Translation
Operating manual – part 1

Single belt press EBP580
3 x 208-240V 60Hz
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1 Basic safety principles

1.1 Key to the symbols

**Listing of the symbols used and their significance**

**BEFORE FIRST START INSTRUCTIONS READ**

- ! [Warning]  
  Not observing this requirement can lead to serious injury or to death!

**WARNING AGAINST GENERAL DANGERS**

- ! [Warning]  
  The instructions for these signs must be used without fail!  
  Not observing this requirement can lead to serious injury or to death!

**WARNING OF DANGEROUS LIVE ELECTRICAL POWER SUPPLY**

- ! [Warning]  
  Before any servicing or checking work is undertaken, all parts or supply lines on the machine that are marked with this sign must be switched free from live current.  
  Not observing this requirement can lead to serious injury or to death!

**BEFORE OPENING UNPLUG!**

- ![Socket]  
  Interrupting your work on the machine power supply and secure against accidental before reconnecting it and turning.  
  Non compliance can mean severe personal injury.

**PROTECTIVE GLOVES and WEAR EYE PROTECTION!**

- ![Glove]  
  Always wear protective gloves and goggles when using cleaning agents.  
  Non-observance could be serious burns and eye injuries and even loss of sight!
WEAR EAR MUFFS!

Ear muffs must be worn when there is a high noise level!

Not observing this can lead to serious personal injury!

INFORMATION!

Helps you to make optimal use of the functionality of your machine.

NOTE!

Technical requirements for simplifying the operation of the machine!

1.2 General safety regulations

NOTE!

Ensure that the machine/line is only operated under perfect technical operational conditions and giving full account to the proper use.

WARNING AGAINST GENERAL DANGERS

Ensure that all possible faulty functions and risk situations are eliminated immediately and without delay before starting up!

Faulty functions and risk situations are e.g.:

- uncontrolled lifting/sinking and turning/swiveling movements
- loose parts on the machine/line

INFORMATION!

Apart from the instructions and standards which are listed on the CE marking, the accident prevention regulations of the national laws and regulations, for example, VDE to IEC note.
1.3 Selection, qualification and responsibility of operating staff

**NOTE!**

Please note each operator of the unit must be trained, instructed and older than 15 years.

Please observe your national law and regulations for industrial safety.
Operating staff who are in training or under instruction may only work under the constant observation of an experienced person who is thoroughly familiar with this machine/line!

All work on the electrical systems for this machine/line may only be carried out by a qualified electrician / electrical engineer. All work of this kind may only be carried out under the direction of a qualified electrician / electrical engineer taking full account of the relevant electro-technical guidelines.

The operating personnel must ensure that no other people are in the working area.

Before you leave the unit, you have to stop it and to ensure that no unauthorized person (especially children) is able to restart it. Therefore lock the main switch in position <0> with a padlock and / or disconnect the main plug!

1.4 Organizational measures

**NOTE!**

Before starting up the machine/line the operating personnel must without fail be familiar with the Operating Manual, in particular with the safety regulations and notes.

It is too late to make a start on familiarization with these procedures when work is already being done on the machine/line.

This applies in particular to persons who work constantly on the machine/line.

Ensure that a copy of the Operating Manual is kept constantly at the machine/line!

The Operating Manual must be read by every person whose task is operation or maintenance (servicing, inspection and maintenance).

Only line-specific trained personnel who are thoroughly familiar with it may be employed on the machine/line.
If the machine/line must be transported only trained staff who are permitted to do so may operate the lifting gear (crane, stacker).

Training and instruction must be recorded and entered in this documentation machine/line Operating Manual (instructor, content, participant and date).

Safety and danger notes and all notices must be maintained in a perfect and legible state.
In the event of warning and notice signs on the machine being illegible the manufacturer must be informed at once!
NOTE!
Use protective equipment if necessary, but without fail if this is required by the protection regulations! (gloves, masks, ear muffes, protective helmets etc.)

Observe all the safety requirements and notices that are place on the machine/line!

In the event of damage to a part or a component group that may a detrimental effect on operating personnel on the line, the line must be shut down immediately and the responsible person or the Customer Service Department must be informed!

All changes, additions or subsequent constructions to the machine/line that may have a negative effect on its safety and functionality, may only be made when these are tested, agreed to and released in writing by the machine/line suppliers!

This also applies to the installation and setting of the safety devices and safety equipment This also includes the welded constructions of the bearing and support structures.

All spare parts must comply with the technical requirements of the machine/line supplier. This is also the case where original spare parts are used.

NOTE!
Ensure that the fixed intervals, or the inspection intervals specified in the Operating Manual are adhered to! (see the chapter "Servicing and Repairs")

Ensure that the tools and equipment required for each kind of servicing work is available as required!

Ensure that both fire-fighting equipment and instructions for the fire alarms and for fire fighting are available.

Observe the instructions given for the fire alarms and for fire fighting.

NOTE!
The machine should be taken from company Voran in operation!

When commissioning an enrollment (operation, maintenance) is performed.
1.5 Safety requirements for the operating state

**WARNING AGAINST GENERAL DANGERS**

The machine/line may only be operated after all statutory safety requirements have been fulfilled.

---

1.5.1 Servicing/repair operation

**WARNING AGAINST GENERAL DANGERS**

Servicing and repair work may only be carried out when the machine/line is switched off and secured against being switched on again (e.g. by pulling out the device mains plugs, locking the mains switches; the key must be in the safe keeping of the maintenance staff!)

**WARNING AGAINST GENERAL DANGERS**

The machine may only be operated when the safety covers are assembled!

The machine/line area that is to be serviced must be switched off and locked before the start of the work. It must be assured that the machine/line is not switched on again by appropriate measures or the posting of a second person.

When carrying out work in an unsecured area it must be possible for the second person must be outside of the danger area and must be able to take appropriate rescue measures in the event of an emergency.

Servicing, repair and maintenance work may only be carried out from a safe working position.

