

Translation of the original instructions

# Vacuum packaging machines **GreenVac®** machine Table model (GV3)



#### **ERME AG SWISS VACUUM SOLUTIONS**

Grossmattstrasse 25 CH-8964 Rudolfstetten

T +41 (0)56 633 74 18 F +41 (0)56 633 75 18

erme.ch info@erme.ch

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1 | General information ERME AG

# 1 General information

## 1.1 Subject of these instructions

The vacuum packaging machine described here was manufactured and placed on the market by:

#### **ERME AG / SWISS VACUUM SOLUTIONS**

Contact data (see Legal notice page 2)

#### 1.2 Target group

In addition to the operator, the target groups for these operating instructions include:

- Operating personnel operation and cleaning instructions.
- Maintenance personnel troubleshooting and maintenance instructions.
- Specialists who are tasked by the machine operator with performing tests and maintenance work.

#### 1.3 Information about these instructions

#### 1.3.1 Information about the content

These operating instructions contain important information about handling the machine during installation, commissioning, operation, maintenance and servicing as well as disassembly and disposal.

Compliance with all specified warning messages and instructions is a prerequisite for safely, correctly and efficiently working on and with the machine.

Observing the above information helps to prevent dangers, reduce repair costs and downtimes and increase the reliability and service life of the machine.

In addition, the local accident prevention regulations and general safety regulations applicable at the site where the machine is operated must also be observed.

Carefully read through the operating instructions before starting all work. They are part of the product and must be stored at a location where they are always accessible to the personnel.

In addition to these operating instructions, the instructions for the installed components provided by the respective supplier are located in the overall documentation. See chapter Additional sources of information [ 11].

1 Observe the information — in particular, the warning messages — contained therein.

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#### 1.3.2 Instructions for use

#### Instructions and system reactions

The work steps to be carried out by the operating personnel are described consecutively. The order of the steps must be observed. The system reactions to the respective operational steps are marked by an arrow.

#### Example:

- ✓ Requirement
- 1 Work step 1
- ⇒ Reaction to work step 1

#### Lists

Lists without a mandatory order are displayed as a list with a preceding bullet point.

#### Example:

- Item 1
  - Item 1, sub-item A
- Item 2

Lists with a mandatory order are displayed as a list with a preceding number.

#### Example:

- 1. First
- 2. Second

#### References to chapters/pages

References to specific chapters in which procedures and instructions are described are illustrated as active links.

Example: (see chapter A [▶ 7])

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# 1.3.3 Used symbols

#### **Pictograms**

The warning messages used in these operating instructions are also provided with pictograms to clarify the type of the possible hazard.

The following pictograms are used:

Symbol	Meaning
	General warning message
4	Danger due to electricity
	Observe the operating instructions
i	General information and helpful tips on handling

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## 1.3.4 Structure of the warning messages

The warning messages in these operating instructions are introduced by the signal words DANGER, WARNING, CAUTION and NOTICE that express the extent of the hazard. A warning symbol also indicates the nature of the hazard.

The following warning messages are used in these operating instructions:

#### Risk to life



## **∆DANGER**

#### Risk to life!

Consequences of non-compliance...

• Instructions about prevention.

A warning message of this danger level indicates an impending dangerous situation. If the dangerous situation is not prevented, it will result in death or severe, irreversible injuries.

Follow the instructions in this warning message to prevent the risk of death or severe personal injuries.

#### Risk of injury



#### **MARNING**

#### Risk of injury!

Consequences of non-compliance...

• Instructions about prevention.

A warning message of this danger level indicates a potentially dangerous situation. If the dangerous situation is not prevented, it may result in death or serious injuries.

Follow the instructions in this warning message to prevent the possible risk of death or serious personal injuries.

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#### **Personal injuries**



#### **ACAUTION**

#### Personal injuries due to...

Consequences of non-compliance...

• Instructions about prevention.

A warning message of this danger level indicates a potentially dangerous situation.

If the dangerous situation is not prevented, it may result in light or moderate injuries.

Follow the instructions in this warning message to prevent personal injuries.

#### Material damage



#### **NOTICE**

#### Material damage due to...

Consequences of non-compliance...

