

# **OPERATION MANUAL**

|                        |                     |
|------------------------|---------------------|
| <b>MACHINE-TYPE:</b>   | <b>JBF HD 38/50</b> |
| <b>MACHINE-NUMBER:</b> | <b>2995</b>         |
| <b>YEAR:</b>           | <b>2026</b>         |

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

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## Appendix:

- Specifications of control system
- Circuit diagrams
- List of electrical components
- Dimensional drawing
- Spare parts list
- Description of purchased parts

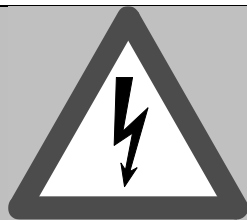
## 2 Description of Symbols



**Information!**  
Important application note



**Attention!**  
Danger of destruction or damaging of machine or facility



**Danger!**  
Danger for life or physical condition

## **3 General**

### **3.1 Warranty and Liability**

General terms of JBF Maschinen GmbH are valid.

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

- Inappropriate use of the machine
- Improper installation, commissioning, set-up, operation or servicing of the machine
- The machine was designed for safe operation by trained and instructed person only and is not designed to be used by children.
- No other works may be performed on the machine during cleaning or servicing
- If the machine was used:
  - with inoperative safety devices
  - with incorrectly installed safety devices
- Non observance of the references related to:
  - transport
  - installation
  - start-up
  - set-up
  - maintenance
- Unauthorised physical/structural modification of the machine
- Unauthorised intervention into the control system
- Emplacement and use of unapproved components and spare parts
- Faulty repairs by non-trained and authorized personnel

### **3.2 Copyright**

The operation manual in hand and associated documents remain the property of JBF Maschinen GmbH. They are handed to our customers and users of our products.

Without our explicit permission it is prohibited to copy these documents or hand over them to third parties, especially to our competitors.

### **3.3 Convention, intended use**

#### **3.3.1**

- The machine is built according to state of the art technology and to generally approved safety regulations
- Nevertheless, when using unless used strictly in accordance with the instructions and by a trained operator then the operator and third parties may place themselves in harm's way.
- adverse effects to the machine and other material property

#### **3.3.2**

- Use the machine only in proper technical condition
- Use the machine only under awareness of safety & danger and in full compliance with the operation manual
- Permanently check and repair any malfunctions of the machine especially regarding to damage to safety switches and interlocks, which in case of damage and malfunction must be repaired without any delay by qualified personnel
- The machine is to be used:
  - only for the purposes for which it was originally designed and built
  - only for the purposes as described with the operator manual, see chapter 7 of this manual
  - for industrial and commercial use only
- Any other as specified above is out of designated use
- The manufacturer or supplier is not liable for any damages if not used and 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 must be readily available at the machine.
- In addition to the operation manual users are to observe:
  - general legal requirement and regulations
  - full accident prevention regulations
  - environment protection regulations
  - personnel protective equipment is to be provided by the operating company
- Local and internal instructions are to be respected and adhered to
- Before starting any work on the machine the operating personnel has:
  - 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 machine.
- The behaviour of the operating personnel in accordance of the safety regulations must be checked and corrected by the operating company
- 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 changes or adjustments are to be made to the height of the machine or that will change the operating height in relation to the operator
  - The operator must not stand higher than the machine when feeding items into to 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 terms of any issues relating to performance, modification and safety mentioned with the manual
- To undertake any maintenance task a proper workshop equipment is absolutely essential
- Provide, communicate and record the location and handling of suitable fire extinguishers
- Observe and record any fire call and fire fighting

### **3.5 Personnel 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
- Clearly define the responsibilities of personnel for operating, servicing and maintenance
- Ensure, that only fully instructed personnel work on or use the equipment
- Carefully note down and communicate who will be the responsible person for the training of machine operators
- Personnel to be trained are only allowed to work at the machinery under permanent view a suitably trained supervisor, who is in the position to reject any safety-adverse directives from third parties
- Electrical requirements are to be carried out by authorised and suitably qualified electricians/trained personnel. Observe normal rules and regulations relating to local requirements



