Mobile wind sifter

Model description: HURRIKAN S

Machine number: 82038

Year of manufacture: 2016

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Original instruction manual: BA_HURS_V6_gb
NOTICE

➢ Before you perform any work on or with the machine, read the entire operating manual carefully!
➢ Only use the machine for its intended purpose!
➢ Observe all safety instructions described in this operating manual.
Structure of the entire operating manual

- Operating manual (this chapter)
  1. Preface
  2. Safety
  3. Overview and intended use
  4. Function
  5. EC Declaration of Conformity
  6. Transport and setting up
  7. Operation
  8. Emergency
  9. Annex

- Maintenance manual (separate chapter)
  10. Maintenance / Cleaning
  11. Error, cause, correction
  12. Disassembly / Disposal
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1 Preface

Dear Customer!

Thank you for the confidence that you have shown in our products by purchasing this machine.

Purpose of the operating manual

This operating manual dient dem sicheren is a guide for safe and efficient use of the machine. The purpose of this operating manual is to avoid injury to persons and damage to the machine: We have provided the information necessary to operate and maintain the machine easily. We also want to familiarise you with the technical details of the machine and point out any risks and dangers.

WARNING

Danger due to operating the machine without first studying the operating and maintenance manual.

Personal injury and machine damage may occur.

➢ Prior to commissioning the machine read the operating manual! You must understand and observe all safety instructions!

➢ Persons entrusted with the machine must always be able to access the operating and maintenance manual!

Availability of the operating manual

Please ensure that this operating manual is available so that required information can be obtained at any time or training can be carried out. In case of re-sale we ask you to hand over the entire documentation together with the machine! Never commission the machine without first having read the operating manual!
**Resale**

Please hand over the complete documentation with the machine in case of resale.

In the case of a later resale into a country of the EEA, the operating manual must be translated into the language of the corresponding user's country.

**Translation**

If there are any discrepancies occur in the text translated, the original operating manual (German) is to be consulted for clarification or the manufacturer is to be contacted.

**Pictograms**

Other instructions in the form of short texts and pictograms are attached to the machine itself. Information is therefore directly available on site without having to consult separate manuals. Contact us in case of damaged, loose or illegible pictograms. These are to be replaced immediately with new pictograms.

The operator is responsible for ensuring that only qualified personnel operate and maintain the machine. Both the operator and all service and maintenance personnel must be completely familiar with the safety and operation regulations.

The machine operator must read this operating manual before starting the machine and follow the guidelines it contains precisely.

Prevent incorrect repair or maintenance. If in any doubt please contact our customer service:

Komptech Umwelttechnik Deutschland GmbH
Carl-Zeiss-Straße 2
D-59302 Oelde

[t] (+49) 25229345 - 0
[f] (+49) 25229345 - 45

http://www.komptech.de
info@komptech.de
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Technical changes

This instruction manual only applies to the machine with the serial number entered in the file and is not subject to a revision service! In the event of modifications, additions, or changes, the operator is responsible for keeping the manual up to date!

The date on the EC Declaration of Conformity is applicable to the edition of this operating manual.
2 Safety

Marking by safety notices The systematic marking of certain points (danger locations, lubrication points, adjusting interval, displays, operation elements) by safety notices allows the machine to be operated safely. This marking is performed with the same pictograms as shown in this operating manual.

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger due to commissioning of the machine without observance of the safety instructions or due to the execution of maintenance work by unqualified personnel.</td>
</tr>
<tr>
<td>Serious personal injury and material damage may occur.</td>
</tr>
<tr>
<td>➢ Commissioning the machine as well as maintenance work must only be carried out by qualified persons, observing the safety instructions.</td>
</tr>
</tbody>
</table>

2.1 Operator

Operator's obligations As operator you are responsible for correct use of the machine. Correct use includes operation and maintenance of the machine.

- The operator shall comply with the legal requirements for the operation of work machines.
- The operator shall confirm to the manufacturer that instruction regarding safe use of the machine has taken place.
- The operator must be familiar with the contents of the operating and maintenance manual and comply with the instructions contained in it.
- The operator will plan for and be responsible for the use of the machine within the constraints of its intended use.
The operator is responsible for ensuring that the machine is safe to operate and in proper service condition.

The operator ensures that the machine is only operated by persons whose mental and physical conditions satisfy the task assigned.

The operator shall prevent unauthorized modifications and shall obtain an expert opinion from the manufacturer before any modification. In the case of safety defects the operator shall inform the manufacturer or seller.

In the case of loss of the operating manual or the safety markings (loose or illegible pictograms) the operator shall ensure they are reordered immediately.

In the case of resale the operator shall ensure that the complete operating manual is handed over to the buyer in a reliable and demonstrable way.

The operator must perform a noise measurement under operating conditions and if necessary supply corresponding hearing protection.

2.2 Qualification of personnel

Only the following groups of persons are allowed to work at or with the machine:

Instructed personnel
Persons who have been trained by a specialist and instructed about
- possible dangers,
- appropriate behaviour,
- inappropriate behaviour,
- safety devices and
- safety measures.
Specialists

Persons who have the following qualifications:

- professional education,
- professional experience and
- knowledge about the relevant standards and regulations.

These persons are able independently to evaluate the work delegated to them with regard to existing and possible dangers.

(Definition according to EN 60204-1)

2.3 Obligations of personnel

Obligations of personnel

All persons, working at or with the machine have the following obligations:

- Operate the machine exclusively for its intended purpose.
- Follow the operator’s instructions with regard to working protection and operating safety.
- Wear the personal protection equipment specified as per the operator’s risk assessment.
- Before executing work on or with the machine, read the operating manual.
- Avoid all working methods that cause hazards to persons or damage to the machine or environment.
- Perform maintenance and inspection work only according to the operating manual’s descriptions.
- Inform the machine’s operator immediately if the contents of the operating manual cannot be understood.
- Ensure that escape routes are free.
- Only carry out changes of location with the machine after being instructed by the operator.
- Inform the machine’s operator immediately if:
• the machine is not used for its intended purpose.
• you have identified damage on the machine.
• you realise that safety devices of the machine are missing, damaged or do not function perfectly.
• you identify that warning signs and/or safety symbols at the machine are not available or hard to read.
• you identify that structural changes have been made to the machine.
2.4 Danger zone

**WARNING**

Danger to persons in the machine’s danger area due to movable parts or discharged material.

Personal injury resulting in death may occur.

- Ensure that only authorized persons stay in any of the danger areas.
- Only operate the machine if no unauthorized person is in the corresponding danger area.
- Stop operating the machine if unauthorized persons enter the corresponding danger area.
- Use personal protection equipment.

Fig 1: Danger zones
### PROHIBITION | EXCEPTIONS / NOTES
--- | ---
**Zone 1:** | 2m (6 ft) in a circle around the machine.  
Access for personnel or authorized persons only allowed if  
- this is necessary to operate the machine.  
- the operating manual’s safety instructions are carefully observed.

**Zone 2:** | 2 m (6 ft) in a circle around the discharge areas of the discharge belt, resp. the collecting container for the sucked material.  
Access for personnel or authorized persons only allowed if  
- the machine is switched off and secured against being re-started unintentionally.

**Zone 3:** | 50 m (150 ft) circle around the machine.  
Access for third persons only allowed if  
- such persons have received corresponding safety instruction.

*Tab. 1: Danger zones*

**Note:**

Authorized persons are authorized by the machine’s operator to perform work on or with the machine.
2.5 Safety devices

DANGER

Danger to persons due to missing or not perfectly functioning safety devices.

Personal injury resulting in death may occur.

- Before start of work, check whether all safety devices are available, correctly installed and functioning.
- Never put the safety devices out of operation.
- Ensure that all safety devices are freely accessible.

DANGER

Danger to persons due to manipulated safety devices.

Personal injury resulting in death may occur.