• Instructions about prevention.

A warning message of this danger level indicates possible material damage.

If the situation is not prevented, it may result in material damage.

Follow the instructions in this warning message to prevent material damage.

#### Tips and suggestions



#### NOTE

Message text...

Consequences

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#### 1.4 Additional sources of information

In addition to the instructions contained in these machine operating instructions, the information contained in the sources of information specified below must also be taken into consideration:

- Information about the signage on the machine
- Operating instructions for the assemblies and purchased parts that are in use
- Instructions from the operator
- Safety data sheets for auxiliary and operating materials
- Local accident prevention regulations and regional regulations at the machine operating site
- Data sheets for installed components
- 1 Observe the information in particular, the safety instructions contained therein.

# 1.5 Limitations of liability

All information and instructions provided in these operating instructions were compiled taking into consideration the applicable standards and regulations, the technological state-of-the-art as well as knowledge and experience acquired over many years.

We reserve the right to make technical modifications in the course of further developing the machine that is the subject of these operating instructions. No claims can be derived from the information, figures and descriptions provided in these operating instructions.

The manufacturer assumes no liability for damage and malfunctions due to:

- Non-compliance with these operating instructions
- Unintended use
- Personnel who are not sufficiently trained or trained at all
- Use of impermissible equipment
- Faulty connection
- Non-use of original spare parts and accessories
- Technical modifications and conversions unless they have been coordinated with the manufacturer
- Non-performance of the required maintenance work
- Performance of welding work on the machine

The manufacturer is liable for any faults or failures on our part, not including further claims arising within the context of the warranty obligations specified in the contract. Claims for compensation, regardless of the legal grounds, will be excluded.

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# 1.6 Copyright protection

This documentation is protected by copyright.

We reserve all rights, including the rights of photomechanical reproduction, duplication and the distribution through special procedures (for example, data processing, data carriers and data networks), also in part, as well as the right to make content-related and technical modifications.

# 1.7 Warranty provisions

According to the Purchase Agreement, the company ERME AG provides the corresponding warranty from the delivery date of the machine.

The warranty extends to the material and manufacturing defects, which occur during normal load (single-shift operation).

The warranty excludes improper operation, incorrect electrical installations and wear parts.

Our "General Terms and Conditions" apply.

#### 1.8 Customer service

Please keep the following information readily available for all contact with our customer service department:

- Machine type (see type plate on the machine)
- Purchase date (see proof of purchase)

Contact data (see Legal notice page 2)



#### NOTE

We recommend that the operator conclude a service agreement with ERME AG.

This ensures that the machine will be regularly maintained by our service personnel and also ensures the supply of necessary wear and spare parts without long delivery times.

## 1.9 Product monitoring

The company ERME AG monitors its machines up to and after delivery.

Therefore, please provide us with the following information:

- Any accidents that have occurred;
- Problems that have occurred when using the machine;
- Malfunctions that occur during specific operational situations;
- Experiences that could be important for other users.

Contact data (see Legal notice page 2)

ERME AG Safety | 2

# 2 Safety

#### 2.1 General information

This chapter provides important information about all safety aspects to ensure the optimum protection of personnel as well as safe and smooth operation.

Non-compliance with the safety instructions and handling instructions specified in these operating instructions may result in significant hazards.

1 Make sure to observe the warning messages and instructions specified in the operating instructions.

#### 2.2 Intended use

The vacuum packaging machine is only suitable for packaging solid and liquid food as well as technical products. The machine must not be used in electrostatic discharge-protected (ESD) areas.

The machine may only be used within the technical specifications and under the operating conditions defined by the manufacturer.

Any other use beyond this scope is not considered as the intended use.

The permissible values specified in the "Technical data [▶ 24]" section must be observed.

#### 2.2.1 Foreseeable misuse

Any use for purposes other than that specified above is not intended.

The operator solely bears the risk of unintended use or misuse.