Before starting up again and renewing normal operation a functional test of all functional groups and safety equipment must be made without fail.

**WARNING OF DANGEROUS LIVE ELECTRICAL POWER SUPPLY**

Before servicing and maintenance work on electrical components (e.g. clamping box) it must be assured that no parts are live and they must be secured against the power being switched on again!

Before loosening the electrical connections the clamps must be tested with a voltage tester to ensure that they are not live.
1.5.2 Normal Operation

**NOTE!**

Avoid working methods that are not clear from a safety aspect!
Make all required settings to the machine/line so that can work under reliable and safe operating conditions!
The machine/line may only be operated when all safety devices and safety equipment is available and functional, such as e.g.:
- emergency stop button
- two hand operation (dead man’s switch)
- protective covers

**WARNING AGAINST GENERAL DANGERS**

Check the machine/line before each start up for externally visible damage or defects! All changes (including any changes made to the Operator's Manual) must be reported without delay to the responsible person or the Customer Service Dept.
The machine/line is to be stopped immediately and secured against being started up again!

In the event of malfunctions the line/machine must be shut down immediately and locked!
Ensure that immediate and professional trouble shooting of the malfunctions is carried out!
Observe the switching on and off procedures and compare the controls indicators with the data provided in the documentation/Operating Manual!
Observe the notices on the machine/line!
Before starting up the machine/line it must be ensured that no person will be endangered!
Do not remove any safety covers while the machine/line is in operation!
Moving mechanical parts must never be touched!
Use no fuses that do not comply with the required fuse protection! In the event of a fault in the power supply machine/line must be switched off immediately!
In order to assure an operation free from interruptions the machine/line and the area around it must be kept clean and tidy and adequate lighting must be provided.
Before starting normal operation a safety test of all functional groups and safety equipment must be carried out!
1.6 Safety devices

The machine/line may only be used either in the course of normal operation or in servicing/repair operation when all required safety devices are used and are effective.

The following safety regulations have been introduced in order to reduce the remnant risk from the machine/line to an absolute minimum:

- The Operating Manual describes the sources of risk and the orderly behavior of the operating, servicing and repair personnel.
- Notices on the machine/line marking sources of risk!

e.g.:

Picture 1.6-1) Caution live voltage!

HINWEIS!

| The safety devices must not be left aside nor made in effectual. |
| Where this is not assured no liability can be accepted. |
| safety devices must be checked monthly. |
| Notices must be easy to recognize. |

Electrical safety devices

WARNING AGAINST GENERAL DANGERS

| All electrical safety devices must be connected and functional at all times. |
| they must not be electrically bridged! |
| Before quitting any activated safety devices it must be ensured that no persons are in the danger areas. |

The electrical safety devices include for example:

- main switch
- emergency stop-switch and button
- energy supply cables
- any operator controls and control stands if these are provided
Mechanical safety devices

WARNING AGAINST GENERAL DANGERS

| All safety devices must be firmly fixed! |
| It must only be possible to remove them with the use of tools! |
| The possibility of loosening them manually is not permitted! |

Protective devices may only be removed for the period of maintenance and servicing! The machine/line must be secured against a starting up in unsecured condition!

The mechanical safety devices include for example:

- safety clothing
- railings and barriers
- protective grids
- covers on moving parts
## 1.7 Remnant risks

<table>
<thead>
<tr>
<th>Reasonably foreseeable, incorrect use/risk</th>
<th>Remnant risk</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not maintaining of the safety regulations, as described in the documentation or the Operating Manual</td>
<td>Any failure of safety devices, all forms of risk possible</td>
<td>Additional note on the machine/line about the observation of specified safety regulations</td>
</tr>
<tr>
<td>Servicing and maintenance work on the machine/line, while it is not in a safe condition, e.g. the mains electricity has not been switched off, etc.</td>
<td>All forms of risk possible!</td>
<td>For operator training see Operating Manual</td>
</tr>
<tr>
<td>Not observing the safety measures in setting up the machine/line</td>
<td>All forms of risk possible, e.g. loose mechanical parts</td>
<td>For operator training see Operating Manual</td>
</tr>
<tr>
<td>Catching of clothing in moving mechanical parts during servicing or repair work</td>
<td>All forms of risk possible!</td>
<td>Starting up of the machine/line only with assembled safety covers; Regulation clothing, operator training</td>
</tr>
<tr>
<td>Standing beneath hanging loads</td>
<td>The endangering of the ground personnel is possible from falling loads</td>
<td>Wear safety helmets; observe safety notes for servicing and repair work; staff training</td>
</tr>
<tr>
<td>Neglect of personal protection equipment in normal operation and servicing and maintenance work</td>
<td>All forms of danger to staff are possible!</td>
<td>For operator training see Operating Manual; use personal protection equipment if required, but without fail if this is required by the protection regulations! (gloves, facial protection and earmuffs, protective helmet etc.)</td>
</tr>
<tr>
<td>Straining the body through incorrect manual lifting</td>
<td>Permanent damage to the spine and joints of the hand</td>
<td>Use of suitable permitted lifts</td>
</tr>
</tbody>
</table>

### Risk areas

Risk areas must be constantly marked by means of warning plates, coloured markings or other clear indicators.

**WARNING AGAINST GENERAL DANGERS**

- The presence of persons during operation in risk areas is prohibited!
- A functional test of all safety devices must be carried out before re-starting of line!
- It must be assured before switching the main switch and the control power, that there are no persons in the risk areas.
1.8 Correct use

This machine/line is intended and constructed for the following use in full compliance with the contractual terms:

**INFORMATION!**

The press may only be used for the pressing of fruit, vegetables and herbs that contain juices.

The stones must be removed from all stone fruit, unless the stones are no bigger than cherry pits and do not have sharp edges (danger of breaking screen belt).

Any other use of this machine/line represents an improper use of the machine/line.

The correct use of this machine/plant to terms of the contract requires further that the documentation/Operating Manual as also the specified inspection and servicing intervals are strictly adhered to.