- Do not perform any mechanical changes to safety devices.
- Do not perform any electrical changes to safety devices.
Position of safety devices:

![Diagram of safety devices](image)

*Fig 2: Safety devices - electrics*

<table>
<thead>
<tr>
<th>SAFETY DEVICES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EMERGENCY-STOP-switch</td>
<td></td>
</tr>
<tr>
<td>Main electrical switch</td>
<td></td>
</tr>
</tbody>
</table>

*Tab. 2: Safety devices (electrics)*

### 2.6 Structure of warning signs

In the separate chapters of this operating manual your attention is drawn to hazards or special information with warning signs. These signs are shown either at a chapter’s start or before an action involving a potential safety hazard.
The following graphic shows the structure of a warning sign:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Signal word</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Type of hazard</strong></td>
</tr>
<tr>
<td></td>
<td>Consequences in the event of non-observance of the hazard or danger warnings.</td>
</tr>
<tr>
<td></td>
<td>➢ Avoiding the hazard</td>
</tr>
</tbody>
</table>

### 2.6.1 Signal words

<table>
<thead>
<tr>
<th>SIGNAL WORD</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DANGER</strong></td>
<td>Passages set off in this manner mark a direct hazard with high risk of death or serious injury if not avoided.</td>
</tr>
<tr>
<td><strong>WARNING</strong></td>
<td>Passages set off in this manner mark a possible hazard with medium risk of death or severe injury if not avoided.</td>
</tr>
<tr>
<td><strong>CAUTION</strong></td>
<td>Passages set off in this manner mark a hazard with low risk that may cause light or moderate personal injury if not avoided.</td>
</tr>
<tr>
<td><strong>NOTICE</strong></td>
<td>This indicates malfunctions during operation and possible damage to the machine or environment. Furthermore notices are provided for optimum handling of the machine.</td>
</tr>
</tbody>
</table>

*Tab. 3: Signal words*
### 2.6.2 Warning symbols

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Symbol]</td>
<td>Dangerous point or situation</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger electricity, electric shock.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger of entrapment by moving parts.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger of entanglement by rotating parts.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger of harmful or irritant materials.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger overhead load.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger of flammable materials.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger of hot surface.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Danger of hot media (e.g. hot liquids).</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Battery hazard.</td>
</tr>
<tr>
<td>![Symbol]</td>
<td>Keep hands clear</td>
</tr>
</tbody>
</table>
### 2.6.3 Prohibitory symbols

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Symbol" /></td>
<td>Do not spray with water.</td>
</tr>
<tr>
<td><img src="image2" alt="Symbol" /></td>
<td>Unauthorized access prohibited.</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol" /></td>
<td>Do not climb unless authorized.</td>
</tr>
<tr>
<td><img src="image4" alt="Symbol" /></td>
<td>Fire, naked flame and smoking prohibited.</td>
</tr>
<tr>
<td><img src="image5" alt="Symbol" /></td>
<td>Substances affecting normal physical and mental functioning prohibited.</td>
</tr>
</tbody>
</table>

*Tab. 5: Prohibitory symbols*
### 2.6.4 Command symbols

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>General command symbol. Marks instructions for operation.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Read the document carefully before starting work.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Activate before working.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Safety glasses with side shields. Protect against injuries to the eye caused by solids, liquids or gaseous substances.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Safety shoes. Protect against crushing and falling parts.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Close fitting work clothes. Protect against getting caught or drawn in.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Safety gloves. Protect against cutting and aggressive liquids.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Safety helmet. Protects against falling objects.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Ear protection. Protects against hearing loss in the event of procedures with high noise emission.</td>
</tr>
</tbody>
</table>

*Tab. 6: Command symbols*
## 2.6.5 Additional symbols (pictograms) used at the machine

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Symbol" /></td>
<td>Marks a load suspension point with corresponding load specifications in kN.</td>
</tr>
<tr>
<td><img src="image2" alt="Symbol" /></td>
<td>Marks a lubrication point.</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol" /></td>
<td>Marks the battery master switch.</td>
</tr>
<tr>
<td><img src="image4" alt="Symbol" /></td>
<td>Notice of the connection point for maintenance work on the ABS braking unit.</td>
</tr>
<tr>
<td><img src="image5" alt="Symbol" /></td>
<td>General safety notice regarding the execution of maintenance work.</td>
</tr>
<tr>
<td><img src="image6" alt="Symbol" /></td>
<td>Prohibition of access</td>
</tr>
<tr>
<td><img src="image7" alt="Symbol" /></td>
<td>Notice to observe the operating manual and safety instructions.</td>
</tr>
<tr>
<td><img src="image8" alt="Symbol" /></td>
<td>Notice of the next accident prevention regulation check.</td>
</tr>
<tr>
<td>SYMBOL</td>
<td>MEANING</td>
</tr>
<tr>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Notice of the maximum admissible speed in km/h for transporting the machine.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Notice to switch off the electrical main switch.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Instruction to open the valve cover completely.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Marks the area of intoxication danger by motor exhaust gases.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Prohibition for persons with pacemaker. Only in conjunction with the “magnet drum” option.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Warning of magnetic field. Only in conjunction with the “magnet drum” option.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Notice for valve position (open and close) for the option „Cover of suction fan, hydraulically foldable“.</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Notice for valve position (open and close) for the option „Cover of suction fan, hydraulically foldable“ .</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>Notice for valve position (in and out) for the option „Diesel engine hydraulically movable“.</td>
</tr>
</tbody>
</table>

*Tab. 7: Warning symbols*
### 2.6.6 Rescue and fire protection signs

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Fire extinguisher" /></td>
<td>Fire extinguisher</td>
</tr>
<tr>
<td><img src="image" alt="Fire alert telephone" /></td>
<td>Fire alert telephone</td>
</tr>
<tr>
<td><img src="image" alt="First aid box" /></td>
<td>First aid box</td>
</tr>
<tr>
<td><img src="image" alt="Escape direction" /></td>
<td>Escape direction / escape route.</td>
</tr>
<tr>
<td><img src="image" alt="Meeting point" /></td>
<td>Meeting point.</td>
</tr>
</tbody>
</table>

*Tab. 8: Fire protection and rescue signs*
2.7 Basic safety instructions

**WARNING**

Personal injury due to non-observance of basic safety instructions.

Personal injury resulting in death may occur.

- Observe the basic safety instructions always.

- Only use the machine
  - in technically perfect condition,
  - for its intended purpose, as well as
  - aware of safety and danger.

- Check all safety devices of the machine before starting work on or with the machine.

- Before starting work on or with the machine, check it for visible damage (mechanics, electrics, hydraulics).

- Store the complete operating manual at the machine’s location.

- Add to the operating manual with documents, such as the legal regulations for accident prevention.

- Only perform work for which you have acquired basic and specific knowledge or instruction.

- Only perform work you have been authorized by the operator to perform.

- Use personal protection equipment.
2.8 Residual risks

Even if you follow all safety instructions, there are still residual risks when working at or with the machine.

All persons working at or with the machine have to know these residual risks.

All persons must follow the instructions to prevent residual risks leading to accidents or injury.

<table>
<thead>
<tr>
<th>DANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger to persons due to electric shock when touching defective electric cables, plugs or switches.</td>
</tr>
<tr>
<td>Personal injury resulting in death may occur.</td>
</tr>
<tr>
<td>➢ Work on the machine’s electrics must only be performed by an electrical specialist.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger to persons due to exhaust gases from the diesel generator.</td>
</tr>
<tr>
<td>Danger of death from asphyxiation.</td>
</tr>
<tr>
<td>➢ Only operate the diesel generator in surroundings that are sufficiently ventilated.</td>
</tr>
<tr>
<td>➢ If necessary, direct the exhaust gases out of the working environment using a suitable exhaust system.</td>
</tr>
</tbody>
</table>
WARNING

Danger to persons due to using inappropriate lifting devices.

Personal injury may occur.

- Only use approved lifting devices.
- Only use lifting devices with a sufficient load bearing capacity (see operating and maintenance manual, technical notices for transport / assembly).
- Never stay under pending load.
- Use personal protection equipment.

WARNING

Danger of falling when using ladders.

Personal injury resulting in death may occur.

- Only put ladders onto the machine if this is not operated.
- Only use ladders that are free from visible damage.
- Ensure that the underground is appropriate for setting up a ladder.

WARNING

Danger due to high pressure in lines of lubrication, pneumatics and hydraulics.

Personal injury may occur.

- Before executing work on lines, switch them pressure-less.
- Use personal protection equipment.
WARNING

Danger of fire due to inflame easily inflammable substances.

Personal injury resulting in death may occur.

- Avoid fire, open light and smoking in the direct surroundings of the machine.
- Do not fill the machine with burning or smouldering materials.
- Remove easily inflammable materials from the machine's direct surroundings.
- Familiarize yourself with the local firefighting conditions.