Misuse occurs, for example, if

- The machine is not used for its intended purpose.
- The information provided in these operating instructions is not strictly observed.
- Modifications are made to the machine.
- The machine is used in a potentially explosive area.
- The machine is used in electrostatic discharge-protected (ESD) departments.
- Aggressive, combustible liquids, such as petroleum, benzol, benzene, (explosive vapours!) as well as infectious substances, living beings and material whose processing violates laws or social standards are packaged.

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# 2.3 Basic safety instructions

The machine is built according to the current directives, the technological state-of-the-art and the established safety rules and regulations.

Hazards and adverse effects may, however, occur when operating the machine:

- To life and limb of the user or third parties
- To life and limb of the maintenance personnel
- To the machine itself
- To other equipment

Knowledge of the safety and user instructions set out in these instructions provides the basis for safe handling and smooth operation of the machine.

Set up the machine where it is out of the reach of children.

Regularly clean the machine.

Only have the service and repair work performed by the ERME customer service department or an authorised dealer.

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# 2.4 Special dangers / residual risks

# 2.4.1 Danger due to electrical current

There is a risk of death when making contact with lines or components that carry current.

- Do not use the machine if electrical lines, plugs or the insulating housing are damaged. Perform checks according to the intervals for recurring tests/ inspections specified in the operating instructions.
- Work on electrical equipment must only be carried out by qualified electricians or personnel under the guidance and supervision of a qualified electrician in accordance with electrical engineering regulations.
- Defects identified on the electrical components/equipment must be corrected immediately. If there is an acute danger up until that point, the machine, component or equipment must not be used in a defective condition.
- Machine parts on which inspection, maintenance and repair work are performed
   if required must be de-energised. First check that parts that have been disconnected from the power are free of voltage, then earth and short circuit them and isolate adjacent live parts.
- If work is required on live parts, involve a second person who can disconnect the main power switch in case of an emergency. Block off the work area with a red and white security chain and a warning sign. Only use insulated tools.

#### 2.4.2 Danger due to pressurised components

Serious injuries may occur due to components under high pressure.

- Prior to maintenance and repair work, depressurise all machine components that are under pressure (take the pressure accumulator into consideration here).
- Regularly check the pressurised components.
- Regularly replace hose lines during preventative maintenance, even if no damage is detected.
- Observe the warning messages and instructions specified in the operating instructions.
- Wear personal protective equipment when working on the machine.

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#### 2.5 Emissions

#### 2.5.1 Noise emission

Refer to the technical data for the machine's noise emission (see "Technical data [> 24]").

To evaluate the overall noise level at the machine's operating site, observe the local noise control regulations and measure the noise if necessary.

# 2.6 The operator's responsibility

When using the machine in the commercial sector, the operator is subject to the legal obligations on occupational safety.

In addition to the occupational safety instructions provided in these operating instructions, the safety, accident prevention and environmental protection regulations applicable for the location where the machine is operated must be observed

The operator must

- obtain information about the applicable occupational safety regulations and carry out a risk assessment to identify additional dangers, which arise due to the special working conditions at the machine's operating site. This assessment must be implemented in the form of operating instructions for the machine.
- check during the entire operating time of the machine whether the operating instructions prepared by the operator correspond with the current status of the regulations, and adapt them as necessary.
- secure dangerous areas that are created between the machine and other equipment provided by the customer.
- clearly regulate and define the responsibilities for installation, operation, maintenance and cleaning.
- define the machine operator's responsibility and authorise it to reject instructions from third parties that are detrimental to safety.
- ensure that all personnel who handle the machine have read and understood the operating instructions.
   In addition, it must also train the personnel at regular intervals and notify them of the dangers.
- ensure that these operating instructions and all other applicable regulations are readily available to the operating and maintenance personnel.
- regularly check that the personnel are working in a safe manner while remaining aware of the dangers in compliance with these operating instructions.
- provide the personnel with the required personal protective equipment.
- ensure that hearing protection is worn if the permissible noise level (85 dB(A)) is exceeded at the operating site.

The operator is also responsible for ensuring that the machine is in perfect working order. The following therefore applies:

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 The operator must ensure that the cleaning and maintenance intervals defined in these operating instructions are observed.

 The operator must have all safety equipment regularly checked for proper functioning and completeness.