## 4 Security information

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

### 4.1 Normal mode

- Minimum age of persons to operate the machinery is 16 years
- Inside the working area of the machine, the operator is responsible for other persons
- The machine must be placed on even and solid ground.
- Before leaving the machine turn-off main switch and protect it against unauthorised start-up.
- Maintenance and cleaning as well as the removal of the safety devices are only allowed with main switch turned-off (ensure that the main switch cannot be turned-on).
- Ensure that safety devices supplied with the machine are in function and uses.
- Do not access the cutting knives. Danger of serious injury!
- Collecting containers for shred goods must be suitable for the shredded materials and their residual liquids.
- Dangerous goods and improper materials must be separated from the waste before shredding and be disposed separately (e.g. cans and containers used for highly inflammable and explosive substances).
- Waste that can produce loops/tails must be pre-treated separately not to be able to create danger of injury by pulling the operator or other materials into the shredding unit. I.e. do not feed a material with tails that could become tangled drawing the operator or persons in the vicinity towards the machinery.
- The operator has to be trained on the machine and must always wear according safety clothing.
- Take measures for steadily operating the machine in a safe and functional condition. Use machine only, when protection devices and safety attachments are installed and also 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 the operating performance. Inform the responsible person about any changes. If any change occurs immediately stop the machine and shut down and carry out checks. Do not re start until confident there is no fault or problem.
- In case of malfunction of the machine: stop and protect it against unauthorised start-up. Clear faulty without any delay
- Before starting the machine assure that nobody will be at a risk

### **4.2 Special works in the course of operation and maintenance as soon as troubleshooting during operation; waste disposal**

- Observe the terms for service and maintenance. This tasks must be executed only by qualified personnel
- The operating personnel and supervisors are to be informed before service tasks will take place
- If necessary, block off and mark a suitable service area
- Before service/maintenance: clean the machine from oil
- Do not use aggressive cleaning agent
- Use fibre-free cleaning rag
- After demounting of safety devices for servicing or maintenance works always re-install and test them before operating the machine
- Take care for environmental friendly disposal of operating materials fluids and replacement parts

## **4.3 Reference to possible cause of risks**

### **4.3.1 Power supply**

- Operations in the power supply system must be executed by qualified personnel only
- The switch cabinet must always be closed
- Access to any electrical part by authorised personnel with key only

### **4.3.2 Noise**

- Permanent sound level of the machine in idle mode: max. 70 dB(A)
- Depending on the working processes the sound level can be higher
- Personal ear protection is mandatory

### **4.3.3 Oil, grease and other chemical substances**

- Handling of oil, grease and other chemical substances only in accordance with safety regulations for the according material

## 5 Function of the machine

Exchangeable hardened cutting discs are mounted on two counter rotating steel shafts

Materials such as optical and magnetic data mediums are drawn-into cutting shafts and cut into pieces.

Depending on requested security level the shredded chips can be shred once more to receive the target size or, if necessary, a screen can be optionally installed underneath the cutting unit with hole diameters of e.g. 12, 10, 8, 6 mm to reach the target security level.

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

## 6 Technical Data

|                     |                |                                                                                              |
|---------------------|----------------|----------------------------------------------------------------------------------------------|
| Hard drive shredder |                | JB F HD 38/50                                                                                |
| Cutting area        |                | 380 x 500 mm                                                                                 |
| Drive               | P              | 4,0 kW / 400V / 50Hz                                                                         |
| Current consumption | I <sub>N</sub> | 9 A (in case of overcharge: temporary rising of charging rate to 3x I <sub>N</sub> possible) |
| Fuse                |                | 32 A slow blow                                                                               |
| Revolutions         |                | 19 1/min                                                                                     |
| Machine number      |                | 2995                                                                                         |
| Year                |                | 2026                                                                                         |
| Noise level max.    |                | ≤ 70 dB(A) - in no load operation                                                            |
| Weight              |                | approx. 1,100 kg                                                                             |

## 7 Workable materials and warranty details

JBF HD 38/50 is designed to shred optical and magnetic media including standard 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 designed for feeding via a special funnel for max. part size of approx. 270 x 220 x 44 mm (l x w x h). **For processing of any alternate products please contact the supplier for written approval and advice.**

**The machine is supplied with a limited warranty for 12 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 wear the cutting head of the shredder after varying time, depending on type, size, quality and volume of shredded goods.

**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!**

Do not use material which contains poisonous or caustic substances or substances which develop corrosion or which are combustible.

## 8 Vapors and Dust

ATTENTION! During shredding vapor and dust may emerge.

1. Depending on the individual shredding material and the assembled screen, flammable **dust** may develop during the shredding process. The smaller the mesh size of the assembled screen, the smaller particles are created and the higher the dust contents is in the shredding material. Due to the vast multitude of data media and their manufacturers, we cannot give general advice if and when flammable dust is generated. Thus **it is in the responsibility of the operator** to monitor developing of flammable dust for his specific shredding situation depending on the individual shredding material and assembled screen **and take appropriate action** in accordance with applicable standards and rules.
2. Depending on the individual shredding material and the assembled screen, harmful **vapors and dust** may develop during the shredding process. The smaller the mesh size of the assembled screen, the smaller particles are created and the more likely it is that small components on PCB-boards or HDD's are cut, which may release liquid or aeriform substances. Due to the vast multitude of data media and their manufacturers, we cannot give general advice if and when harmful vapor or dust is generated. Thus **it is in the responsibility of the operator** to monitor developing of harmful vapor or dust for his specific shredding situation depending on the individual shredding material and assembled screen **and take appropriate action** in accordance with applicable standards and rules. At any rate it is recommended, to follow the basic guidelines for electronic scrap recycling to **not employ pregnant women in the room** where the shredder is situated, and to **interdict eating, drinking and smoking in this room** for all employees. As an option, the shredder can be equipped with a connecting port for an existing dust extraction plant for collection and disposal of dusty and aeriform emissions of the machine.