WARNING

Danger of being drawn in at moving / turning parts.

Personal injury may occur.

- Do not remove the protection covers in any case. If this is necessary for maintenance or cleaning work, secure the machine against unwanted starting!
- Do not grasp into the moving area of machine parts during a trial run.
- Keep a safe distance from rotating parts when the machine is in operation!
- Always wear appropriate working clothes (e. g. no loose clothing, in case of long hair, use a hair net).
- After termination of work, install the protection covers again!
### WARNING

Danger to persons due to improper handling of lubricating, cleaning or working material.

Personal injury due to skin contact and/or breathing in may occur.

- Use personal protection equipment.
- Read the corresponding safety data sheets.
3 Intended use

All figures and drawings in this operating manual serve exclusively for the general illustration.

If necessary, observe the separately attached operating manuals of the engine manufacturers, which are enclosed as original.

We reserve technical changes due to further development of the machine described in this operating manual.

READ – UNDERSTAND - OBSERVE!

3.1 Intended use

The mobile wind sifter serves to separate impurities like e.g.:

- foils and
- paper
- as well as
- rolling parts and
- FE- metals.

A biomass-fuel-fraction with a grain size of 10 … 20 is allowed as input material.

Furthermore, the following points belong to the intended use:

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger due to improper use.</td>
</tr>
<tr>
<td>The manufacturer’s warranty expires.</td>
</tr>
<tr>
<td>➢ Attend the descriptions regarding the „Intended use“.</td>
</tr>
<tr>
<td>➢ Attend the descriptions regarding the „Non-intended use“.</td>
</tr>
</tbody>
</table>
• The machine’s application within the limits of performance, mentioned in the technical data.

• The machine’s use in the manner described in the operating manual.

• Exclusive operation and care by instructed personnel.

• The execution of maintenance and repair work by qualified personnel.

• The execution of cleaning, maintenance as well as repair work is only allowed when the machine is at standstill.

• Spare parts must only be installed according to the manufacturer’s specifications.

• Transporting the machine on public roads, with appropriate means of transport.

• Transporting the machine by qualified personnel.

• The exclusive, mechanic feed of the machine.

• Use of the full-colour printed version of the operating and maintenance manual only.

3.2 Non-intended use

The following points do not belong to the intended use:

• The transport of persons.

• The transport of materials.

• The application in potentially explosive atmospheres.

• Feeding the machine by hand.

• Driving the machine on public roads without using the equipment and transport safety devices necessary for this.

• Moving the machine in public road traffic without a corresponding personal qualification.

• Moving the machine with inappropriate towing vehicle.

• Moving the machine in jacked-up status.
• The execution of modification work on the machine, not permitted by the manufacturer.
3.3 Basics for operation

Before commissioning the machine, it must be prepared for operation. This contains the following listed activities:

3.3.1 Hand over product documentation

When the machine is handed over, you also receive the operating manual, as per the completion certificate. Check it for completeness and confirm receipt.

3.3.2 Personnel training

When the machine is handed over, initial training for the machine is carried out. The training must contain the following points:

- Safety instructions.
- Controls and functions of the machine.
- Carry out, check and change basic settings.
- Explanations for use of the operating manual.
- Invitation to use the operating manual.
- Perform regular safety checks.
4 Product description

4.1 General information

**NOTICE**

The information stated here refers to the equipment of the basic machine.

Owing to changes to the machine, the actual dimensions may differ from the dimensions stated here.

- Observe the information in the additional documents that have to be added to the documentation after modifications or changes to the machine.

- The notices in this manual are only valid for the machine with the machine identification number stated on the front page of the operating manual.

- Only the observance of permissible values corresponds to appropriate use of the machine.

<table>
<thead>
<tr>
<th>SERIAL NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine No.: (HURRIKAN S)</td>
</tr>
<tr>
<td>Vehicle identification No:</td>
</tr>
<tr>
<td>Motor No.:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*Tab. 9: Serial numbers*
4.1.1 Unit marking

The type plate (1) and the vehicle identification number (2) are fixed to the machine's base frame.

Fig 3: Type plate

4.1.2 Technical data

<table>
<thead>
<tr>
<th>TRANSPORT DIMENSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
</tr>
<tr>
<td>With separating belt</td>
</tr>
<tr>
<td>Width</td>
</tr>
<tr>
<td>Height</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permitted total weight</td>
</tr>
<tr>
<td>Permitted axle load</td>
</tr>
<tr>
<td>Permitted bearing load</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEPARATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughput capacity</td>
</tr>
</tbody>
</table>
### DIESEL ENGINE

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power at 1,500 min-1</td>
<td>66.0 kVA</td>
</tr>
<tr>
<td>Emission standard</td>
<td>EU 97/68/EG stage II</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>400 V (± 10%)</td>
</tr>
<tr>
<td>Number of phases</td>
<td>3 Ph / 400 V / PE</td>
</tr>
<tr>
<td>Frequency</td>
<td>50 Hz (± 1%)</td>
</tr>
</tbody>
</table>

### DIESEL TANK

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>approx. 300 l (79.25 gal)</td>
</tr>
</tbody>
</table>

### FAN PERFORMANCE

<table>
<thead>
<tr>
<th>Fan Type</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure fan</td>
<td>7.5</td>
</tr>
<tr>
<td>Suction and conveying fan 1</td>
<td>15.0</td>
</tr>
<tr>
<td>Suction and conveying fan 2</td>
<td>15.0</td>
</tr>
</tbody>
</table>

### AMBIENT CONDITIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature range</td>
<td>-10 °C to +37 °C</td>
</tr>
<tr>
<td></td>
<td>(14 °F to 98.6 °F)</td>
</tr>
</tbody>
</table>

### EMISSIONS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise level (measured under full load, without material)</td>
<td>92 dB (A)</td>
</tr>
</tbody>
</table>

*Tab. 10: Technical data*
4.1.3 Machine equipment

The components of the machine and the possible options are described here.

<table>
<thead>
<tr>
<th>BASIC MACHINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile, electrically driven wind sifter to separate impurities (according to indications of valid documents).</td>
</tr>
</tbody>
</table>

Tab. 11: Basic machine

Fig 4: Working position dimensions
### OPTIONS

| Equipment according to EU Directive: Surrounding lights front and rear; side marking lights; rear underride guard; splash water protection and mudflap. |
| Certificate for obtaining general license as per Road Traffic Act |
| Certificate for obtaining general license as per Road Traffic Act incl. motor vehicle registration certificate |
| Magnet drum in conveyor belt. |
| Separating belt for rolling parts |
| Diesel generator |
| Electric motor pre-heating (only in conjunction with option “Diesel generator”) |
| Soot filter, self-cleaning (only in conjunction with option “Diesel generator”) |
| Cleanfix fan (only in conjunction with option “Diesel generator”) |
| Socket for external power supply (only in conjunction with option “Diesel generator”) |
| Battery master switch (only in conjunction with option “Diesel generator”) |
| Housing of vibration chute |
| Leak air flap for suction fans |
| Frequency converter for suction fan 1 |
### OPTIONS

<table>
<thead>
<tr>
<th>Option</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency converter for suction fan 2</td>
<td>✓</td>
</tr>
<tr>
<td>Suction fan cover, hydraulically foldable</td>
<td>✓</td>
</tr>
<tr>
<td>Platform for suction fans</td>
<td>✓</td>
</tr>
<tr>
<td>Cleaning opening at pressure fan</td>
<td></td>
</tr>
<tr>
<td>Special suction channels for pressure fan</td>
<td>✓</td>
</tr>
<tr>
<td>Gusset shoe</td>
<td></td>
</tr>
<tr>
<td>Special painting</td>
<td></td>
</tr>
</tbody>
</table>

*Tab. 12: Options*
4.1.4 Function of the machine (schematic)

Fig 5: Functions

The material to be treated is fed on to the feeding chute (vibrating conveyor trough (2)) of the wind sifter by a conveyor belt (1).

The vibrating conveyor trough carries the material into the wind sifter’s housing.

The material is sorted/classified into light and heavy material by the flow of air (from the pressure fan (3)), emerging under the vibrating conveyor trough.

The heavier material lying on the conveyor belt (4) is then given additional excitation in the region of the suction fan by the integrated striker rollers.

