine which might reduce the distance between operator and cutting system to a level which does not meet the required safety standards
- No modifications of calibrations of any of the safety device must be made which may impair safety.
- ❖ Use only original spare parts or those that are conforming to the specified technical standards may be used
- ❖ Do not make any modifications in programmable control systems
- ❖ Always keep records of any issues relating to performance, modification and safety
- ❖ Provide, publicize and record the location and handling of suitable fire extinguishers
- ❖ Observe and record any fire call and fire fighting

3.5 Personal selection and qualification; basic responsibilities

- ❖ The operation of the equipment is only allowed to be executed by reliable personnel. Always observe the lawful minimum age
- ❖ Employ only trained or informed personnel. Define exactly the responsibility of personnel for operating, servicing and maintenance
- ❖ Be sure, that only fully instructed personnel work or use the equipment
- ❖ Record who has the responsibility for training the machine operator
- ❖ Personnel to be trained and educated are only allowed to work at the machinery under permanent view a suitably trained supervisor
- ❖ Any electrical requirements are allowed by authorized and suitably trained electricians or trained personnel supervising such. Observe normal rules and regulations relating to local requirements

4 Security information

Read careful before start-up of the machinery!!!

4.1 Normal mode

- Young persons under 16 years of age are not allowed to operate the machinery.
- The operator is responsible for other persons in the working area of the machinery.
- The machine must be installed on stable, even and solid subsoil.
- Before leaving: Turn the main switch of the machine “off” and ensure that it cannot be turned on.
- Maintenance and cleaning as well as the removal of the safety device are only allowed when the motor is stopped and when the main switch is turned off (ensure that the main switch cannot be turned on).
- The safety devices supplied together with the machine must always be used.
- Never put your hands or any other body parts near or in the cutting knife section.
Danger of injury!
- Collection containers must be suitable for the shredded materials and liquids.
- Dangerous goods and material that is not suited for shredding must be separated from the waste before shredding and must be disposed separately (e.g. cans with highly inflammable and explosive substances).
- Waste that can produce loops must be prepared separately so that the danger of injury by a pulling in the shredding unit is expressly avoided.
- The operator has to be trained on the machine and must always wear the necessary safety clothes.
- Always resist unsafe modes of operations
- Take measures, that the machine can only be operated in a safe and functional condition. Operate only, when all protection devices and safety attachments are present and functional
- Check the machine for external visible damage and defects on a daily basis or before any new operation starts

- Be aware of any changes to the equipment, including of the operating performance, and report any changes to a responsible person. If any changes occur stop the machine immediately and lock it so it cannot be operated
- In case of malfunction: stop and lock the machine, clear the fault
- Before starting the machine: check that nobody put at risk

4.2 Special jobs in case of using the machine and maintenance as soon as fault clearance in work cycle; removal

- Observe the deadlines recommended for service and maintenance. This task must be executed only by qualified personnel
- The operating personnel and supervisors are to be informed before service tasks take place
- If necessary, block off and mark a suitable service area
- Before service/maintenance: clean the oil from the machine
- Do not use aggressive cleaning supplies
- Use fibre-free cleaning cloth
- When it is necessary to de-mount protection devices to effect the service or maintenance always re-mount and test prior to any usage
- Take care of the environmentally friendly disposal of supplies, operating fluids and replacement parts

4.3 Reference to special dangers

4.3.1 Electric energy

- Operations in the electrical power supply must only be performed by qualified personnel
- The switch cabinet must always be closed
- Access to any electrical part must only be performed by authorized personnel with a suitable key

4.3.2 Noise

- The permanent sound level from the machine is maximum 70 dB(A) in idle mode
- Dependent on the working processes the sound level can be higher
- Wear any prescribed personal hearing protection

4.3.3 Oils, fats and other chemical substances

- In case of handling with oils, fats and other chemical substances: observe the safety rules for the according material

5 Function of the machine

The individual exchangeable, hardened cutting discs are mounted on two counter rotating steel shafts with multiple keys.