## 9 Suggested Feed Rates

To avoid jamming when operating the machine with sieve and the following long-winded clearing of the jam and eventual damages to the machine, the feed rate must be equal to the output of the sieve. With a smaller meshed sieve the output will decrease as well.

**Attention!**

The operator must define the output of the machine with his specific shredding material and the installed sieve and adapt his feed-rate accordingly.

For standard 3.5" HDD's with average weight JBF has evaluated for ease of operation the following suggestions for feed rates:

**For 3.5" HDD's up to 520 grams weight**

1 HDD every 20 minutes with 3 mm screen

1 HDD every 3 minutes with 6 or 8 mm screen

1 HDD every 2 minutes with 10 mm screen

1 HDD every 45 seconds with 14 mm screen

**For 3.5" HDD's up to 620 grams weight**

1 HDD every 20 minutes with 3 mm screen

1 HDD every 190 seconds with 6 or 8 mm screen

1 HDD every 150 seconds with 10 mm screen

1 HDD every 55 seconds with 14 mm screen

**For 3.5" HDD's with hot swap tray caddy**

1 HDD every 30 minutes with 3 mm screen

1 HDD every 280 seconds with 6 or 8 mm screen

1 HDD every 215 seconds with 10 mm screen

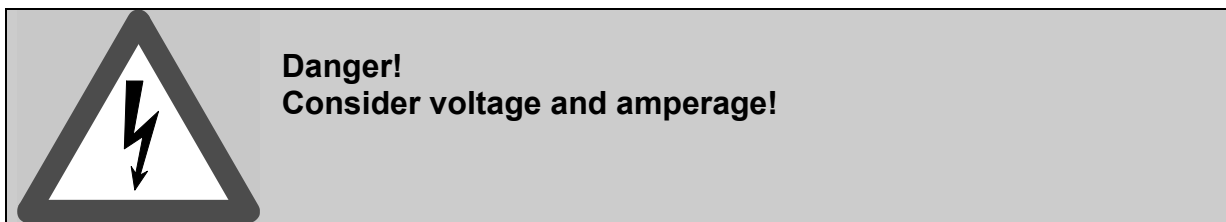
1 HDD every 80 seconds with 14 mm screen

For smaller HDD's and lighter media shorter intervals may be chosen according to the actual load level. Processability of 3.5" enterprise and helium HDD's must be checked in the individual case and feed intervals enlarged as required. Please note that the above mentioned figures are based on JBF internal tests. HDD's, which JBF used for their tests, may achieve different throughput figures than your specific material.

For this reason each operator must determine the output of the machine with his specific shredding material and adapt his feed rate accordingly. Damages which result out of overloading are excluded from warranty.

## 10 Machine set-up

1. It is recommended that the unit is installed and set up by a qualified technician trained by the manufacturer
2. Please carefully read the operation manual and the Security and Safety Information.
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 depending on the configuration of the unit there may be a high centre of gravity and if so, it may be necessary to lift it by crane at the 4 eyebolts at the machine. Please contact the manufacturer for details.
5. If height adjustable machine feet will be not used, please fix the machine frame to the floor with anchor bolts
1. Connection of the machine to the power supply system only in accordance with local regulations like VDE or EVU etc.



2. Check rotation direction of cutting shafts: driving motors must turn in direction of arrow on its cooling fan cover. If the rotation direction is not correct, change of direction must be done by a trained electrician.
6. Fully Instruct the operating personnel prior to starting-up of the equipment
  - Make them familiar with the basic regulations of job safety and accident prevention



## 11 Operation Manual

### 11.1 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.

### 11.2 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.

### 11.3 Operating

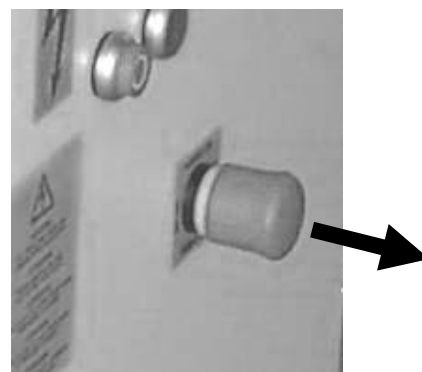
Turn main power switch on

To note: main switch can be locked for maintenance operation by a padlock in off position



If activated, unlock emergency-stop switch by pulling

If several emergency-stop buttons are installed, please unlock all of them.