The lighter components extracted in this way (paper, plastic, fibres, foils) are picked up and drawn out by the suction fan (4) mounted above the conveyor belt. The light component picked up like this passes through the pipeline to a container that is ready for it. The container must be covered with a fine-mesh net.
Optional:
Magnet separator (6)

Ferromagnetic impurities can be sorted out of the material flow by means of a permanent magnet roller at the conveyor belt’s outlet. The impurities are then lead into a corresponding collecting container via an aluminium chute.

Separating belt (7) for rolling parts

Rounded, hard materials such as stones or fragments of glass are excited by the adjustable-slope, fast-running conveyor belt (separating belt for rolling parts). This excitation causes the hard materials to start rotating and turning; they then roll, due to the slope of the conveyor belt, back down the belt in the direction opposite to its movement. These hard materials, guided again by a chute, pass to a collecting container.
4.2 Machine layout

The following is a general description of the machine’s layout.

In the case of location specifications (e.g. right, left, front, rear), the reference direction is always the driving direction of the machine.

**Fig 6: Machine overview**

<table>
<thead>
<tr>
<th>POS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feeding chute (vibration chute) with housing (option)</td>
</tr>
<tr>
<td>2</td>
<td>Feeding channel</td>
</tr>
<tr>
<td>3</td>
<td>Suction fan 1</td>
</tr>
<tr>
<td>4</td>
<td>Suction fan 2</td>
</tr>
<tr>
<td>5</td>
<td>Magnet drum (option)</td>
</tr>
</tbody>
</table>
### Controls

<table>
<thead>
<tr>
<th>POS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operating area BP1, switch cabinet</td>
</tr>
<tr>
<td>2</td>
<td>Operating area BP2</td>
</tr>
</tbody>
</table>

*Fig 7: Position of controls*
4.3.1 Operating area BP1

Fig 8: Operating area BP1 - design

(1) Starting module
By means of the starting module, the diesel engine (option) is operated.

(2) Tank indication
This indication shows the current filling level of the diesel tank.

(3) EMERGENCY STOP switch
Press in case of danger.
To unlock the switch, turn it to the right.

(4) Controls
The switches and keys required for standard operation are installed here.
The function of the switch or key is related to the corresponding pictogram.
The key switch may only be used for brush adjustment if the machine is at a standstill.
(5) **Operating elements for adjustable machine components (option)**

By means of the operating elements (potentiometers) the speed of the separate machine components can be changed. By means of the function scheme’s numbering and the number, fixed at the operating element, the allocation to the corresponding machine component is made.

(6) **Functioning scheme**

Numeric marking of machine components, being started, resp. whose speed can be adjusted.

(7) **Electro-main switch**

Serves to switch on and off the power supply.
Detailed information regarding the operating area BP1

Design of starting module

![Starting module diagram]

Fig 9: Starting module

1) **Operating hour counter**
Display of the operating hours of the diesel generator.

2) **Ignition lock**
- 0 = Off
- 1 = Ignition switched on
- 2 = Motor start

3) **Control light (red)**
Is not occupied with any function.

4) **Control light (red) for water temperature.**
The control light for water temperature lights up, if the ignition key is turned to „1“ and then it expires. If the cooling water’s temperature is too high, the control lamp lights up continuously. In the case of a too high temperature, the diesel generator is switched off automatically.

5) **Control light (red) for motor oil pressure.**
The control light for motor oil pressure lights up if the ignition key is turned to position “1”, and then changes to continuous. It expires directly after starting the generator. If the oil pressure is too low, the control lamp lights up continuously. In the case of too low oil pressure, the diesel generator is shut down automatically.
(6) **Control light (red) for battery charging.**
The charging control lamp lights up, if the ignition key is turned to position “1”. The light expires directly after motor start. In case of a defective alternator or a broken V-belt, the control lamp lights up and the diesel generator shuts down.

(7) **Control light (green) for ignition.**
The control light for ignition lights up, if the ignition key is turned to position „1“. The diesel generator must not be started until the control light changes to continuous light. The control light expires directly after starting the diesel generator.

**Pictograms at the controls**

Functions of switches or buttons are activated realizing, by turning them to the right.

Reversing, resp. stopping functions are activated by turning the switches to the left.

Numbers, being mentioned on the pictograms, relate to the corresponding machine components (see „Functioning scheme“, page 45).

<table>
<thead>
<tr>
<th>PICTOGRAM</th>
<th>FUNCTION</th>
</tr>
</thead>
</table>
| ![Operation mode](image) | **Operation mode**  
„AUTOMATIC OPERATION | MANUAL OPERATION“ |
| ![Machine](image) | **Machine**  
„START“ |
| ![Machine](image) | **Machine**  
„STOPP“ |
| ![Control light](image) | **Control light**  
„OPERATION“ (green) |
### Control light

Control light „COLLECTIVE FAULT“ (red)

### Separating belt for rolling parts

Revolution infinitely adjustable via potentiometer in operation mode „Manual operation“.

(option)

### Interior conveyor belts

Revolution infinitely adjustable via potentiometer in operation mode „Manual operation“ (option)

### Pressure fan

Revolution - pre-adjustment to 1100 / 0 / 1500 RPM

### Pressure fan

Revolution – infinitely adjustable via potentiometer in operation mode „Manual operation“.

(option)

### Suction fan 1

Revolution infinitely adjustable via potentiometer in operation mode „Manual operation“.

(Option)

### Suction fan 2

Revolution infinitely adjustable via potentiometer in operation mode „Manual operation“.

(Option)
## Suction fan switching

<table>
<thead>
<tr>
<th>PICTOGRAM</th>
<th>FUNCTION</th>
</tr>
</thead>
</table>
| ![suction-fan-switching](image) | **Suction fan switching**  
Left switch position on  
Center switch position and 2 on  
Right switch position on (in manual operation) |

- suction fan 1 on
- suction fans 1 and 2 on
- suction fan 2 on

## Cleanfix®

<table>
<thead>
<tr>
<th>PICTOGRAM</th>
<th>FUNCTION</th>
</tr>
</thead>
</table>
| ![cleanfix](image) | **Cleanfix®**  
OFF or ON |

**Tab. 13: Pictograms – Operating elements**

### 4.3.2 Release valve compressed air braking unit

**NOTICE**

Danger of pressure loss at the braking unit due to a long standstil or too much activation of the release valve.

The release valve cannot be activated anymore, because of a too low air pressure in the reservoir. Moving the machine is impossible anymore.

- Couple an appropriate towing vehicle onto the machine, to establish the supply of compressed air.
Fig 10: Release valve compressed air braking unit

The release valve (1) serves for draining off compressed air. The brakes of the tandem axle can be released by activating the valve, if the unit is to be moved without an air-braked towing vehicle.

4.3.3 ABS-control – Junction box

Fig 11: Junction box ABS control

The tandem axle has got an integrated ABS-control. The connection is made via a control cable.

To connect the checking device, a connection plug (1) is fixed to the side of the machine. Here measuring data for service work on the ABS-unit can be exchanged.
In case of errors, call the after-sales service of the manufacturer.

4.3.4 Battery master switch

**NOTICE**

Danger due to improper handling of the battery master switch.

Damage to the battery at the diesel engine can arise.

- Do not switch off the diesel engine by means of the battery master switch.
- Activate the battery master switch only when the diesel engine is switched off.