# 2.7 Personnel requirements

#### 2.7.1 Personnel qualifications

Improper handling can result in significant personal injuries and material damages.

- Have all activities performed by appropriately qualified personnel only.

The following qualifications for various areas of activities are specified in these operating instructions:

#### **Instructed person**

 The instructed person has been trained using instructions provided by the operator about the work assigned to him/her and the possible hazards in case of improper behaviour.

#### Specialised personnel

 The specialised personnel can, as a result of his/her technical training, knowledge and experiences as well as knowledge of the relevant regulations, perform the work to which he/she has been assigned and independently identify and avoid possible hazards.

#### Qualified electrician

- can, as a result of his/her technical training, knowledge and experience as well as knowledge of the relevant standards and regulations, perform work on electrical machines and independently identify and avoid possible hazards.
  - The qualified electrician is trained for the particular operation site where he/she works and knows the relevant standards and regulations.

Only persons who can be expected to reliably perform their work are permitted to work as operating personnel. Persons whose responsiveness is impaired, e.g. by drugs, alcohol or medicines, are not permitted.

Personnel who are yet to be trained, taught, instructed or are undergoing general training may only work on the machine under constant supervision of an experienced person.



#### NOTE

Observe the age and occupational-specific regulations that apply at the operating site when selecting personnel.

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# 2.7.2 Unauthorised personnel

Unauthorised personnel who do not fulfil the described requirements are not aware of the dangers in the work area.

- Keep unauthorised personnel away from the work area.
- In case of doubt, address the personnel and direct them out of the work area.
- Stop working as long as unauthorised personnel are in the work area.

#### 2.7.3 Instruction

The personnel must be regularly instructed by the operator.



# NOTE

For better tracking, document the performance of the training programs and have the participants confirm their participation with their signature.

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# 2.8 Personal protective equipment

Personal protective equipment must be worn when performing work in order to minimise health risks.

- When performing the work, always wear the protective equipment necessary for the respective work.
- Immediately replace worn or defective protective equipment.
- Observe the signs in the work area concerning the use of personal protective equipment.

Wear the following protective equipment for all work:



Close-fitting protective work clothing with low tear strength.



Work gloves to protect against injuries.



Protective footwear with steel caps and puncture and oil-resistant safety soles.



Safety goggles for protecting the eyes against flying parts and fluids.

Special protective equipment is also required when performing specific types of work. This is indicated separately in the individual chapters.

Also wear the following protective equipment for special work:



Helmet to protect the head against falling objects.



Hearing protection in environments with noise emissions  $\geq$  80 dB(A).

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# 2.9 Safety equipment on the machine

Missing or non-functioning safety equipment can result in severe injuries.

- Only operate the machine if all the safety equipment is fitted and functional.
- Prior to starting work, check whether the safety equipment is functional and installed correctly.
- Never disable the safety equipment.
- Make sure that the safety equipment is always freely accessible.

The machine was manufactured in accordance with the legal regulations that apply in the European Union.

The machine, however, may pose dangers if it is not operated correctly or in a proper condition. Dangerous areas that cannot be eliminated by design are fitted with safety equipment and, where necessary, marked by warning signs on the machine and by corresponding safety instructions in the operating instructions.

The machine is equipped with the following safety equipment:

- Warning signs
- Thermal switch that interrupts the power supply for the vacuum pump if the temperature reaches approx. 60°C
- Safety and pressure relief valves

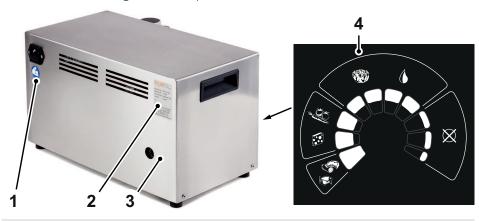
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# 2.10 Signage on the machine

Stickers and signs can become dirty or otherwise unrecognisable over time.

- Always keep all safety, warning and operating instructions in an easily readable condition.
- Immediately replace damaged signs or stickers.

The following symbols and signs are located on the machine. They refer to the immediate surroundings where they are attached.