Materials such as optical and magnetic media are drawn in the machine and are cut in defined sizes pieces.

Dependant on what further security level is required the resultant shreds can then be further shredded and reduced in size until they are small enough to pass through an optional disintegrator screen with 10, 8 or 6 mm drilled holes which is installed directly underneath the cutting shafts

The drive and cutting unit is overload protected by an electronic torque limitation with reversing movement.

6 Technical Data

Hard drive shredder		JBF HD 38/50
Cutting area		380 x 500 mm
Drive	P	4,4 kW 460V 60Hz
Current consumption	I _N	9 A (in case of overcharge: temporary rising of charging rate to 3x I _N possible)
Fuse		25A
Revolutions		19 1/min
Machine number		2227
Year		2012
Noise level max.		≤ 70 dB(A) - in no load operation
Weight		approx. 900 kg

7 Shreddable Material and Warranty Details

The unit is designed to shred optical and magnetic media including standard size hard drives (2.5", 3.5" and 5.25" only), video cassettes, printed circuit boards and data storage tapes, CDs, DVDs, DDS and DLT. JBF HD 38/50 is layed out for to be fed via a special funnel for max. part size of approx. 150 x 200 x 44 mm (l x w x h). **Any alternate products please contact the supplier for written approval and advice.**

The unit is supplied with a limited guarantee for 6 months from the date of delivery with wear parts excluded (cutting cylinders, spacers, security screen and drive system). Whilst cutting head parts are specially hardened it must be noted that computer hard drives and other media contain tough materials including metal parts which will after a varying time wear the cutting head of the shredder depending on the type, size, quality and volume of items that are processed.

Computer hard drives and other optical media contain magnetic parts which by there nature will attach themselves to any metal surfaces including cutters, spacers etc. It is an absolute necessity therefore that these magnetic parts have to be removed from the machine on a weekly basis **or earlier if the capacity throughput of the unit reduces.**

It must also be noted that you should never try to shred any type of hardened metal like the head of a hammer as this will permanently damage the cutting knives and associated parts.

Please note that the unit should be placed under a suitable annual preventative maintenance contract from new by a trained engineer or the guarantee may be void.



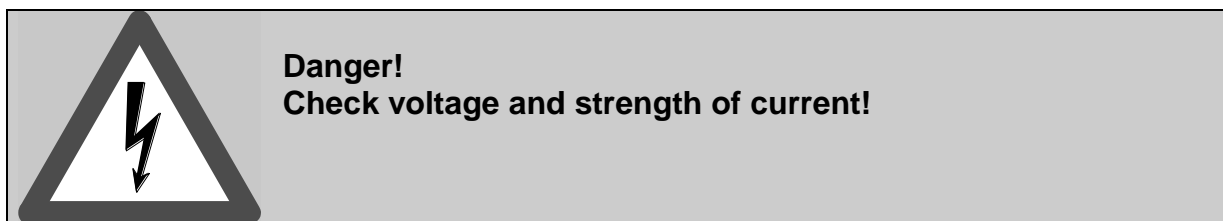
Attention!

Due to the extreme nature of destroying hard drives to such small tolerances models fitted with security screens must not be overfed.

Do not feed in more than one hard drive disc every three minutes - maximum 20 x standard sized discs per hour

8 Machine set-up and screen cleaning

1. It is always recommended that the unit is installed and set up by a qualified engineer trained by the manufacturers
2. Study the Operation Manual and the Security and Safety Information exactly and act accordingly.
3. Remove the external packing material
4. Remove the pallet by lifting the machine from the bottom with hand lift truck or stacker.
ATTENTION - Please note that dependent on the configuration of the unit there may be a high centre of gravity and in these cases it may be necessary to lift by crane and hoisting devices by the 4 eyebolts. Please consult the manufacturers for details.
5. If there is no height adjustable mounting feet, anchor the frame to the floor by anchor bolts
6. Install the machine according to local regulations like VDE or EVU etc.