Fig 12: Battery master switch - position

- Prior to every operation switch on the option „Battery master switch“ (1) and switch it off after operation.
5 EC Declaration of Conformity
EG – Konformitätserklärung nach 2006/42/EG, Anhang II, Nr. 1A

Hersteller: Komptech Umwelttechnik Deutschland GmbH
Carl-Zeiss-Straße 2
D – 59302 Oelde
Tel.: + 49 2522 / 03 45 - 0

Produkt: Mobiler Windsichter
Produktbezeichnung: HURRIKAN S
Typenbezeichnung: W0906203881KB4039
Seriennummer: 2016

Hiermit erklären wir, dass das voran genannte Produkt in der gelieferten Ausführung allen einschlägigen Bestimmungen und den aufgeführten EN-Normen entspricht:

EG-Richtlinie Maschinen 2006/42/EG
EG-Richtlinie EMV 2004/108/EG

Folgende harmonisierte Normen und Richtlinien wurden angewandt:

<table>
<thead>
<tr>
<th>Normenbezeichnung</th>
<th>Einhaltung</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/42/EG</td>
<td>beinhaltet</td>
</tr>
<tr>
<td></td>
<td>DIN EN ISO 12100:2010</td>
</tr>
<tr>
<td></td>
<td>DIN EN 626-1:2009</td>
</tr>
<tr>
<td></td>
<td>DIN EN ISO 7731:2008</td>
</tr>
<tr>
<td></td>
<td>DIN EN ISO 13857:2008</td>
</tr>
<tr>
<td>2004/108/EG</td>
<td>beinhaltet</td>
</tr>
<tr>
<td></td>
<td>EN 61000-6-2:2011</td>
</tr>
<tr>
<td></td>
<td>EN 61000-6-4:2011</td>
</tr>
<tr>
<td>DIN EN 82079-1</td>
<td></td>
</tr>
</tbody>
</table>

In den Normen EN 12100-1+2 wird zusätzlich auf folgende zutreffende Normen verwiesen:


Bei einer nicht mit uns abgestimmten Änderung der Maschine verliert diese Erklärung ihre Gültigkeit.

Bevollmächtigte Person für die Zusammenstellung der technischen Unterlagen ist der Unterzeichner dieses Dokumentes.

Oelde, den 24.05.2016

Jörg Brinkmann, Technische Leitung
EC-Conformity declaration according to 2006/42/EC, Annex II, No. 1A

Manufacturer: Komptech Umwelttechnik Deutschland GmbH
Carl-Zeiss-Straße 2
D - 59302 Oelde
Tel.: + 49 2822 / 93 45 - 0

Product: Mobile windsifter

We herewith declare, that the above mentioned product corresponds to the following regulations and harmonised standards in the delivered design:

EC-directive machines 2006/42/EC
EC-directive EMC 2014/30/EU

The following harmonised standards and directives had been applied:

<table>
<thead>
<tr>
<th>2006/42/EC</th>
<th>contains</th>
<th>DIN EN ISO 12100:2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DIN EN 626-1:2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DIN EN ISO 7731:2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DIN EN ISO 13857:2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2014/30/EU</th>
<th>contains</th>
<th>EN 61000-6-2:2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>EN 61000-6-4:201</td>
</tr>
</tbody>
</table>

DIN EN 82079-1

In the harmonised standards EN 12100-1+2, the following applicable harmonised standards are referred to:
also these standards are complied with:


In the case of a change at the machine, not consulted with our company, this declaration looses its validity.

This document's signatory is responsible for the compilation of the documentation.

Oelde, 30.09.2016

Christoph Schroeder, General manager
6 Setting up the machine

6.1 Setting up the machine

---

**DANGER**

Dangerous electric voltage due to contact with an electric overhead line when setting up.

Danger to personnel and third parties due to electric shock.

- Keep sufficient safety distance to electric overhead lines.
- Initiate immediate shutdown of the electric overhead line in case of contact and observe the following points:
  - Do not touch the machine.
  - Do not touch the machine until it is ensured that the electric overhead line was switched off.
  - Ensure that nobody enters the danger area.
  - Expel all persons out of the danger area.

---

**WARNING**

Danger to persons due to insufficiently solid and/or level ground on which the machine is to be placed.

Danger to the personnel's lives due to the machine, sinking in or turning over.

- Follow the instructions in chapter „Operator“, page 10.

---

Machine assembly must only be performed by qualified employees of the company Komptech GmbH or authorized specialist companies.

- Assemble the machine according to the layout plan.
- Ensure that an unhindered and error-free material flow is possible.
- Ensure that the machine is set up in a manner so corresponding free space around the machine exists. This
should ensure that maintenance and/or repair work can be performed safely.

- Connect the machine’s electrical power supply. The power supply can be provided either via the switch cabinet included in the scope of supply or via the customer’s electric system.

### 6.1.1 Free space under the machine

**WARNING**

Danger to persons due to rubbish or screening being pulled into the machine, or danger of fire due to the motor's heat emission.

Personal injury resulting in death may occur.

- Ensure that the free space under the machine is always kept free of rubbish and/or flammable materials.

---

*Fig 13: Free space under the machine*

The area below the machine (2) needs to be kept free of screenings and impurities constantly.

The areas below the discharge belts (1) are to be kept free of impurities. Furthermore, screenings must not contact the discharge belts.
6.1.2 Decouple the machine from the towing device

Fig 14: Wheel chocks and parking brake

- Engage the parking brake (2) (crank to the right).
- Place the wheel chocks (1) behind the wheels on both sides.

Fig 15: Release valve compressed air brake

- Activate the release valve (1), if the machine should be moved without a towing machine, braked by compressed air.
Fig 16: Machine connections

- Disconnect
  - the electrical connections (1),
  - the compressed air connections (2) and
  - the ABS connection (3)
  to the towing vehicle.

Fig 17: Manual winch

- Crank down the manual winch (1).
6.1.3 Bring the machine into working position

### DANGER

Danger to persons due to electric shock when touching defective electric cables, plugs or switches.

Personal injury resulting in death may occur.

- Inform the operator of electrical defects you have identified.
- Secure the machine against being switched on until the defects have been eliminated.
- Work on the machine’s electrics must only be performed by an electrical specialist.

### WARNING

Danger to persons due to unsafe machine operation, after damage during transport.

Danger of death for persons.

- After setting up, check the machine for visible mechanical, electric or hydraulic damage.
- Inform the operator immediately if you identify any damage.
- Do not perform any further work on or with the machine.
- Secure the machine against being switched on unintentionally.
Establish the power supply

---

**DANGER**

Danger to persons due to electric shock when connecting or disconnecting the electrical power supply.

Personal injury resulting in death may occur.

- Ensure that the machine is not under voltage when connecting or disconnecting the power supply.
  - The machine’s generator is switched off.
  - The machine’s main switch is switched off.

---

**NOTICE**

Risk of flashovers between the contacts when connecting or disconnecting the plug connection.

Damage to electrical contacts may occur.

- Ensure that the machine is not under voltage when connecting or disconnecting the power supply.
  - The machine’s generator is switched off.
  - The machine’s main switch is switched off.

---

*Fig 18: External power supply*

- Establish the external power supply (1).
Fig 19: Power supply – diesel engine

- Start the diesel engine by means of the starting module (1), see page 46.

Assemble exhaust hose

Fig 20: Fixing nozzle conveying hose

- Release the transport securing device (3) from the fixing nozzle (2).
- Swivel the fixing nozzle (2) to the front and fix it with a span lock (1) at the suction fan.
Fig 21: Assemble conveyor hose

- Fix the conveyor hose (1) by means of the span locks (2) at the suction fan (3).
- Lead the conveyor hose (1) into an appropriate collecting container.

Fig 22: Attachment parts

- Fix the covering net (2) at the collecting container for sucked material.
- Fix the awning (1) of option „Housing of vibration chute“.
Disassemble rear light bar

**Fig 23: Rear light bar**

- Disconnect the power supply between the machine (3) and the rear light bar (4).
- Loose the retainer’s (2) fixation screws on both sides.
- Remove the rear light bar (1) out of the retainers (2), fixed on both sides.
Disassemble rear light bar in case of option „Separating belt for rolling parts“

Fig 24: Rear light bar - option „Separating belt for rolling parts“ - 1

- Loose the retainer’s (2) fixation screws on both sides (2).
- Remove the rear light bar (1) out of the retainers (2) fixed on both sides.
- Disconnect the power supply between the machine (3) and the rear light bar (4).

Fig 25: Disassemble rear light bar in case of option „Separating belt for rolling parts“ - 2

- Remove the securing bolts (3 and 4), fixed on both sides.
- Remove the securing rods (2), fixed on both sides.
Lift the „Separating belt for rolling parts“ to working position, by means of the manual winch (1).

Final steps

- Ensure that all the machine’s maintenance flaps are closed.
- Ensure that all operating areas are closed.
- Switch off the machine.
- Turn the electro main switch to position „0/OFF“.
- Remove the key.

For the first commissioning request a mechanic from the retailer or manufacturer.
7 Operation

7.1 Operating modes

7.1.1 Automatic mode

Automatic mode serves as normal operation mode. This guarantees that the unit is started and emptied in the technologically correct order.

If a component fails, the machine is immediately brought to a complete stop. Safe operation of the unit is therefore guaranteed.