- 1 Observe the instructions
- 3 Oil level indicator (min/max)
- 2 Type plate
- 4 Vacuum recommendations for various products

# 2.11 Conversions prohibited

Any conversions and modifications on the machine, in particular, removing or manipulating the safety equipment are prohibited.

The manufacturer no longer assumes any liability or provides any warranty if unauthorised conversions or modifications are made to the machine.

The electromagnetic behaviour of the machine can be adversely affected by additions or modifications of any kind. Therefore, do not make any changes or additions to the machine without consulting or the written consent of the manufacturer.

Opening the housing is prohibited.

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2 | Safety ERME AG

## 2.12 Spare parts

Risk of injury due to incorrect or faulty spare parts.

Incorrect or faulty spare parts can result in damage to and malfunctions or total failure of the machine and endanger safety.

- Only use original spare parts or spare parts approved by the manufacturer.

The manufacturer assumes no liability for damages resulting from the use of spare or wear parts that have not been approved by the manufacturer.

# 2.13 Auxiliary and operating materials

Risk of injury due to impermissible auxiliary and operating materials.

Impermissible auxiliary and operating materials can result in damage to and malfunctions or total failure of the machine and endanger safety.

 Only use auxiliary and operating materials that have been specified and approved by the manufacturer.

The manufacturer assumes no liability for damage resulting from the use of auxiliary and operating materials that have not been approved by the manufacturer.

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# 2.14 Accident prevention measures

#### 2.14.1 Preventative measures

- 1 Always be prepared for accidents or fires.
- 2 Keep first aid equipment (first aid kit, blankets, etc.) and fire extinguishers readily available.
- 3 Familiarise personnel with accident signaling, first aid and rescue equipment.
- 4 Keep the access roads clear for the rescue vehicles.

#### 2.14.2 Response measures in case of accidents

- 1 Immediately shut down the machine.
- 2 Initiate first aid measures.
- 3 Rescue people from the danger zone.
- 4 Notify the responsible personnel at the operation site.
- 5 Alert the emergency services.
- 6 Clear the access roads for the rescue vehicles.

# 2.15 Environmental protection

The incorrect handling of environmentally hazardous substances, in particular incorrect disposal, can cause significant damage to the environment.

- Observe the disposal instructions [▶ 42].
- If environmentally hazardous substances are accidentally released into the environment, take suitable measures immediately. In case of doubt, notify the responsible local authorities of the damage.

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3 | Technical data ERME AG

# 3 Technical data

#### 3.1 Machine data

Model	GV3	Unit
Machine dimensions (width x depth x height)	380 x 205 x 225	mm
Total weight	19	kg
Power supply	230 single-phase	V
Frequency	50	Hz
Suction power of vacuum pump	12	m³/h
Maximum vacuum pressure	1	mbar
	99.9	%
Nominal motor power	0.45	kW
Mains fuse	6.3	А
Noise emission	62	db(A)

## 3.2 Ambient conditions

Information	Value	Unit
Operating ambient temperature range	+10 +30	°C
Max. operating humidity (non-condensing)	80	%
Max. altitude above sea level	2000	m

# 3.3 Type plate

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Grossmattstrasse 25
CH-8964 Rudolfstetten
info@erme.ch | erme.ch

Modell:
Baujahr:
Netzanschluss:
Leistung:
Netzsicherung:
Serien Nr.:

Fig. 1: Type plate

The type plate is located on the rear of the machine and contains the following information:

- Manufacturer address
- CE label
- Model designation
- Year of manufacture
- Mains connection
- Power
- Mains fuse
- Series no.

ERME AG Structure and function | 4

# **4 Structure and function**

# 4.1 Functional description

The vacuum packaging machine is only suitable for packaging solid and liquid food as well as technical products. The machine must not be used in electrostatic discharge-protected (ESD) areas.

The bagless vacuuming process is carried out directly in the GreenVac container and thus allows the packaging of pressure-sensitive products, such as vegetables, fruit, pasta and salads.