Although this machine/plant has been constructed to the highest technical standards and the recognised standards of safety and has been accepted by the client, danger of injury or of loss of life may none-the-less arise for the user or third persons as a result of its use, or the machine/line may itself be damaged.

The machine/line may only be operated when in a technically perfect condition, in a professional manner and when the operator is fully aware of the safety and danger aspects.

Recognized weaknesses or faults that may reduce the safety of operation, must be dealt with in a professional manner immediately or must be reported to customer service in a manner that can be proven!

Changes must not be made to the machine/line settings values.

**WARNING AGAINST GENERAL DANGERS**

This machine/line was constructed to the current standards of engineering and the currently applicable Safety of Machinery Directive (MSV).

Non-observation of the safety regulations contained in the Operating Manual during operation of the line/machine can endanger the operating staff or third persons or have a detrimental effect on the line/machine or its properties.

1.9 Inappropriate use

**WARNING AGAINST GENERAL DANGERS**

Any use of this machine/line other than that as defined in the chapter "Correct Use", represents an inappropriate use of the machine/line and can result in serious injuries of the operating staff or third persons or to the damage or destruction of the line/machine.

The manufacturer/supplier cannot be held liable for any damage resulting from an inappropriate use of the machine/line.

In such cases the user assumes full liability.
1.10 Training record

<table>
<thead>
<tr>
<th>Line/machine:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainer:</td>
<td></td>
</tr>
<tr>
<td>Date of training:</td>
<td></td>
</tr>
<tr>
<td>Place of training:</td>
<td></td>
</tr>
<tr>
<td>Training content:</td>
<td></td>
</tr>
</tbody>
</table>

**Participant confirmation**

<table>
<thead>
<tr>
<th>Name of participant</th>
<th>Signature of participant (you confirm with your signature that you have understood the training in special safety measures)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
2 Technical data

2.1 Technical data - overall machine/line

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>up to 1000 kg</td>
</tr>
<tr>
<td>Speed of belt</td>
<td>2.1 – 5.5 m/min</td>
</tr>
<tr>
<td>Processing time</td>
<td>0.6 – 1.6 min</td>
</tr>
<tr>
<td>Application width</td>
<td>240 – 460 mm</td>
</tr>
<tr>
<td>Application height</td>
<td>10 – 50 mm</td>
</tr>
<tr>
<td>Width of belt</td>
<td>580 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>665 kg</td>
</tr>
<tr>
<td>Sound power level (EN ISO 3746)</td>
<td>LWA &lt; 80dB</td>
</tr>
</tbody>
</table>

Drive motor

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive type</td>
<td>Helical-bevel geared motor</td>
</tr>
<tr>
<td>Voltage</td>
<td>230/400V 50HZ IP56</td>
</tr>
<tr>
<td>Capacity</td>
<td>0.75 kW</td>
</tr>
<tr>
<td>Rotary speed</td>
<td>1400</td>
</tr>
<tr>
<td>Transmission</td>
<td>i=151</td>
</tr>
</tbody>
</table>

Pneumatic system

The press is provided with a manometric switch that switches the press off when the working pressure of the press is too low, or that makes it possible to first switch on the machine when a minimum operational pressure has been reached.
This serves to protect the machine against damage.
When the pressure is too low the belt tenser and the diagonal run regulation no longer work.

NOTE!

You will find further information on the setting of the pressure regulator in the chapter "Controls and settings work before first starting up/re-starting of line!"
3 Transportation and setting up of the machine/line

3.1 Notes on transportation

NOTE!

- Before transporting the machine/line the motor is to be switched off and the mains connector plug must be pulled out!
- The machine/line must not be tipped!
- In order to avoid transportation damage assemble any available transport securing devices.
- Secure the machine/line in an orderly manner on the means of transport!
- Observe the statutory requirements (StVO) for legally specified dimensions or mark the load!

A forklift with a lifting capacity in compliance with the table given below is required for the unloading of the machine.

Before unloading the machine must be checked for any transportation damage, this is to be recorded in the delivery certificate and reported to the Customer Service Department.

Ensure that the machine is not damaged by knocking it or setting it down too quickly in the course of the manipulation.

Picture 3.1-1) Transport single belt press EBP 580

<table>
<thead>
<tr>
<th>F1 load on the means of attachment</th>
<th>6650 N oder 665 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2 foundation load</td>
<td>3400 N/m² oder 340 kg/m²</td>
</tr>
<tr>
<td>1</td>
<td>Foundation fixture</td>
</tr>
<tr>
<td>2</td>
<td>Transport pallet</td>
</tr>
<tr>
<td>3</td>
<td>Reception point on the forklift</td>
</tr>
</tbody>
</table>

WARNING AGAINST GENERAL DANGERS

A crane or forklift stacker with a lifting capacity in compliance with the table given below is required for the unloading of the machine.

Means of attachment (rope, chain, belt) should be fixed only to the lifting points provided!

The lifting accessories used must be adequate for dealing with the load as given (See table above and nameplate on notice)!

The machine must be secured during transportation by belts or on a pallet bolted.
3.2 Notes on assembly

**WARNING OF DANGEROUS LIVE ELECTRICAL POWER SUPPLY**

The Power connection must not come into contact with water!

Not observing this requirement can lead to serious injury or to death!

**NOTE!**

- A 4-pole connection must be available as a minimum (3 phase and grounding)!
- Only use connection pipes of at least 4 x 2,5 mm².
- Mobile devices that are used in the open air must be connected with minimum operational current switch protection (FI). If this not possible, the machine must be separately earthed.
  The centrifugal crusher may only be connected to 208-240V cables that are secured with a capacity protection switch 16 A.
- The water pipes must be permanently protected against frost!