To start the machine – press the green push-button



To stop the machine – press the red push-button



Reverse mode:

1. push emergency-stop button and pull it out again



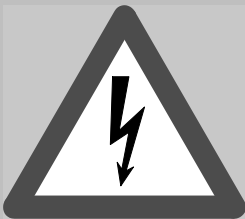
2. Then press the black reverse push-button



Please note that the hopper cover and doors at the machine have to be closed during operation. After opening and closing please restart the machine.

## Attention!

In case of disturbances or if hazards to the operator will occur during normal operation, **emergency-stop button(s)** will have to be pushed immediately.



## Suggested Feed Rates

See chapter 9

## 11.4 Troubleshooting

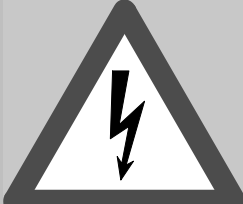
IF RED DISTURBANCE LIGHT ON CONTROL PANEL IS ON

- 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 one of the safety switches on door or hopper damaged → immediately call a technician in charge

If this fault message appears several times in a row, switch-off main switch and lock main switch against switching-on.

Possible causes of fault:

- There is non-cuttable material in the machine → Remove it
- Cutting space is blocked by too much material → empty 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!

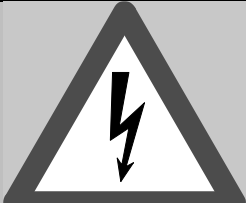


**Information!**  
A bi-annual service check by trained persons is recommended.

## 12 Cleaning of shredding unit and screen

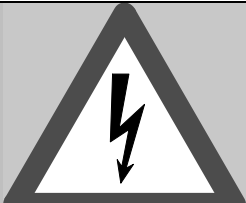
### 12.1 Cleaning of shredding unit

The shredding unit should be cleaned once a week.

|                                                                                   |                                                                                                               |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  | <b>Danger!</b><br>Before cleaning ensure that the main switch of the shredding machine cannot be switched on. |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|

### 12.2 Cleaning of the screen (optional)

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 absolutely necessary to remove these magnetic parts from the machine on a weekly basis or earlier if the capacity throughput of the unit will be reduced. These parts will eventually block the screen and if not removed on a regular basis they may cause serious damage.

|                                                                                     |                                                                                                               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  | <b>Danger!</b><br>Before cleaning ensure that the main switch of the shredding machine cannot be switched on. |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|

|                                                                                     |                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>Attention!</b><br>Staff must be provided with suitable clothing including eye protection, gloves and hard shoes etc. as the magnetic parts can be very sharp. |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 12.3 Exchange & cleaning of screen on shredder JBF 38/50

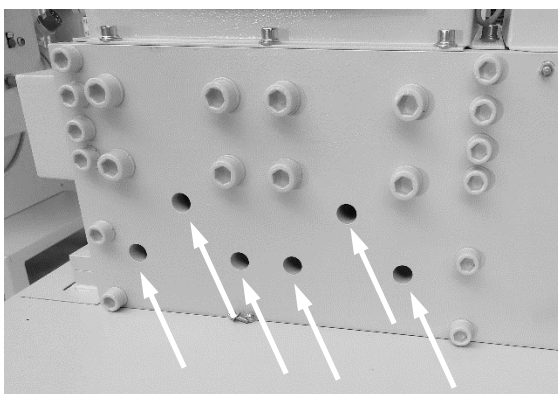
### Procedure:

1. Switch-off machine and ensure that the main power switch cannot be switched-on again until the service process is finished
2. Open front door and remove the waste container.
3. Prop up screen from underneath with the help of a forklift or hoist by placing wooden beams or similar onto the lifting platform to support the screen before loosening the screen's fixing bolts

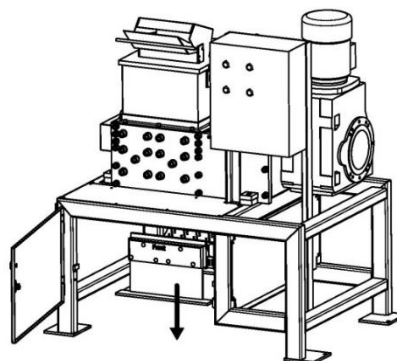


4. Loosen the bolts "A" (6 x Allen bolts M20 each on front and 6 x Allen bolts M20 on the back side of the cutting unit (see picture. 1)
5. With the help of the lifting device move the screen downwards out of the cutting unit when all bolts are removed (see picture 2). Please note that the weight of the screen is approx. 50 kg without the magnetic parts attached.

pict. 1



pict. 2



6. If the screen is stuck and will not slide down by gravity, you may use a crowbar (naildrawer / assembly lever) to pull it out of the chassis. attach it between the foot of the screen and the chassis of the machine and pull the screen down