## 4.2 Machine overview

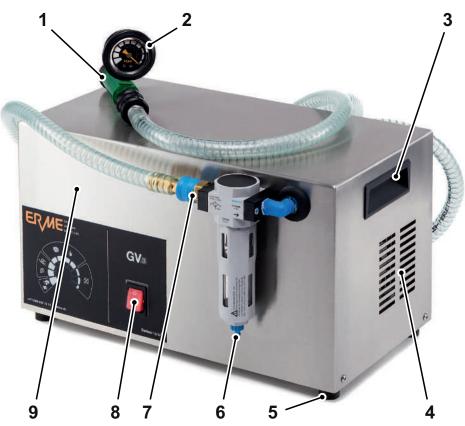


Fig. 2: Machine overview 1

1 Manual valve	2 Pressure indicator
3 Handle	4 Ventilation Slot
5 Machine feet	6 Condensate drain
7 Hose connection	8 Main switch
9 Machine housing	

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4 | Structure and function ERME AG



Fig. 3: Machine overview 2

10 Electrical connection	11 Ventilation Slot
12 Oil level indicator	13 Fuse

ERME AG Transport | 5

# 5 Transport

## 5.1 Safety instructions

#### Incorrect transport

Improper transportation may result in considerable material damage.

- Prior to each transport, make sure that the machine is correctly packaged.
- Do not tilt the machine during transport and only transport the machine horizontally.
- When unloading delivered packages and when transporting them on the premises, proceed with caution and observe the symbols and instructions on the packaging.
- Do not remove the packaging until shortly before installation.

# 5.2 Personnel qualifications

Transport, packaging and storage may only be carried out by personnel who

- are authorised to do so due to their training and qualifications.
- are tasked to do so by the machine operator.

## 5.3 Transport inspection

After receiving the machine:

- 1 Refer to the order papers for the scope of machine delivery and compare them with the delivery note.
- 2 Check that the delivery is complete using the delivery note.
- 3 Check the delivery for visible damage.
- 4 Report an incomplete or damaged delivery to the dealer/supplier immediately.

# 5.4 Packaging

The used packaging materials are recyclable. Dispose of packaging materials that are no longer necessary according to the local applicable regulations.

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6 | Installation ERME AG

# **6** Installation

# **6.1 Safety instructions**



# **△DANGER**

#### Danger due to electrical current.

There is a risk of death when making contact with lines or components that carry current.

 Work on electrical equipment must only be carried out by qualified electricians or personnel under the guidance and supervision of a qualified electrician in accordance with electrical engineering regulations.

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#### 6.2 Electrical connection

Observe the following instructions when establishing the electrical connection to ensure safe and smooth machine operation:

- Check that the existing mains voltage matches the voltage specified on the type plate. This data must match to ensure that the machine is not damaged.
- Refer to the "Technical data [▶ 24]" chapter for the fuse necessary for operating the machine.
- Make sure that the power line is not damaged and not routed over sharp edges.
- The connection line must not be tightly stretched, kinked, crushed or knotted or come into contact with hot surfaces.
- The electrical safety of the machine is only ensured if it is connected to a protective conductor system that has been installed in accordance with the applicable regulations. The machine must not be powered from a socket without a protective conductor. In case of doubt, the installation must be checked by a qualified electrician. The manufacturer accepts no responsibility for damage caused by a missing or disconnected protective conductor.
- Install the connection line so that it does not create a tripping hazard.

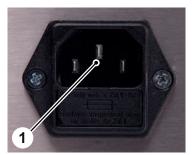


Fig. 4: Electrical connection

- 1 Make sure that the main switch of the machine is in position "O" (off).
- 2 Connect the plug of the connection cable to the connection (1) on the machine.
- 3 Connect the mains plug to the socket.

## 6.3 Connecting the GreenVac hose



Fig. 5: Connecting the GreenVac hose

Connect the GreenVac hose (1) to the separator connection (2).

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7 | Control/operation ERME AG

# 7 Control/operation

# 7.1 Safety instructions



#### **NOTICE**

#### Possible damage to the vacuum pump.

With an ambient temperature below +8°C, the vacuum pump may be damaged.

• Only operate the machine at an ambient temperature higher than +8°C.