**Electricity supply**

Three-phase current 208 - 240 V (3 phases + earthing)
Fuse protection 16 A neutral

**Water supply for belt cleaning**

a) For high-pressure cleaners supplied by Voran (Kärcher type HD 7/18 C):
   Water supply pipe 3/4" with a reduced connection to 1/2" external thread
b) For high-pressure cleaners supplied by the customer:
   a continuously sustained high-pressure cleaner with a working highest pressure of at least 180 bar and a supply performance of 500 l.
   The water supply pipe dimensions must be compliant with the high pressure cleaner operating manual.
   The water supply pipe must without fail be provided with a to prevent a blocking of the cleaning jet with sand or sediment.
   The press is provided with a standard high-pressure connection M22 x 1.5 mm external thread.

**NOTE!**

The water pipes must be permanently protected against frost!

**NOTE!**

There's no separate light mounted on the unit.
The licensee is responsible for adequate light based on national requirements for workplace layout!
The following measures must be undertaken before starting up:

- Assembly of connections [single belt press EBP 580]

  - Polokal pipes D = 70 mm nominal value (Fig. Pos.2) for belt cleaning waste water.

**NOTE!**

Before you connect the unit to the sewer, you have to talk with your regional sewer contractor!

- Connect the washing machine to the safety switch (Fig. Pos.3).

**Compressed air supply**

The compressor must have a maximum pressure of 10 bar and a supply capacity of 100 l/min. The compressor is set to a cutting-off pressure of maximal 8.5 bar and this must on no account be increased by the customer.

**NOTE!**

The membrane switch responsible for the dosing settings in the dosing box may be connected either to the Voran Washing Machine with fully automatic dosing or to an own line.
4 Starting up / re-starting of the machine/line

4.1 General

NOTE!

− Before starting up and before each restart, the complete unit and all devices must be efficiently cleaned.
− For cleaning just use the specified and preferred agents (chapter 9.5.1)
− If you should use other cleaning agents the responsibility, suitability and right usage of them belongs to the licensee.

WARNING AGAINST GENERAL DANGERS

The operator must ensure, just to handle materials which aren’t capable, also especially during the milling process, to create ignitable substances (fluids, aerosol, steam, explosive dust atmosphere, etc.)!

NOTE!

The machine/line and all machine/line components must be checked by a specialist
− before starting up and before re-starting after significant changes.

4.2 Mounting belt lug

For transport, the belt lug of the belt regulation is disassembled and is in the control cabinet of the machine.

For mounting the belt lug look at picture Picture 4.1-1.

<table>
<thead>
<tr>
<th>Piece</th>
<th>Name</th>
<th>Part nr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Belt lug 3x61x181</td>
<td>10035699</td>
</tr>
</tbody>
</table>

Picture 4.1-1) Mounting belt lug
4.3 Controls and settings work before first starting up/re-starting of line

Check the machine/line for loose parts (e.g. forgotten tool)!

Check all cable connections (clamp and plug connections) as also all pneumatic pipelines of the machine/line. Pay particular attention to damaged and loose cable and connections (see illustration).

Check that the required safety devices have been placed in an orderly manner and are intact! (see the chapter "Safety devices")

**WARNING AGAINST GENERAL DANGERS**

---

| | Before cleaning the device or checking the connection cable, to see if this has been twisted or damaged, switch the machine off without fail and pull out the mains connector plug! |
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Picture 4.2-1) Symbol image, control cable and connector point

Changes in comparison with normal operation such as

- higher capacity feeding
- higher noise development
- higher acceleration or delay, higher vibration amplitudes
- unusual noises or unusual smells
- response of the safety devices without a motivational cause

are grounds for recognizing that the function of the line/machine is impaired.

Detrimental effects such as this or similar are to be immediately reported by the operator to the person responsible.
4.3.1 Setting the pressure regulator

The following basic values are pre-set by Voran:

<table>
<thead>
<tr>
<th>Component</th>
<th>Pressure (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressor</td>
<td>8.5</td>
</tr>
<tr>
<td>Belt regulation</td>
<td>8</td>
</tr>
<tr>
<td>Belt tenser</td>
<td>4</td>
</tr>
<tr>
<td>Pressure switch</td>
<td>6</td>
</tr>
</tbody>
</table>

![Pressure regulator diagram]

*NOTE!* The values given above must be set again before re-starting of line after servicing and repair work!

4.3.2 Testing of the screen belt

Test the screen belt closure before starting work and check that the belt runs correctly centred on the rollers. Information on the setting of the screen belt can be found in the chapter "Servicing and Repairs" under 10.5.4 Setting of the screen belt and 10.5.5 Adjusting the regulating valve.

4.3.3 Water supply for belt cleaning

1.) Activate the water supply (water turn on)
2.) Switch on high-pressure cleaner

After cleaning
3.) Switch off high-pressure cleaner
4.) Deactivate the water supply (water turn off)

The maximum operational pressure of the high-pressure cleaner must not exceed 200 bar!

*INFORMATION!* Further information on the handling of the high-pressure cleaner can be found in the manufacturer's operator's manual.
5 Functional description

5.1 Functional description – single belt press EBP 580

The single belt press is a continuously operating press for the separation of solids from the liquid parts of different products.

The continuously operating screen belt is driven by a variable speed double worm gear motor.

The pressing product (generally fruit or vegetable mash) is filled in the dosing box for the single belt press until the full signal is made for the switching off of the filling procedure. The pressing product is then pulled in between the screen belt and the first large roller and in a first pressing is pre-pressed by approx. 70 %.

After this first pressing, the pressing product goes on via a guide roller to the next (smaller) pressing roller and is pressed once again. This procedure is repeated four times.

The pressing product is scraped from the belt by a spring-loaded scraper after the last roller and it falls out at the rear of the machine.

The pressed out juice is directed by the screen belt into the collecting trough below it and it is conveyed onwards from there.

The screen belt runs back to the mash loader under the machine and if required will be cleaned by an integrated high pressure cleaner.

The screen belt is tensed by means of a pneumatic cylinder and regulated centred in the machine.
6 Operation

6.1 General

WEAR EAR MUFFS!

It's absolutely necessary to use ear protections at noise nuisance
Not observing this can lead to serious personal injury!