7. Check rotation direction: driving motors must turn in direction of arrow. If the rotation direction is wrong, a trained electrician should change it.
8. Fully Instruct the operating personnel prior to starting the equipment
 - Learn the basic regulations of job safety and accident prevention

8.1 Cleaning the security screen

Computer hard drives and other optical media contain magnetic parts which by their nature will attach themselves to any metal surfaces including cutters, spacers and the disintegration security screen. **It is an absolute necessity therefore that these magnetic parts have to be removed from the machine on a weekly basis or earlier if the capacity throughput of the unit reduces.** These parts will eventually clog the screen and if not removed on a regular basis may cause permanent damage.

The screen is removed by taking the weight on blocks by a suitable device like a hoist or fork lift truck and removing 8 bolts – 4 at front and 4 at rear.

Due to the precise sizing of the screen and depending on what may be collected it may be necessary to help the removal by knocking the screen out with a suitable rod if it becomes jammed.

Once cleaned the screen will need to be replaced by lifting upwards on the blocks and the bolts should then be tightened to a suitable pressure by an adjustable Allen wrench – Size 14mm,



Attention!

Staff must be provided with suitable clothing including eye protection, gloves and hard shoes etc. as the magnetic parts can be very sharp.

8.2 Exchange & cleaning of screen on shredder JBF 38/50

Procedure:

1. Switch-off the shredding machine and ensure that the main power switch cannot be switched-on again until the process is completed
2. Open the front door and remove the collection container.
3. Prop up the screen from underneath with the help of a forklift or hoist by placing wooden beams or similar onto the lifting platform and support the screen before loosening the screen's fixing bolts
4. Loosen the bolts "A" (4 x Allen bolts M20 each on front and 4 x Allen bolts M20 on the back side of the cutting unit (see picture. 1)
5. With the help of the lifting device lower the screen downwards out of the cutting unit when all bolts are removed (see picture 2). Please note that the weight of the screen is approx. 37 kg without the magnets attached.
6. If the screen becomes stuck and will not lower under its own weight it may be necessary to knock from above through the hopper area with a suitable metal bar
7. Once lowered draw out the screen from under the shredder and remove all magnetic parts from all accessible areas under the shredder head and from the screen surface with suitable tools like heavy duty pliers. Also unblock the screen holes with a suitably sized punch. Be careful not to damage the screen

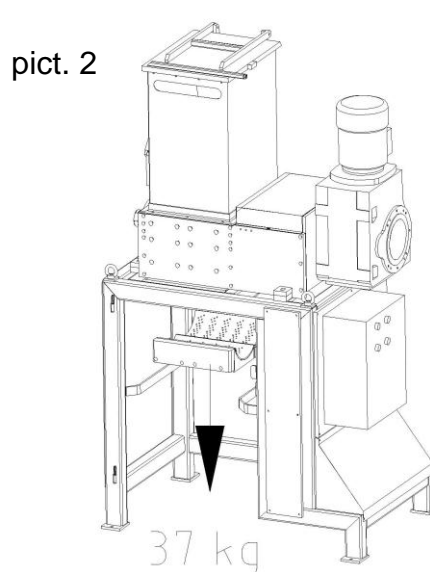
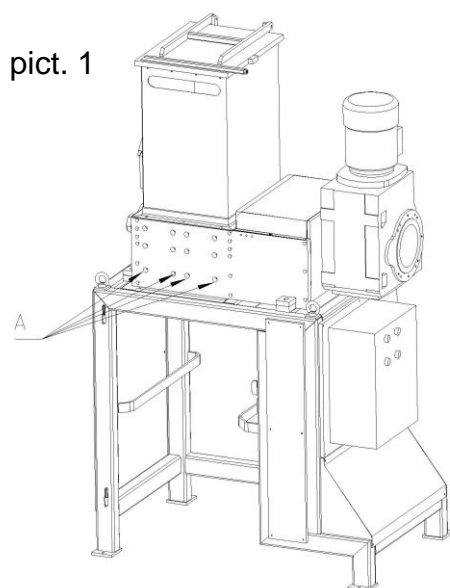
The re-mounting of the security screen once cleaned can be done in reverse order.