You do not have to intervene in this automatically running screening process if the right presets have been made for the given material.

Changing the material, the occurrence of obstructions, or unsuitable settings may necessitate a correction of the settings. To do so, the corresponding functions are available directly in the automatic mode.

7.1.2 Manual mode

When operating in manual mode, the individual components can be switched on or off independently of each other to check that the components function or to perform maintenance and repair.

If the stop-button is pressed, all operated components are stopped.
The speed of the individual components is freely adjustable in this operating mode.

If a component fails, the machine is immediately brought to a complete stop.

Manual mode does not serve as normal operating mode.

Fig 26: Operating area BP 1 – Manual operation – select components

The components’ selection is realized via the jack switch (1) in combination with their numbered images.

The selected component is operated by pressing the button (start).

By pressing the button (stop), the started components are stopped.
7.2 Daily commissioning (Automatic operation)

### NOTICE

Ensure that the machine is in a perfect operating condition.

Damage to machine can arise.

- Prior to every operation, realize the "Preparation for daily operation", see page 80.

---

### NOTICE

At ambient temperatures below +1°C (33.8F) there is an increased danger of the machine icing up.

Machine damage or errors in operation may occur.

- Prior to commissioning, ensure that movable machine parts are not frozen up.
- Ensure that the machine is carefully emptied before breaks or longer periods of standstill so the material cannot freeze onto the machine.

---

7.2.1 Start machine

Preconditions:

- The machine is in working position (see chapter 6.1.3, "Bring the machine into working position" page 59).
- The machine’s power supply is connected (see chapter "Establish the power supply" page 60).
- The electro main switch is turned to position “I/ON”.
- The key switch (AUTOMATIC OPERATION | MANUAL OPERATION) is turned to position (AUTOMATIC OPERATION).
Press the button start (start).

The control light operation starts flashing.

The control light operation lights continuously, if all machine components are started.

Adjust the desired revolution of the pressure fan by means of the switch pressure fan - 1100 / 0 / 1500.

The material feed can now be started according to the intended use (see page 30).

7.2.2 Stop machine

To stop the machine running in automatic mode systematically, proceed as follows:

- Stop the material feed into the machine.
- Empty the machine and ensure, that there is no material within the machine resp. on the belts.
Fig 27: Operating area BP1 – stop machine

- Press the button \(0\) (stop) at the operating area BP1.

**Option „Diesel engine“:**

- Stop the diesel engine, by turning the key at the starting module (2) to position „0“.

- Turn the switch / key switch (Automatic operation | Manual operation) at the operating area BP1 to position \(1\).

- Turn the electro main switch (1) to position „0/OFF“.
- Remove the key and store it safely.
7.3 Optimization during operation

### WARNING

**Danger of being drawn in or squeezed at moving / turning parts.**

Damage to persons can arise.

- Only realize optimization works, if the machine is switched off and secured against re-starting.
- Do not grasp into the moving area of the machine parts during the trial run.
- Keep sufficient distance to turning parts when the machine is running.
- Always wear appropriate working clothes (e.g. close fitting clothes, in case of long hair, use a hair net).

---

7.3.1 Electric components (option)

By means of potentiometers, the performance of the

- suction fan 1,
- suction fan 2 and
- separating belt for rolling parts

can be adjusted infinitely.

The separate machine components are marked with numbers on the function scheme (see page 45).

The potentiometer, belonging to the machine component is marked with the same number (see page 47).

The adjustment can be realized as follows:

- Before starting the machine, adjust the potentiometer to the desired values.
or

- change the values, adjusted at the potentiometers during the machine operation.

### 7.3.2 Mechanic components

**Change the vibration chute's inclination**

![Fig 28: Inclination of vibrating chute](image)

The aim of the inclination adjustment is to spread the material onto the conveyor belt the most possible evenly and let it run through the machine.

- Loose the counter nuts at the span lock (1).
- Turn the span lock (1) until the vibrating chute reaches the desired inclination.
- Tighten the counter nuts at the span lock (1) again.
Change the wind guiding plate’s inclination

Fig 29: Wind guiding plate

By means of the inclination adjustment, the wind’s speed and with this the selectivity are changed.

If the lever is turned anti-clockwise, the wind’s speed is enhanced.

- Loose the clamping screw (1) of the adjusting lever.
- Adjust the wind guiding plate.
- Tighten the clamping screw (1) again.
Adjust the height of the suction fan

The distance between the conveyor belt and the suction fan is adjusted by means of the manual winch (1).

- Turn the manual winch (1) clockwise, to enhance the distance.
Thereby, the suction performance is decreased.

- Turn the manual winch (1) anti-clockwise, to reduce the distance.
Thereby, the suction performance is increased.

By means of the fixed scale (2), adjustments, based on experience values, can be made, resp. these values are determined and recorded.
Adjust the vacuum pump’s inclination

**Fig 31: Adjust vacuum pump**

The vacuum pump at the suction fan serves to optimize the suction performance.

For this, it is necessary to adjust the vacuum flap (3).

An optimal performance is achieved, if the material leaves the machine evenly spreaded on the conveyor belt and not centrally heaped.

- Loose the clamping screw (2) at the guide bushing.
- Change the adjustment of the vacuum flap by means of the adjusting rod (1).
- Tighten the clamping screw (2) at the guide bushing.
Adjust leak air flap

Fig 32: Adjust leak air flap

By means of the leak air flap (2) the fan's suction performance can be adjusted.

The more the leak air flap (2) is opened, the more the suction performance is decreased.

- Loose the clamping screw (1).
- Get the leak air flap (2) to the desired position by means of the adjusting handle.
- Tighten the clamping screw (1) again.
Separating belt for rolling parts – Adjust inclination (option)

By means of the separating belt’s (1) inclination adjustment, the grade of separation for rolling parts can be optimized. If there are still too much impurities in the oversized grain material, the separating belt (1) needs to be adjusted steeper.

- Loose the securing chains (2) on both sides (2).
- Adjust the separating belt’s (1) inclination by means of the manual winch (3).
- Fix the securing chains (2) on both sides.
8 Emergency

WARNING

Danger to persons due to switching on the machine, although the danger or its source is not yet eliminated.

Death or serious injury may occur.

- Secure the machine against unauthorized re-starting.
- Attach corresponding notice signs to the operating panel.
- Inform the personnel, being on site about the reason of shutdown.

8.1 Damage to persons

If a danger to life and health of persons exists, the following steps must be performed immediately:

- Press the EMERGENCY-STOP-switch.
- Take precautions against early re-starting of the machine.
- As far as necessary, undertake First Aid or measures to avoid danger or injury.
- Make an emergency call (rescue service, fire brigade, police) or assign someone to make the emergency call.
- Inform the supervising personnel/superior and the machine’s operator immediately.
- Do not unlock the EMERGENCY-STOP-switch until the danger is past and the source or cause has been found and eliminated.
8.2 Damage to machine

If there is a danger to the machine, the following steps must be performed immediately:

- Press the EMERGENCY-STOP-switch.
- Take precautions against early re-starting of the machine.
- Inform the supervising personnel/superior and the machine’s operator immediately.
- Only eliminate damage if authorized by the operator to do so and if you are specially qualified to eliminate such damage.
- Do not unlock the EMERGENCY-STOP-switch until the danger is past and the source or cause has been found and eliminated.
9 Annex

9.1 Preparation for daily operation

In the following chapters, we explain the checking and maintenance works, being necessary every day before commissioning.

After termination of checking and maintenance works, all maintenance doors and flaps are to be closed again.

9.1.1 Checking the machine’s stability

- Check whether the machine has not sunk into the underground.
- Check whether the parking brake is tightened.
- Check whether the machine stands approximately horizontally.
- Check that the wheel chocks are placed behind the wheels.
- Ensure, that there are no impurities or screenings below the machine.

9.1.2 Checking the mechanics

Checks at the machine, switched off and secured against restarting:

- Ensure, that there are no foreign bodies on the feeding chute and the conveyor belts.
- Secure that the screwing connections are firmly tightened.
- Secure that the machine does not show any visible damages.
9.1.3 Checking for working materials, running out

- Secure that the machine does not show any leakages in the hydraulic system.
- Secure that the machine does not show any leakage of oil.
- Secure that the machine does not show any loss of fuel.
- Secure that the machine does not show any loss of cooling liquid.