WARNING AGAINST GENERAL DANGERS

Before leaving the machine/line the motor must be switched off and the mains connector plug must be disconnected!
Machines that are not under observation must be secured against being started up!

6.2 Operation - machine/line components

6.2.1 Screen belt tension

*Picture 6.2.1-1) Screen belt tension*

1.) Switch on compressor
2.) Open the hand valve on the maintenance unit (Fig. Pos.1) by turning it.
   The tensing cradle (Fig. Pos. 2) then moves forwards and tightens the screen belt.

The compressor must be set to a cutting-off pressure of maximal 8.5 bar.

In order to ensure that the yield is kept as great as possible, the belt should always be tensed as tight as operation will permit. This means that the mash is not to be pressed out at the sides!

The adjustment of the screen belt pressure is regulated by the pressure switch at the air service unit (Fig. Pos.4)
By coming up and twist the regulator (Fig.Pos.5) the tension can be shifted from 0 to 4 bar.

The pressure reducer valve (Fig.Pos.3) must be always adjusted at 8 bar. This pressure is necessary to guarantee a concentric tape run.
6.2.2 Switch on and off the Belt press

1.) The Belt press is supplied with power by switching on the main switch (Fig. Pos. 1). Switch the key switch (Fig. Pos. 2) to automatic. Unlock the emergency-stop button.

2.) Press the button (Fig. Pos. 4).

3.) Choose a language by tipping a flag.

4.) After switching on the screen belt by pressing button fig. 5, the cleaning and brush cleaning can also switched on by pressing button fig. 6 and fig. 7.
5.) Press the button relay (fig. 6) and/or FU (fig. 7); by pressing the button back (fig. 8) it can be returned to the main menu.

6.) After switching on the screen belt (fig. 9), the cleaning (fig. 10) and the brush cleaning (fig. 11) can be switched on as well by pressing the corresponding button.

7.) By pressing again the button cleaning (fig. 13) and brush cleaning (fig. 14) the function can be turned off. By pressing the button belt (fig. 12) the screen belt, the cleaning and the brush cleaning will stop simultaneously.
6.2.3 Setting belt speed

The belt speed can be adjusted continuously.

1.) Press display fig. 1.

2.) The screen belt operates slower or faster (35 – 90 Hz) by pressing the arrows (Fig. Pos. 2 + 3).

Press button fig. 4 for running the screen belt backwards for a short time.
6.2.4 Setting the cleaning interval

1.) For setting the cleaning time, press button „Intervall“ (Fig. Pos. 1) and afterwards tip on the minute display of the waiting time (Fig. Pos. 2) for opening the numerical keyboard.

2.) Enter the required waiting time and press the Enter key. Afterwards enter the required cleaning time as before. The cleaning time must be maintained at least 4 min. (1 belt circulation).

3.) The cleaning is activated by pressing the button „Start“ (Fig. Pos. 4).

4.) For continuous cleaning, the waiting time must be set to 0.

6.2.5 Belt cleaning

When the belt cleaning is switched on, following operation process must be strictly observed!

1.) Provide water supply (open water supply)
2.) Switch on high pressure cleaner

End of the belt cleaning

3.) Switch off high pressure cleaner
4.) Turn off water

INFORMATION!

Nähere Informationen zur Handhabung des Hochdruckreinigers finden Sie in der Bedienungsanleitung des Herstellers (im Lieferumfang enthalten).
6.2.6 Charging of the press

On the dosing tank (Fig. Pos. 1) is an inductive proximity switch (Fig. Pos. 2) which controls by start and stop of the mash supply the mash amount in the dosing tank to prevent an overflowing of the mash.

The application width is adjusted by the adjusting plates (Fig. Pos. 4) as required. The application amount can be adjusted variably by using the adjusting lever (Fig. Pos. 3) with several latching positions.

The adjustment of the application level is depending on the mash texture. The softer and more fluid the mash, the lower the application level.

The belt speed can be adjusted continuously as described under point 6.2.3.
7 Electricals

7.1 Electrical circuit diagram – EBP580
Single belt press EBP580

- Circuit diagram - single belt press EBP580

- Voran Maschinen GmbH
- Einbandpresse EBP580

- Main circuit

- Voran Gmbh

- Date: 28.11.2017

- Version: 166098000

- Projektnummer: EBP580

- Seitenbeschriftung: Main circuit
Picture 7.1-3) Circuit diagram – single belt press EBP 580
Picture 7.1-5) Circuit diagram – single belt press EBP 580
Picture 7.1-6) Circuit diagram – single belt press EBP 580
Picture 7.1-7) Circuit diagram – single belt press EBP 58
## Material list – EBP 580