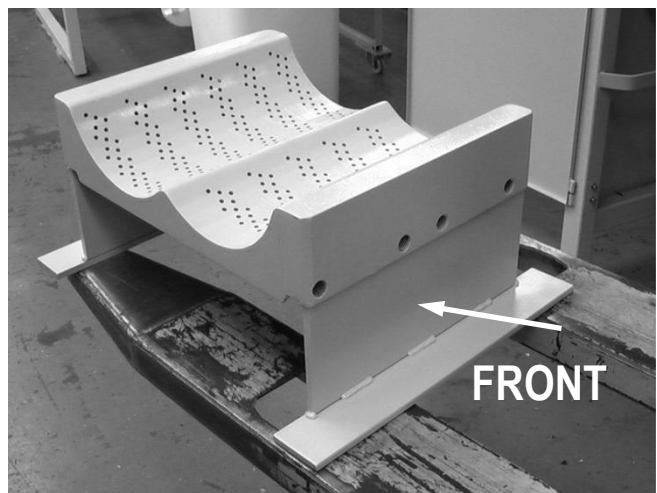


7. Once lowered draw out the screen from under the shredder and remove all magnetic parts from accessible areas underneath the cutting knives and from the screen surface with suitable tools like heavy duty pliers. Also unblock the screen holes with a suitably sized punch. Be careful not to damage the screen

The re-assembly of the screen after cleaning is to be done in reverse order.

**Attention: please check the screen for the mark "FRONT" (see arrow on the picture to the left). This side must be installed towards the front side (door) of the machine. Attention: bring the platform with the screen up so that the platform is above the door switch and the guide bars of the collecting bin, but also ensure that the screen is low enough to match under the chassis.**

Then carefully position the screen so that it matches with the opening of the cutting block and carefully lift it into the cutting block. Finally it will get in touch with the combs within the cutting block. **At the feet there will remain a gap towards the chassis, so do not try to lift the screen any further, else you will lift the complete machine.** Then the holes in the cutting block should match with the treads in the screen so that you can assemble the 6 large allen head bolts at the front and rear side of the cutting block. First tighten the 6 bolts at the front carefully, then the 6 bolts at the rear.



Further instructions and pictures will follow later in this chapter.



**Attention!**

**Position the screen correctly.**

**In case of doubt please contact a qualified engineer or do not operate the machine, as if positioned incorrectly serious damage may occur.**

Please assure that the screen is laying horizontally on the lifting table.

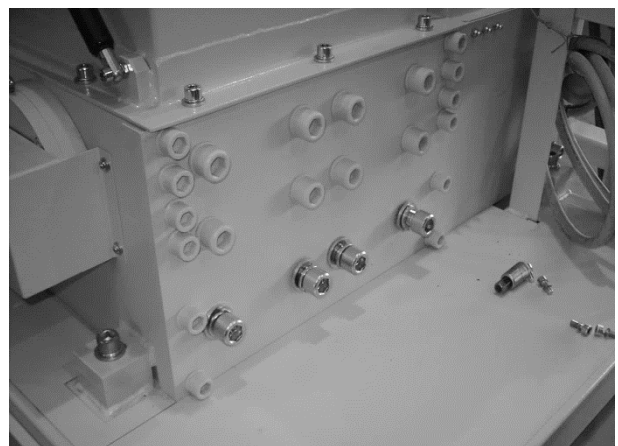


Move the lifting table with screen underneath the shredding unit and lift it up against block.





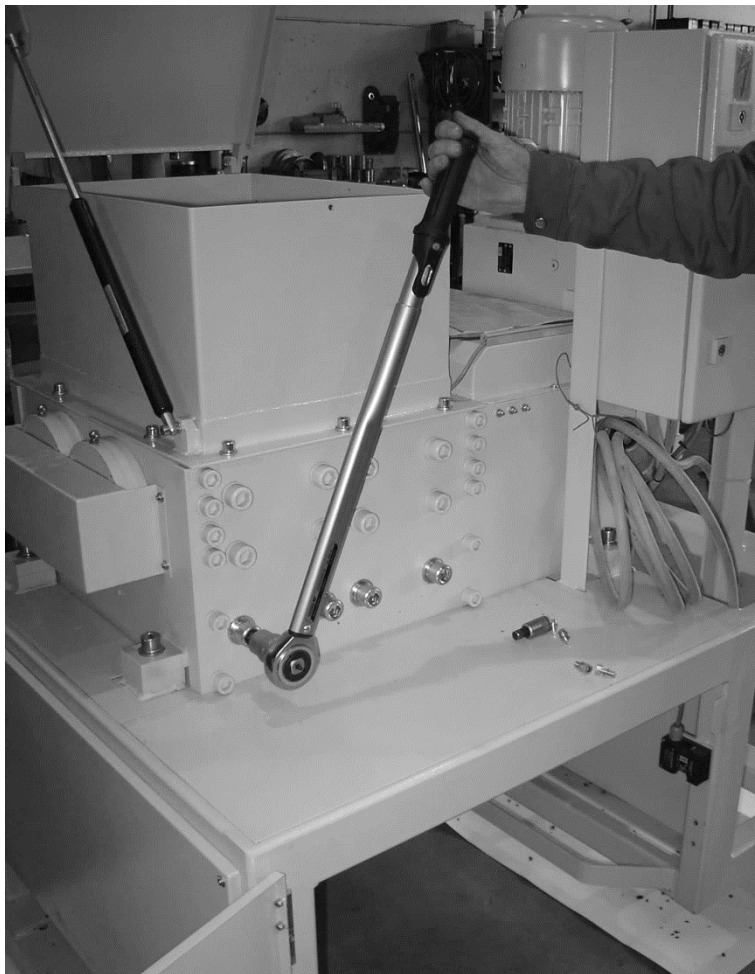
Tighten the screws on both sides of the cutting unit.