9.1.4 Checks at the conveyor belt

![Image of conveyor belt]

*Fig 34: Gear motor conveyor belt*

- Check, whether an oil loss is visible at the gear motor (1).
- If necessary, refill missing gear oil (see chapter “Maintenance manual”).
Unlock the maintenance flaps’ locks (1) on both sides and open the flaps.

Open the maintenance opening (2)

Ensure the conveying channel (3) to be free of impurities – if necessary, remove them.

9.1.5 Checks at the pressure fan

Ensure the pressure fan’s suction nozzles (1) to be free of impurities on both sides – if necessary, remove these.

If necessary, open the suction grids (2).
Option „Special suction channels for pressure fan“

Fig 37: Clean pressure fan (option)

- Ensure the pressure fan’s suction nozzles (1) are free of contamination on both sides – remove it, if necessary.
- Open the suction grid, if necessary (3).
- If necessary, open the maintenance cover (2).

9.1.6 Checks at the diesel engine (option)

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger due to works at the diesel engine, realized improperly.</td>
</tr>
<tr>
<td>Damage to machine can arise.</td>
</tr>
<tr>
<td>➢ Attend the indications of the manufacturer documentation, being attached to this manual.</td>
</tr>
</tbody>
</table>
Fig 38: Open motor flaps

- Open the left (1) and right (2) engine flap.
- Clean the engine from coarse impurities.

Cooling liquid

Fig 39: Engine cooler

- Secure that there is sufficient cooling liquid in the cooler. If necessary open the cooler cap (1) and fill in the necessary quantity (see chapter "Maintenance manual").
- Ensure the cooler (2) to be free of contamination.
Engine oil level

![Image of engine with labels 1, 2, and 3]

*Fig 40: Check motor oil level*

- Check the oil level with a dipstick (3). The filling level has to be above the marking of minimum quantity.

- If necessary, fill motor oil into the filling opening (1) (see chapter „Maintenance manual“).

- If necessary, change the oil filter (2) (see chapter „Maintenance manual“).

Water pre-separator

![Image of water pre-separator]

*Fig 41: Water pre-separator*
Check, whether the water pre-separator (2) in the fuel line has to be emptied and if necessary empty the water pre-separator.

Check, whether the filter insert of the fuel filter (1) or the water pre-separator (2) has to be changed (see chapter „Maintenance manual“).

Air filter contamination display

Fig 42: Air filter – contamination display

Check, whether the air filter contamination display (1) shows a red stripe.

If a red stripe is shown, clean or replace the air filter (filter element) (see chapter „Maintenance manual“).
Air filter

Fig 43: Air filter – dust valve

- Press the dust valve (1) on the sides. Thereby the dust, collected by the inner pre-separator, is removed out of the filter housing.

Generator

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dirt within the generator can inflame, resp. cause a short-circuit.</td>
</tr>
<tr>
<td>Damage to persons due to burnings can arise.</td>
</tr>
<tr>
<td>➢ Check the generator’s protection cover regularly for contamination.</td>
</tr>
<tr>
<td>➢ Clean the protection cover of the generator if this is contaminated.</td>
</tr>
</tbody>
</table>
Fig 44: Clean generator

- Check the generator’s covers (1) for contamination and clean them, if necessary.

9.1.7 Checking the fuelling

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the case of a tank not filled completely, the possibility of condensation water in the tank exists.</td>
</tr>
</tbody>
</table>

Condensation water can lead to corrosion rust in the tank. By and by this can lead to a leakage in the tank resp. to motor damages.

- At the end of the working day, fill up the tank completely.
- In the case of a longer stand still of the unit it is absolutely necessary that the tank is filled completely.
Fig 45: Operating area BP1 - Tank – Filling level display

- Turn the ignition key at the starting module (1) to position „1“.
  The current filling level is shown at the tank indicator (2).
- By means of the filling level indication (2) ensure, that there is always sufficient fuel (diesel) in the tank.
9.1.8 Checking the electrics

Checks at the machine, switched on:

- Check the functionality of the switches and the digital display.

**Fig 46: Safety devices - electrics**

<table>
<thead>
<tr>
<th>SAFETY DEVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMERGENCY-STOP-switch</td>
</tr>
<tr>
<td>Electro-main switch</td>
</tr>
</tbody>
</table>

**Checking the safety devices**

- Secure that all safety devices (EMERGENCY-STOP-switches and electro main switch) are
  - available,
  - undamaged and
  - not manipulated.
- Check the function of all safety devices at the machine, switched on.
- Press the EMERGENCY-STOP-SWITCH (unlock by turning it clockwise).

After activating a safety device the machine has to be decommissioned immediately.

Checks at the machine, switched off and secured against re-starting.

- Check, whether all electric connecting cables lay freely. Free up squeezed cables. Damaged cables must be replaced.

Check the cooling openings at the electro motors

Fig 47: Cooling openings at electro motors

- Ensure the cooling openings (1) at the electro motors to be free of contamination, clean them if necessary:
Check the cooling openings at the additional switch cabinets

Fig 48: Cooling openings at additional switch cabinet

- Ensure the cooling openings (1) at the switch cabinet to be free of contamination – clean it, if necessary.

Fig 49: Cooling openings at additional switch cabinet with air conditioners

- Ensure the cooling openings (1) of the air conditioners at the switch cabinets to be free of contamination – clean them if necessary.
9.2 Functional description of options

### NOTICE

Purchased parts are only described on basic terms in this operating manual.

Special adjusting and maintenance work on the purchased parts is not possible following only the descriptions in this operating manual.

- Attend the manufacturer’s documents, which can be found in the annex „suppliers' operating manuals“, if the machines is correspondingly equipped.

#### 9.2.1 Version in accordance with the EU Directive

**Fig 50: Version in accordance with EU Directive**

<table>
<thead>
<tr>
<th>POS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Side marking lights (both sides)</td>
</tr>
<tr>
<td>2</td>
<td>Surrounding lights (both sides)</td>
</tr>
<tr>
<td>3</td>
<td>Splash water protection / mudflap (both sides)</td>
</tr>
<tr>
<td>4</td>
<td>Rear underride protection</td>
</tr>
</tbody>
</table>
Function:

This machine equipment is the basis for creating the certificate to obtain the general license, according to the Road-Traffic-Act, as well as the creation of a motor vehicle registration certificate.

9.2.2 Magnet drum in conveyor belt

<table>
<thead>
<tr>
<th>POS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Warning indications (both sides)</td>
</tr>
<tr>
<td>2</td>
<td>Magnet drum (Permanent magnet)</td>
</tr>
<tr>
<td>3</td>
<td>Collecting chute</td>
</tr>
</tbody>
</table>

DANGER

Danger to persons, due to the magnet drum's magnetic field, able to lead to a breakdown or influence of a pacemaker.

Danger to lives of persons with pacemakers.

- Persons with pacemakers must not stay near the magnetic roller.
- The discharge belt must be marked with the labels, used in this warning indication, in the direct proximity of the magnetic roller.

Fig 51: Magnet drum
Function:
By means of a magnet drum (2), being a permanent magnet, it is possible to sort FE-metal out of the material.

9.2.3 Separating belt for rolling parts

Fig 52: Separating belt for rolling parts

<table>
<thead>
<tr>
<th>POS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Separating belt</td>
</tr>
<tr>
<td>2</td>
<td>Collecting chute</td>
</tr>
</tbody>
</table>

Function:
By means of the separating belt (1), the separated material can be split up in two further fractions. Rolling parts like e.g. stones are withdrawn and get into a special container via the collecting chute (2).

The separating belt's (1) inclination can be adjusted by means of a rope winch.
9.2.4 Diesel engine – hydraulically movable

Fig 53: Diesel engine, hydraulically movable

Function:
The diesel engine (1) serves to supply the machine with electric energy.

By means of the manual hydraulics (2) the diesel engine can be moved in and out (see labels at the manual hydraulics).

9.2.5 Electric motor pre-heating

Fig 54: Motor pre-heating
## Heating element with fixing angle

**Function:**

The electric motor pre-heating serves to keep resp. pre-heat the cooling liquid’s temperature to 50°C (122°F).

Using a motor pre-heating device leads to a reduction of operating costs due to a lower fuel consumption. Furthermore the wearout is reduced and the motor starts better.

So the motor gets to operating temperature faster after a longer break or the morning start.