<table>
<thead>
<tr>
<th>QTY</th>
<th>Description</th>
<th>Item-Nr.</th>
<th>Reference</th>
<th>Producer/supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VCD2 Emergency stop main switch 40A</td>
<td>120600001</td>
<td>-1S1</td>
<td>Telemecanique</td>
</tr>
<tr>
<td>1</td>
<td>A9F07213 IC60H,2P,13A, circuit breaker</td>
<td>160300142</td>
<td>-1F1</td>
<td>Groupe Schneider</td>
</tr>
<tr>
<td>1</td>
<td>Frequency converter LSIS SV008iC5-1F</td>
<td>160200089</td>
<td>-1FU1</td>
<td>ALGAutomatisierungs-lösungen GmbH</td>
</tr>
<tr>
<td>1</td>
<td>Helical-bevel geared motor 0,75 kW 208-240V</td>
<td>110403501ULCSA</td>
<td>-1M1</td>
<td>Drive Experts GmbH</td>
</tr>
<tr>
<td>1</td>
<td>Woarm gear motor 0,37 kW 208-240V 60Hz</td>
<td>110300462ULCSA</td>
<td>-1M2</td>
<td>Drive Experts GmbH</td>
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<tr>
<td>1</td>
<td>GV2ME07 Motor protection switch 1.6-2.5A</td>
<td>160300047</td>
<td>-1Q1</td>
<td>Groupe Schneider</td>
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<tr>
<td>1</td>
<td>LC1D12BD contactor 12A 5,5 kW 24VDC</td>
<td>160301015</td>
<td>-1K1</td>
<td>Telemecanique</td>
</tr>
<tr>
<td>1</td>
<td>LC1D38BL contactor 18.5KW, 24VDC</td>
<td>160300175</td>
<td>-2K1</td>
<td>Groupe Schneider</td>
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<tr>
<td>1</td>
<td>GV2ME06 Motor protection switch 1,0 -1,6A</td>
<td>160300046</td>
<td>-2Q1</td>
<td></td>
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<tr>
<td>1</td>
<td>Woarm gear motor 0,12 kW 208-240V 60Hz</td>
<td>110205304ULCSA</td>
<td>-2M1</td>
<td>Drive Experts GmbH</td>
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<td>-3F1</td>
<td>Telemecanique</td>
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<tr>
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<td>Power supply unit 24V, 72W, 3A</td>
<td>121100301</td>
<td>-3T1</td>
<td>Groupe Schneider</td>
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<tr>
<td>1</td>
<td>Touch control IDEC FT1A-C12RA-B</td>
<td>160100096</td>
<td>-3A1</td>
<td>ALG Automatisierungs-lösungen GmbH</td>
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<tr>
<td>1</td>
<td>ZB4BS844 Mushroom button (emergency stop)rot 40mm</td>
<td>160700005</td>
<td>-4S1</td>
<td>Telemecanique</td>
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<tr>
<td>1</td>
<td>ZB4BZ102 bottom part 1O</td>
<td>160700016</td>
<td>-4K1</td>
<td>Groupe Schneider</td>
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<tr>
<td>1</td>
<td>Safety relay 2-chan. 24VDC, 2xNO</td>
<td>160500061</td>
<td></td>
<td>Pilz - Industrielektronik</td>
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<tr>
<td>1</td>
<td>ZB4BG2 Key selection switch 90°</td>
<td>160700014</td>
<td>-4S2</td>
<td>Telemecanique</td>
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<td>1</td>
<td>ZB4BZ101 bottom part 1S Extension with clamp.</td>
<td>160700015</td>
<td></td>
<td>Groupe Schneider</td>
</tr>
<tr>
<td>1</td>
<td>Electric Safety Sensor RSS 36-D-R-ST</td>
<td>121001400</td>
<td>-5S1, -5S2, -5S3</td>
<td>Schmersal - Elektro</td>
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<tr>
<td>1</td>
<td>Cod. actuator RST 36-1-R</td>
<td>121001401</td>
<td></td>
<td></td>
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<td>1</td>
<td>XS618B1MAU20 Ind. Proximity switch</td>
<td>160800038</td>
<td>-6B1</td>
<td>Telemecanique</td>
</tr>
<tr>
<td>1</td>
<td>XZCP1965L5 Connecting cable 5 m</td>
<td>160800039</td>
<td></td>
<td>Groupe Schneider</td>
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<tr>
<td>1</td>
<td>XCSPA592 Safety Limit Switches</td>
<td>121000520</td>
<td>-6S1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Pressure switch 1-16 bar, R 1/4 &quot;</td>
<td>545100177</td>
<td>-7S1</td>
<td>Norgren Martonair</td>
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<tr>
<td>1</td>
<td>XY2AU1 Enabling switch 3 contacts</td>
<td>121000551</td>
<td>-7S2</td>
<td>Telemecanique</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Groupe Schneider</td>
</tr>
</tbody>
</table>
8 Pneumatic

8.1 Pneumatic diagram – EBP580

Picture 8.1-1) Pneumatic
9 Fault and error analysis

9.1 General

WARNING AGAINST GENERAL DANGERS

In faults trouble shooting the safety instructions described in the chapter "Basic
safety principles" must be followed without fail!

INFORMATION!

When faults tables on the separate machine/line parts are not otherwise given, you
can find further information on the precise settings in the chapter “Controls and
settings work before first starting up/re-starting of line”.

The precise replacement work is described in the chapter “Servicing and Repairs”.

9.2 Fault and error analysis - machine/line components

9.2.1 Error message on the display

- Error's occurred
- Failure Brush cleaning
- Reset motor protection switch 1Q2 inside the control box.
- Check brush cleaning motor.

- Error's occurred
- Dosing Box Error
- Check safety switch connection at the dosing box.

- Error's occurred
- Pressure switch failure
- Check Air connection, minimum pressure 6 bar!

- Error’s occurred
- Failure Belt Cleaning
- Reset motor protection switch 2Q1 inside the control box.
- Check belt cleaning motor.
When a fault is displayed, the possible cause of the occurred error can be read by pressing “Ref.” (Fig. Pos. 1). After removing the fault, the fault message closes automatically.

To change between several faults press Fcs.Up (Fig. Pos. 2) or Fcs.Dwn. (Fig. Pos. 3). By pressing REVERSE the particular error can be selected.

After opening and closing the safety fence the safety relay and frequency converter have to be reset by pressing the buttons Reset (Fig. Pos. 6), Relay and FU.

Review status LED of the magnetic switches.

LED green: power supply works correctly → protective is not closed
LED yellow: protective net is closed
LED red: fault

After fault correction press „Reset“ (Fig. Pos. 6).
10 Servicing and Repairs

10.1 General

The mechanical and electrical equipment requires regular servicing if it is to fulfill its tasks satisfactorily at all times.

The general safety notes the documentation/Operating Manual must be adhered to without fail.

The component-specific notes listed below must be observed!

Before taking the machine/line apart into its components the Operating Manual including all drawings, must be carefully studied!

The machine/line is constructed so as to require very little servicing. The servicing work required is concentrated on the few activities listed in the Operating Manual at the intervals as given.

The machine/line is to be checked regularly in compliance with operational experience. Parts that are recognisably damaged are to be replaced at an early date to avoid subsequent damage and downtime.