Attention!

Position the screen correctly. The holes of the screen have to be directly under the cutting knives.

When the screen is suitable re-positioned the 8x M20 allen bolts must be re-tightened using a fastening torque of 390 kN



9 Operation Manual

9.1 Mounting information:

The machine can be operated outdoors. It must, however, be protected against wind and rain, and be installed stable on even and solid subsoil base.

Attention: Please anchor the frame with bolts on the floor.

Outside temperature not below +25°C

9.2 Operating information:

Fill only shreddable parts in the shredding unit, no solid, massive parts. (see Chap.7).



Attention!

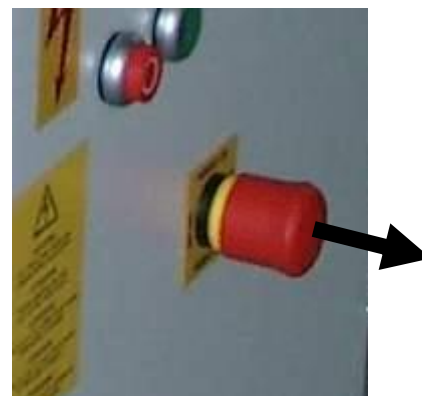
No warranty applies when shredding other parts not approved by the manufacturers.

9.3 Operating

Turn main power switch on



Unlock emergency-stop, if it was pushed in by pulling out as arrow



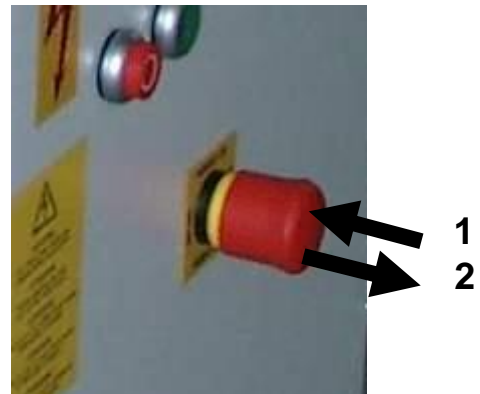
Start the machine – press the green switch



Stop the machine – press the red switch



Reverse the machine - push emergency-stop in 1, and pull it out 2



Afterwards push the black reverse-button



Only for Hard-disk shredder:
Signal lamp, when filling is permitted



Attention!

In case of disturbances or hazards to the Operator during normal operation, immediately push the **emergency-stop** button

Do not fill in more than 1 hard drive disc per 3 minutes !

Please note that the hopper cover and doors have to be closed for the unit to work.
After opening and closing restart the machine.

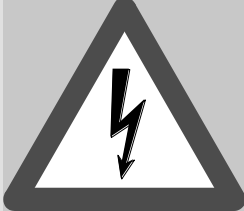
Attention!

In case of disturbances or hazards to the operator during normal operation, immediately push the **emergency-stop button**



9.4 Cleaning

The shredding unit should be cleaned once a week.

	Danger! Before cleaning ensure that the main switch of the shredding machine cannot be switched on.
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9.5 Fault clearance

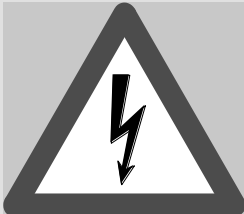
– IF RED DISTURBANCE LIGHT ON CONTROL PANEL IS ON


- is the emergency stop button pressed in → pull out
- is the front collection door open → closed it
- is the hopper open and unlocked → close and relock
- is shredded waste container full → empty the container
- Is the limit switch damaged → call engineer immediately

If the disturbance appears several times in a row, switch-off the main switch and lock machine against activating.