Remove the lifting table from the machine.



The silver M20 allen bolts (12x) must be re-tightened by using a torque wrench with 320 Nm



## 13 Lubrication and services

| servicing periods | working steps | recommended lubricants |
|-------------------|---------------|------------------------|
|-------------------|---------------|------------------------|

### Every week or 40 working hours

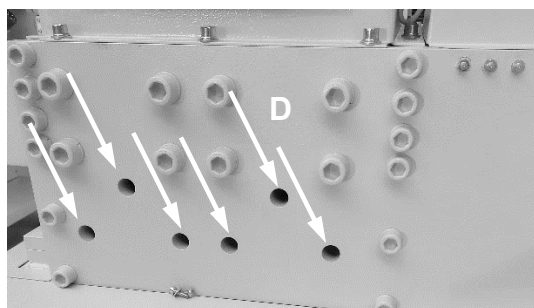
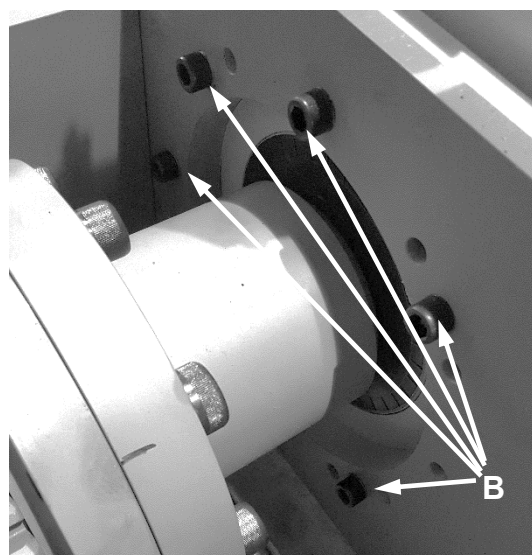
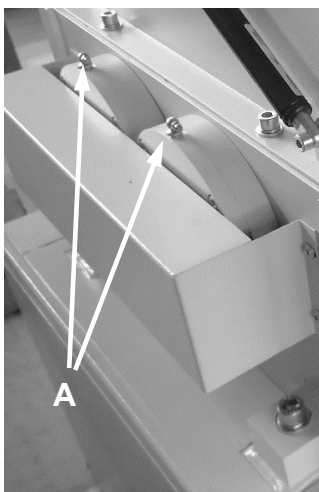
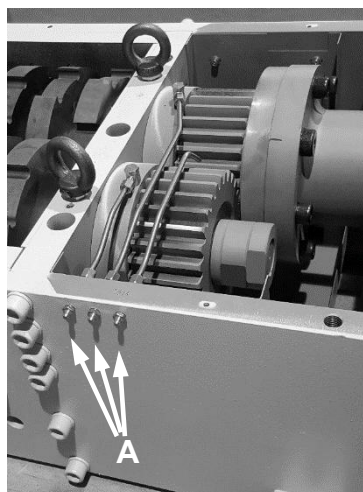
|                                    |                              |   |
|------------------------------------|------------------------------|---|
| A synchronizing gears cutting unit | greasing                     | 5 |
| A bearing cutting unit             | greasing                     | 5 |
| B fixing bolts geared drive        | check and tighten            | - |
| C cutting unit                     | cleaning from magnetic waste |   |
| D screen                           | disassembly and cleaning     |   |

### Every 6 months or 500 working hours

|                                    |                                               |   |
|------------------------------------|-----------------------------------------------|---|
| A synchronizing gears cutting unit | checking oil level,<br>checking for oil leaks | 1 |
| E cutting shafts                   | check for wear                                | - |
| F screen                           | check for wear                                | - |
| G gearbox of main drive            | checking oil level,<br>checking for oil leaks | 1 |