BEFORE OPENING UNPLUG!

Interrupting your work on the machine power supply and secure against accidental before reconnecting it and turning.

Non compliance can mean severe personal injury.

WARNING AGAINST GENERAL DANGERS

Before assembly or dis-assembly is begun on the machine/line, the safety instructions that are described in the chapter "Safety requirements for the operating state" must be followed without fail.

Before starting work on parts of the electrical system measures must be taken to ensure that it is not live. the order of the safety rules is as follows:

1.) clearing by interrupting the electrical circuit
2.) secure against switching on by unauthorized persons
3.) place appropriate warning notices
4.) ensure that power supply is switched off
5.) effectively isolate any neighboring live parts from the working area

The above mentioned measures are then ended in reverse order, when the maintenance work is completed.
Electrical equipment such as for example:
- switch and transmission devices such as e.g. mechanical limit switches
- energy supply cables
- any relevant operating points on location

are in principle free from maintenance. They should be checked on a monthly basis, however, and should be cleaned insofar as this is necessary. Damaged parts must be replaced at once.

Changes in comparison with normal operation such as
- higher capacity feeding
- higher noise development
- higher acceleration or delay, higher vibration amplitudes
- unusual noises or unusual smells
- response of the safety devices without a motivational cause

are grounds for recognizing that the function of the line/machine is impaired. Detrimental effects such as this or similar are to be immediately reported by the operator to the person responsible.

**NOTE!**

- The line/machine must in general be regularly cleaned and tidied.

Checks must be carried out at regular intervals in order to assure an operation of the machine/line without faults.

Differentiation is made here between:

- safety checks
- functional checks
- sight checks

**Safety checks**

the relevant statutory safety regulations must be followed (both regional and also international) must be observed.
also see the chapter "Safety requirements for the operating state".

**Functional checks**

The functional checks result from the tasks of the devices applied in accordance with the operational processes of the machine/line. This checking also includes testing the fixtures and clamps of devices and cables as well as checking temperatures and for noises.

Fixtures and clamps must be tightened. Should the tightening of fixtures and clamps no longer be possible, they must be replaced.

Defective devices must be replaced at once!

Electrical devices are often cooled with air. If coolers are provided their cooling effect must be tested!
Sight checks

The general state of the machine must be tested (condition of the weld and screw connections and of the electrical connections, corrosion points, tears etc.) and the degree of soiling must be assessed. The checks comprise the checking of the notices on the machine/line and the checking of the labeling of electrical devices (these must be placed in an orderly manner and they must be legible). Loose clamps must be tightened at once. Cables and clamps with signs of melting must be replaced at once. Soiled devices must be cleaned. Defective parts must be replaced.

INFORMATION!

The carrying out of servicing work must be documented for warranty claims and the following data given:
- Date
- machine/line area
- activity carried out
- name and signature of the person who performed the work

The documents are to be added to this Operating Manual and presented to the manufacturer on request.

Spare parts

It is essential that spare parts should be stored on site to assure a high machine/line availability. The spare parts recommended by the manufacturer are listed in the chapter "Spare parts documentation" of this Operating Manual.
When ordering spare parts please follow the instructions in the chapter "Spare parts documentation - general".

Customer Service

Please apply to the machine/line supplier for questions on inspection, servicing and installation or for a servicing visit (Customer Service data see the chapter "Spare parts documentation - general").

Replacement of parts that are still under warranty

When you replace parts and wish to have these exchanged by the manufacturer on the basis of the warranty, it is a basic requirement that the replaced parts are made available to the maker. A further requirement is the documentation of when, where and by whom the parts were replaced (see the chapter "Servicing and repairs reporting"). If possible, the presumed cause of the defect should be given.
### 10.2 Servicing and repairs reporting

<table>
<thead>
<tr>
<th>Operator</th>
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<tbody>
<tr>
<td>Street/building no.</td>
<td></td>
</tr>
<tr>
<td>Zip code/city</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td></td>
</tr>
<tr>
<td>Product name</td>
<td></td>
</tr>
</tbody>
</table>

Date: ____________________________

Time: from ____________ to ____________

Fault dealt with:

<table>
<thead>
<tr>
<th>ID number</th>
<th>Name</th>
<th>Further supply</th>
<th>Yes/no</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

Clearly visible faults:

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</table>

**NOTE!**

You will find notes on the ordering of spare parts and on customer service in the chapter “Spare parts documentation”.
### Servicing intervals

<table>
<thead>
<tr>
<th>Servicing interval</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - shift operation</td>
<td>Before start of work</td>
<td>Monthly</td>
<td>12 Monthly</td>
</tr>
<tr>
<td>2 - shift operation</td>
<td>Before start of work</td>
<td>Weekly</td>
<td>6 Monthly</td>
</tr>
<tr>
<td>3 - shift operation</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

**NOTE!**

The intervals given in the servicing table are standard values for normal operating conditions. The intervals are to be shortened appropriately under more intensive working conditions, multiple shift operation and longer working times. Safety devices are to be tested monthly.

**INFORMATION!**

If not otherwise stated in the separate servicing tables, more precise information on the exact settings is to be found in the chapter "Controls and settings work before first starting up/re-starting of line". The precise replacement work is described in the chapter "Servicing and Repairs".

---

**Servicing intervals - pneumatics EBP 580**

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check piston rod for visible damage</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check cylinders, connections and pipelines for leaks</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check bellows cylinder for visible damage</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check valves for functionality</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check tightness of fixture screws</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check the correct setting of the pressure regulator</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Servicing intervals - Electrical system complete**

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check the electrical connections, links, switches, drives and fuse protection</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check tightness of fixture screws</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

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**Servicing intervals - base frame**

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check trough weld seams for visible damage (tears)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check screen belt weld, flanks and closures for visible damage</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check troughs for visible damage</td>
<td></td>
<td>X</td>
<td></td>
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</tbody>
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**Servicing intervals - rollers**

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricate all bearings and guide profiles with foodstuff compatible grease (see the chapter &quot;Lubricants Overview&quot;)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check rollers for visible damage</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
The lubrication of the double worm gear is done by the roller lubrication and is thus servicing-free!