The period of pre-heating takes approx. 3 hours.

The motor pre-heating device is connected to the locally available power supply via the plugging connection with delivered adapter cable.

### 9.2.6 Soot filter

![Fig 55: Soot filter, self-cleaning](image)

Fig 55: Soot filter, self-cleaning
POS | Description
---|---
1 | Soot filter
2 | Display of exhaust gas counter pressure

**Function:**

The soot filter regenerates itself continuously and independently, if the averaged exhaust gas temperature increases to over 280°C / 536°F, depending on the type of motor.

This regeneration temperature has to be achieved for approx. 25% of the entire operating hours of the diesel motor.

Should this temperature not be achieved over a longer period of time, the soot filter (1) is loaded with sooty particles and the exhaust gas counter pressure increases.

The longer the exhaust gas counter pressure stays under the regeneration temperature, the higher the exhaust gas counter pressure increases before the particle filter.

This is shown by the exhaust gas counter pressure display resp. the warning light, installed at the unit.

The soot filter is adjusted via the display and adjusting unit (1) and controlled via the control unit (2).

Together with the increasing counter pressure also the carbon-particulate emission of the diesel motor increases.

In the case of a high counter pressure value (approx. 130 mbar / 1.89 psi), signalised via the filter monitoring systems, a filter regeneration by increasing the exhaust temperature has to be initiated by the operator. For this, further electrical consumers have to be switched to the unit.
9.2.7 Cleanfix-fan

The construction groups consists in:

- Cleanfix- fan (2)
- Adaptor flange
- Air line
- Magnetic valve
- Small compressor
- Electronic control (1)
- Push switch

**Function:**

The pneumatic system (compressor) serves for switching to blowing direction.

Turn the switch (cleanfix) at the operating area BP1 to position „I“, to activate the function.
9.2.8 Socket for external power supply

**NOTICE**

- In the case of a connection to the power supply system, a protection via a FI-protection, sensitive to universal current with a release current $I_{\text{delta N}} \leq 500\text{mA}$, has to be provided by the customer.

**Fig 57: Socket for external power supply**

**Function:**

This option serves the possibility to operate the machine either via a diesel generator or via a connection to the power supply system (CEE 63A, 400V, 50Hz, 3-pole+N+PE).
9.2.9 Battery master switch

Fig 58: Battery master switch

Function:
Installation with a battery master switch (1) protects the battery against total discharge.

9.2.10 Housing of vibration chute

Fig 59: Housing
Function:
The housing (1) serves as protection against wind for the vibration chute and consists of a robust truck awning.

9.2.11 Leak air flap for suction fan

Fig 60: Leak air flap for suction fan

Function:
By means of the leak air flap (1) the suction performance at the suction fan can be adjusted, resp. adapted to the requirements.
9.2.12 Frequency converter for suction fan

Fig 61: Frequency converter for suction fan

Function:

By means of the frequency converter (1), the suction fan’s volume flow regulation is realized. Thereby an optimal adaption of the suction performance to the material flow is achieved. The frequency converter (1) is installed within a separate switch cabinet.
9.2.13  Suction fan, hydraulically foldable

![Image of suction fan cover, hydraulically foldable]

Fig 62: Suction fan cover, hydraulically foldable

Function:
For this, hydraulic cylinders (1) are fixed on both sides of the suction fan cover.
By means of the hydraulic manual pump (2) the cover is folded up or down.

9.2.14  Platform suction fan

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger of falling when using the platform.</td>
</tr>
<tr>
<td>Damage to persons and death can result.</td>
</tr>
<tr>
<td>➢ Close the rails of the platform, when you realize works on it.</td>
</tr>
<tr>
<td>➢ Ensure, that the platform’s maximum bearing load is not exceeded.</td>
</tr>
</tbody>
</table>
Function:
The maintenance platform (1) serves for a simplified and secured realization of maintenance works at the suction fan.

The maintenance platform (1) is necessary, as the conveying channel’s (2) cover must not be entered.

Fig 63: Maintenance platform

Fig 64: Maintenance platform – ladder in working position
• Put the ladder onto the maintenance platform, so the brackets (1) snap into the gaps.

9.2.15 Cleaning opening at pressure fan

Fig 65: Cleaning opening at pressure fan

Function:
By means of the additional cleaning opening (1), the pressure fan’s cleaning is simplified.
9.2.16 Special suction channels for pressure fan

Fig 66: Special suction channels

Function:

The special suction channels (1), being fixed on both sides, serve for an improved air feed for the pressure fan under complicated usage conditions.
9.2.17    Gusset shoe

---

**DANGER**

**Danger of crushing during transport.**

Danger to persons’ lives.

- This auxiliary device serves exclusively for the application on even and fixed ground. Public roads and slope ways must not be driven with this device. Transport only on walking speed.
- Due to safety reasons do not use the gusset shoe during repair or service works.
- Only use this device, if a marshaller is present on the site, to be driven on, but only stays in sufficient safety distance to the unit and within the visual range of the driver!
- There must no further persons stay within the screening unit's working area.

---

**NOTICE**

The gusset shoe is only usable under different conditions.

Moving the machine safely is only possible with an appropriate pin.

- The counterpart at the wheel loader shovel has to have a round pin with a diameter of approx. 110 - 120 mm (4.33 - 4.72 in).
Fig 67: Gusset shoe

**Function:**

The gusset shoe (1) is put onto the towing eyelet and fixed with securing bolts (2).

The gusset shoe (1) serves for moving the machine with a correspondingly equipped wheel loader.
9.3 Prepare machine for transport

**WARNING**

Danger to persons due to a not perfect machine condition, related to traffic.

Death or serious injury may otherwise occur.

- Prior to every transport check the
  - connections of vehicle electrics,
  - compressed air connections,
  - functionality of the braking unit,
  - functionality of the illumination unit and
  - signal devices for perfect condition and functionality.
- Prior to every transport check the tyre pressure (8.0 bar / 116.03 psi).
- Ensure that the wheel nuts are tightened with a torque of 270 Nm (199.14 ft lbs).
- In new machines, check the torque of the wheel nuts after approx. 50 - 100 km (31.07 - 62.14 mi).
- Ensure, that the screws of the towing eye are correctly tightened.

**WARNING**

Danger to persons due to transport and setting up of the machine performed incorrectly and without awareness of danger.

Death or serious injury may otherwise occur.

- Only carry out changes of location with the machine after being instructed by the operator.
Preconditions:
The machine is in working position.

- Stop the material feed to the machine.
- Empty the machine and secure that there’s no material in the machine or on the belts anymore.
- Stop the operation and secure the machine against unintended re-starting (see chapter „Stop machine“, page 69).

- Remove the net, covering the container for sucked impurities.
- Disassemble the conveying hoses from the machine.
- Store the disassembled parts in the machine.

- Couple the machine onto an appropriate towing machine (reverse order than described in chapter 6.1.2, „Decouple the machine from the towing device“, page 57.)

- Close the maintenance doors.
- Close the switch cabinet doors.
- Clean the machine thoroughly before a transport in public traffic.
- Prior to a transport, secure the machine's accessory.
- Before transport ensure, that there are no persons, residual material and
• foreign bodies in or at the machine.

9.4 Special labels USA

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="DANGER" /></td>
<td>Marks an electric hazard – here: electric shock.</td>
</tr>
<tr>
<td><img src="image" alt="WARNING" /></td>
<td>Marks a mechanic hazard – here: danger of being squeezed.</td>
</tr>
<tr>
<td><img src="image" alt="EMERGENCY" /></td>
<td>Marks a mechanic hazard – here: kickback of engine doors.</td>
</tr>
<tr>
<td><img src="image" alt="GENERAL SAFETY" /></td>
<td>General safety instructions for the machine’s operation and maintenance.</td>
</tr>
<tr>
<td><img src="image" alt="CLEANING" /></td>
<td>Cleaning instructions</td>
</tr>
<tr>
<td><img src="image" alt="EMERGENCY STOP" /></td>
<td>Marks EMERGENCY-STOP-switch.</td>
</tr>
<tr>
<td>SYMBOL</td>
<td>MEANING</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td><img src="" alt="Notice on emission standard." /></td>
<td>Notice on emission standard.</td>
</tr>
<tr>
<td><img src="" alt="Notice on the next service point." /></td>
<td>Notice on the next service point.</td>
</tr>
<tr>
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