### Every 2 years or 10,000 working hours

|                                    |                 |                          |
|------------------------------------|-----------------|--------------------------|
| A synchronizing gears cutting unit | changing oil    | 1 , 6                    |
| G gearbox of main drive            | changing oil    | mineral 1<br>synthetic 6 |
| B bearings cutting unit            | exchange grease | 7 , 8                    |

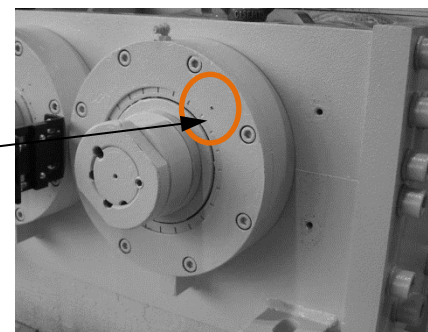


## 13.1 Lubricant Recommendation

| kind of use                            | kind of lubricant | surrounding temperature °C | kin. viscosity at 40°C (cST) mm²/s |  |  |  |  |  |  |
|----------------------------------------|-------------------|----------------------------|------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| synchronizing gearings, gearbox motors | oil               | 1<br>+ 40 to 0             | 242 to 198                         | ARAL Degol BG 220                                                                 | BP Energol GR-XP-220                                                              | SPARTAN EP 220                                                                     | MOBILGEAR 600 XP 220                                                                | SHELL Omala S2 G 220                                                                | Meropa 220                                                                          |
|                                        |                   | 2<br>+ 25 to -15           | 165 to 90                          | ARAL Degol BG 100                                                                 | BP Energol GR-XP-100                                                              | SPARTAN EP 150                                                                     | MOBILGEAR 629                                                                       | SHELL Omala 100                                                                     | Meropa 150                                                                          |
|                                        |                   | 3<br>+ 10 to -30           | 74,8 to 13,5                       | ARAL Degol BG 46                                                                  | BP Energol GR-XP-68                                                               | ESSO Automatic Transmission Fluid                                                  | MOBIL D.T.E. 15                                                                     | SHELL Tellus T 32                                                                   | Meropa 68                                                                           |
|                                        |                   | 4<br>- 20 to -50           | 16,5 to 13,5                       | ARAL Vitamol 1010                                                                 | BP Bartran HV 15                                                                  | UNIVIS J 13                                                                        | MOBIL D.T.E. 11                                                                     | SHELL Tellus T 15                                                                   | Aircraft Hydraulic Oil 15                                                           |
|                                        | grease 5          | + 40 to -15                |                                    | ARAL Aralub FDP 00                                                                | BP Energrease HAT-EP 00                                                           | FIBRAX EP 370                                                                      | MOBILPLEX 44                                                                        | SHELL Grease Alvania GL 00                                                          | Multifak EP 0                                                                       |
| common use                             | synth. 6 oil      | + 80 to -25                | 352 to 198                         | ARAL Degol GS 220                                                                 | BP Energol SG-XP-220                                                              |                                                                                    | MOBIL Glygoyle 80                                                                   | SHELL Tivela S220                                                                   |                                                                                     |
|                                        | synth. 7 grease   | + 60 to -20                |                                    |                                                                                   |                                                                                   | Getriebe-fließfett S 420                                                           | RR.103B Glygoyle Grease 00                                                          | SHELL Tivela GL00                                                                   |                                                                                     |
| bearings for                           | common            | grease 8                   | + 60 to -30                        | ARAL Aralub HL 3                                                                  | BP Energrease LS 3                                                                | ESSO Mehrzweckfett BEACON 2                                                        | MOBILUX EP 2                                                                        | SHELL Alvania RL3 (alt: R3 oder G3)                                                 | Glissando FT 3                                                                      |
|                                        | gearing           | 9                          | + 80 to -40                        |                                                                                   |                                                                                   |                                                                                    | MOBILTEMP SHC 100                                                                   |                                                                                     |                                                                                     |
|                                        |                   | synth. 10 grease           | + 60 to +100                       |                                                                                   |                                                                                   | ESSO Unirex N 3                                                                    |                                                                                     |                                                                                     |                                                                                     |
|                                        | motor             | 11                         | - 30 to -45                        | ARAL Aralub SKL 2                                                                 |                                                                                   | Beacon 325                                                                         | MOBIL THERM p SHC 32                                                                | AERO SHELL Grease 16<br>AERO SHELL Grease 7                                         |                                                                                     |

Roller bearings filled with grease should be filled after approx. 10.000 working hours with new grease. Grease should only fill 1/3 of the hollow spaces. This is the case when grease comes out the control hole in the bearing flange

Control hole



### Attention!

**Do not use or shred material which contains poisonous or caustic substances or substances which develop corrosion or which are combustible.**

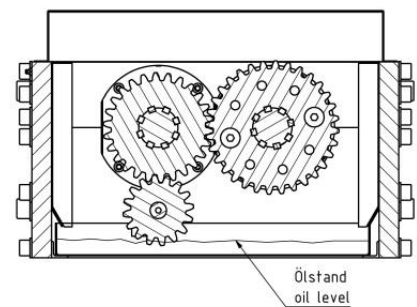
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E-Mail: info@jbf-maschinen.de

With standard horizontal assembly of the machine it is possible to install an oil bath as emergency lubrication device. Please use gear oil before start-up.