### Servicing intervals - Automatic belt alignment and belt tenser

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricate all bearings and guide profiles with foodstuff compatible grease</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>(see the chapter &quot;Lubricants Overview&quot;)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check rollers for visible damage</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

### Servicing intervals - cleaning complete

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD Check fan jet for functionality and tight fit</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Check hopper cones for visible damage</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check the fixture screws for tightness</td>
<td></td>
<td>X</td>
<td></td>
</tr>
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### Servicing intervals - dosing box

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check dosing lever for functionality</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check weld seams for visible damage (tears)</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check the functionality of the membrane switch</td>
<td></td>
<td>X</td>
<td></td>
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### Servicing intervals - attachment and scraper complete

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make a locking functionality test</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check tension spring for visible damage and functionality</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check scraper for visible damage</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Check the plastic scraper pressure on the screen belt rape discharge (this ensures a</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>good rape discharge and good belt cleaning)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Servicing intervals – ball bearing

<table>
<thead>
<tr>
<th>Work to be carried out</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lubricate the ball bearing after approx. 1000 operating hours or once a year</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

10.4 Lubricants Overview

<table>
<thead>
<tr>
<th>Machine part</th>
<th>Aral</th>
<th>Castrol</th>
<th>Lubricant type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guides</td>
<td>standard commercial, foodstuff compatible</td>
<td>Grease</td>
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<td>Bearings</td>
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<td>Grease</td>
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<td>grease</td>
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</tbody>
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**INFORMATION!**

In principle, you can use any commercially available, fat-free grease. Company Voran recommends "LF10 (H1)".
10.5 Servicing and Repairs - machine/line components

**WARNING AGAINST GENERAL DANGERS**

Live working on electrical devices must be conducted by a qualified personal!
Not observing this requirement can lead to serious injury or to death!

**BEFORE OPENING UNPLUG!**

Interrupting your work on the machine power supply and secure against accidental before reconnecting it and turning.
Non compliance can mean severe personal injury.

10.5.1 Cleaning

**NOTE!**

— Use for the daily cleaning process commercial cleaning and caring (qualified for food and disinfectant)

**PROTECTIVE GLOVES and WEAR EYE PROTECTION!**

Always wear protective gloves and goggles when using cleaning agents.
Non-observance could be serious burns and eye injuries and even loss of sight!

**NOTE!**

**Voran prefers:** BTS 3000 - DVG – listed **Part Nr. 190019010**
Active chloride foaming disinfectant concentrate for food industry

<table>
<thead>
<tr>
<th>Usage</th>
<th>Process</th>
<th>Concentration</th>
<th>Dwell time</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frothing</td>
<td>2 – 5 %</td>
<td>20 Minutes</td>
<td>Cold</td>
</tr>
</tbody>
</table>

After using with cleaning agent the machine has to be washed very well with clear water

**NOTE!**

— Beware also for cleanliness on the floor and area around the unit!
First clean any installed Washing Machine or serially connected mill and then clean the press as follows:

1.) Remove protective grating.
2.) Unscrew the cable from dosing switch (Fig. Pos. 1).
3.) Pull out safety end-switch (Fig. Pos. 2).
4.) Open the locking hooks (Fig. Pos. 3) and remove dosing tank (Fig. Pos. 4).
5.) Remove mash conveyor (Fig. Pos. 5), scrapers (Fig. Pos. 6) and end scrapers (Fig. Pos. 7).
6.) Start cleaning mode.

*Picture 10.5.1-1) Cleaning the Belt press*
Change key switch (Fig. Pos. 8) from Automatic to Revision.

Start Belt, Cleaning, Brush and if available Semi – Cip cleaning (OPTION).

7.) Press enable switch (Fig. Pos. 9) and clean the machine with a hose.
8.) Final, pull out juice collection tank, discharge plates and cleaning tank and clean them with a hose or a high-pressure cleaner.

10.5.2 Reading off operating hours

By pressing the tool symbol (Fig. Pos. 1) operating hours can be read.

10.5.3 Setting the pressure regulator

After servicing and repair work has been carried out (above all when parts have been replaced) pressure regulators must be correctly set again.
You can find further details about this in the chapter "Controls and settings work before first starting up/re-starting of line" (chapter 4.2.1 Setting the pressure regulator)!

10.5.4 Setting of the screen belt

1.) Close the compressed air supply and release the pressure that the screen belt hang loose
2.) Turn off the main switch.
3.) Set the belt manually in the centre of the roller.
4.) Turn on the main switch.
5.) Tension the screen belt and switch on the machine again
10.5.5 Adjusting the regulating valve

In the course of durable tape (tape strip bent ....) or exchange of the control valve it must be re-established.

1.) mounting screws (Fig. Pos.1) of the regulator valves to solve anything
2.) regulating valve (Fig. Pos.2) 3 - 4mm push in the opposite direction of the band alignment, tighten the screws and the machine on for a trial run.

Repeat the process described in Section 2, to the main web is running again in the middle.

10.5.6 The setting of the ind. proximity switch

1. Turn on washing/milling machine, turn changeover-switch Hand-0-Auto to 0.
2. Loosen counternut (Fig. Pos.1).
3. Rotate proximity switch (Fig. Pos.2) clockwise until LED (Fig. Pos.3) goes on.
4. Gradually rotate proximity switch counter-clockwise until LED goes out, then rotate another half turn.
5. Tighten counternut.
10.6 Screen belt change

Engless screen belt only with original equipment.

For mounting a new screen belt, proceed as follows:

1) Remove discharge plates and tubs.
2) Remove scrapers and mash conveyor.
3) Pull out defective belt.
4) Place the screen belt in front of the machine (see drawing above).
5) Move screen belt in arrow direction with cake side outwards in.
6) Close the screen belt with supplied plug wire (see drawing below).