Possible causes :

- There is non-cuttable material in the machine → take it out
- Cutting space is blocked → clear the cutting space

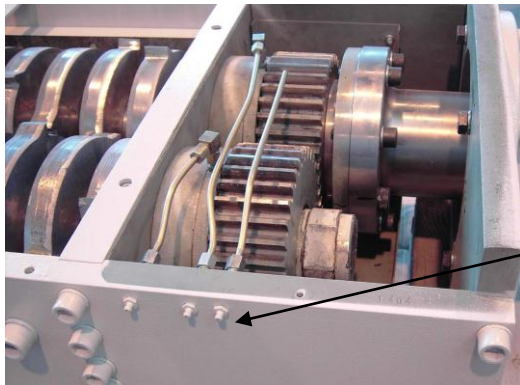
	Danger! Before servicing takes place in the danger area of the shredding machine: push emergency-stop and lock the main switch surely against engaging!
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	Information! It is always recommended that machines are placed under a suitable preventive maintenance contract on a biannual basis by a suitable trained engineer.
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10.3 Cylindrical gears

(only shredding units with one driving motor)

Lubricate once a week with universal grease (temperature range from -30°C to $+60^{\circ}\text{C}$)



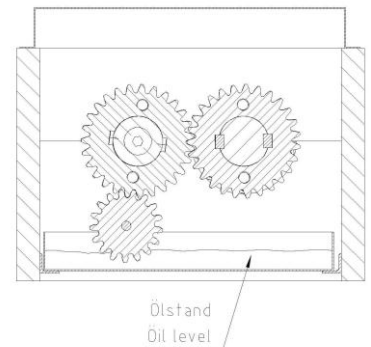
lubrication spur wheels

On a horizontal mounting of the machine it is possible to install an oil bath as emergency lubrication. Please use gear oil before the installation.

Check the oil level on a half year basis.

Change oil every 2 years.

On especially bad conditions please change oil more frequently.



Information!

The type of lubricants could be taken out from the included operating and maintenance instruction of unicase-helical-gearboxes.

11 Declaration of EC-Conformity

According to the EC-Machinery Directive 2006/42/EG

The style of the machine

Product name: Hard drive shredder
Type: JBF HD 38/50
Machine No.: 2227

is developed, designed and manufactured in accordance to the EC-Machinery Directive 2006/42/EG in the only responsibility of

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Authorized for the documents is Managing Director Joachim Farger, address see above company address.

The product complies with the regulations of the above mentioned machinery directive in accordance with the following standards:

- DIN EN ISO 12 100 Safety of machines - tools and equipment
- DIN EN ISO 13857 Safety of machines – safety distances
- DIN EN ISO 14121-1 Safety of machines – assessment of risk
- DIN EN 60 204 Electrical equipment for industrial machines

A technical documentation is completely available. The original operation manual for the machine is existing.

- In the original version
- In the language of the buyer

Hohentengen, den 24.07.2012

.....
Joachim Farger
(Managing Director)

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12 Reference to product liability

According to EC regulations 1999/34/EG, effective since may 10, 1999 the manufacturer is only liable for his product when all parts are originally supplied by the manufacturer or are released by the manufacturer. That means the parts have to be mounted and operated by a specialist.

When using external additions or spare parts the product liability of the manufacturer will not be effective in total or partial. In extreme cases the use of the complete machine can be denied by the officials

13 Reference to inexperienced use of the machine:

In case of inexperienced use of the machine the product liability of the manufacturer expires. This is for instance the case if winding materials is used which deviates in its characteristics from the material tested and released by the manufacturer. See hereto also chapter 3.

14 Production and Service:

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19.03.2012 / PF/THE

Technische Änderungen vorbehalten

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