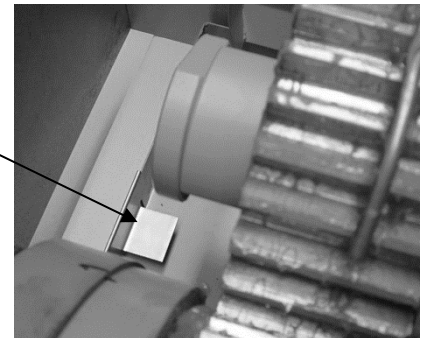
Check the oil level on a half year basis.

Change oil every 2 years.

On especially bad conditions please change oil more frequently.



oil level



The oil level should reach the mark, but do not top up higher.



### Information!

Suitable lubricants can be found in the spreadsheet before as well as from the included operating and maintenance instruction of the unicast-helical-gearboxes manufacturer.

## 14 EC-Declaration of Conformity

**According to the EC machinery directive 2006/42/EG, annex II part 1, section A**

We herewith state that the subsequently described machine complies with the regulations of the EC machinery directive 2006/42/EC.

|                     |                                                                   |
|---------------------|-------------------------------------------------------------------|
| Typ of machine      | <b>Hard drive shredder JBF HD 38/50</b>                           |
| Serial number       | <b>2995</b>                                                       |
| Year of manufacture | <b>2026</b>                                                       |
| Manufacturer        | <b>JBF MASCHINEN GMBH<br/>Flurstrasse 8<br/>88367 Hohentengen</b> |

|                                                           |                                         |
|-----------------------------------------------------------|-----------------------------------------|
| Name of the representative<br>for the technical documents | <b>Managing Director Joachim Farger</b> |
|-----------------------------------------------------------|-----------------------------------------|

### **Applied harmonized standards**

|                              |                                                                                                                                                |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| EN ISO 12100: 2010           | Safety of machinery – General principles for design – Risk assessment and risk minimisation (ISO 12100;2010); German version EN ISO 12100;2010 |
| EN 60204-1: 2006 / AC:2018   | Safety of machinery – Electrical equipment of machines – Part 1: General requirements IEC 60204-1:2005 (modified) EN 60204-1:2006/AC:2018      |
| EN ISO 4414:2010             | Fluid power - General rules and safety requirements for pneumatic systems and their components                                                 |
| EN ISO13849-1:2016-06        | Safety of machinery – Safety referred parts of controls Part 1: General principles for design EN ISO 13849-1: 2008/AC:2009                     |
| EN ISO 13849-2: 2012         | Security of machines – Safety referred parts of controls – part 2: Validation                                                                  |
| DIN EN ISO 14120: 2015       | Safety of machinery – Guards – General requirement for the design and construction of fixed and movable guards                                 |
| EN ISO 3744: 2010            | Acoustics – Determination of sound power levels and sound energy levels of noise sources using sound pressure                                  |
| DIN EN 894-1: 1997 + A1:2008 | Safety of machinery - Ergonomics requirements for the design of displays actuators                                                             |
| EN ISO 13850: 2015           | Safety of machinery - Emergency stop function - Principles for design                                                                          |
| EN ISO 14119: 2013           | Safety of machinery -- Interlocking devices associated with guards – Principles for design and selection                                       |
| Directive 2014/30/EU         | Electromagnetic Compatibility Directive                                                                                                        |
| Directive 2014/35/EU         | Low Voltage Directive (LVD)                                                                                                                    |

**Hohentengen, 11.05.2026**  
Place, date

.....  
Farger, Managing Director

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## **15 Reference to product liability**

According to EC regulations 1999/34/EG valid 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 – and the machine will be operated in accordance to the regulations given by manual in hand.

When using external accessories or spare parts the product liability of the manufacturer will not be to apply in total or partial. In extreme cases the use of the complete machine can be denied by the appropriate authorities.

## **16 Reference to improper use of the machine:**

In case of improper use of the machine the product liability of the manufacturer expires. E.g. if materials will be shred which deviates from the material tested and released by the manufacturer. See hereto also chapter 3.

## **17 Manufacturer and Service Provider:**

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E-mail: [info@jbf-maschinen.de](mailto:info@jbf-maschinen.de)**

31.03.2016 Fu/Ge

Technische Änderungen vorbehalten

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