# 7.2 Requirements for the installation site

The following requirements for the installation site must be met in order to ensure safe and smooth machine operation:

- Operate the machine on a solid level surface. The clearance to the walls and other objects must be at least 30 cm.
- The power socket must be easily accessible so that the mains connection can be quickly disconnected.
- The machine must not be operated or stored outside.
- When selecting the installation site, take the space requirements for the connections into consideration.

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#### 7.3 General instructions

- Select containers that are suitable for the product quantity.
- Only package cooled products.
- Ensure work is performed in a clean manner and wear gloves.

# 7.4 Information about packaged goods

## 7.4.1 Instructions on storage times

The following information is based on experience and may deviate upwards or downwards from various factors, such as age and food, feeding of livestock and refrigeration chain, etc.

The company ERME AG therefore rejects all liability for any resulting damage.

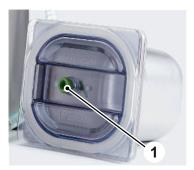
The storage times refers to vacuum-packed, non-frozen products that are stored in a cool location.

Product	Storage times	Comments
Veal	10 - 14 days	
Beef	4 - 6 weeks	Ripening process 2 - 3 weeks
Pork	7 - 10 days	
Poultry	10 - 14 days	Cover sharp bones
Fish	5 - 10 days	Smoked several weeks
Sausage products	7 - 14 days	Depending on product quality
Smoked	Weeks/months	
Pasta	5 - 10 days	Possibly under protective atmosphere
Baked goods	5 - 10 days	Possibly under protective atmosphere
Cheese	Days/weeks	<ul> <li>Depending on product quality</li> </ul>
		<ul> <li>Possibly under protective atmosphere</li> </ul>
Fruit, vegetables	7 - 15 days	Possibly blanch
Salads	5 - 10 days	Only partially seal
Liquids	7 - 14 days	Use slanted insert

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7 | Control/operation ERME AG

# 7.5 Performing the vacuum procedure



1 To prepare the GreenVac container, mount the lid seal (1) and the green sealing ball.

2 Switch the machine's main switch to position (1).

Fig. 6: GreenVac container



Fig. 7: Manual valve with pressure indicator

- 3 Attach the manual valve (2) to the sealing ball in the lid and press the manual slide down.
  - ⇒ The intensity of the vacuum is displayed on the pressure gauge (3).
- 4 After the desired vacuum is achieved, pull up the manual slide and remove the manual valve.
- 5 Switch the machine's main switch to position (0).
- 6 To aerate the container, press the sealing ball to one side.

#### 7.6 Activities after use

1 Clean the machine (see chapter Cleaning the machine).

ERME AG Troubleshooting | 8

# 8 Troubleshooting

# 8.1 Safety instructions



#### **△DANGER**

#### Danger due to electrical current.

There is a risk of death when making contact with lines or components that carry current.

 Work on electrical equipment must only be carried out by a qualified electrician in accordance with electrical engineering regulations.



#### **NOTICE**

#### Material damage due to incorrect troubleshooting.

If pending faults are ignored or not correctly rectified, it can result in damage to the machine.

- In case of active faults, shut down the machine.
- Properly rectify the fault or have it rectified by appropriate specialists.

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8 | Troubleshooting ERME AG

# 8.2 Instructions on troubleshooting



# NOTE

If the measures listed here do not rectify the fault, contact the customer service department of the company ERME AG.

See chapter "Customer service [> 12]".

# 8.3 Localising faults

Problem	Possible causes	Remedy
Main switch is not	<ul> <li>Machine is not switched on.</li> </ul>	<ul> <li>Switch on the machine.</li> </ul>
illuminated.	<ul> <li>Circuit breaker in the power distribution unit has tripped.</li> </ul>	<ul> <li>Switch the circuit breaker back on.</li> </ul>
	<ul> <li>Input fuse is defective.</li> </ul>	<ul> <li>Replace the input fuse (see chapter Replacing the input fuse).</li> </ul>
Poor vacuum.	<ul> <li>The lid seal or sealing ball of the vacuum container is worn or defective.</li> </ul>	– Replace the lid seal.
	<ul> <li>Lip seal on the manual valve is worn / defective.</li> </ul>	– Replace the lip seal.
	<ul> <li>The fine filter in the separator is contaminated.</li> </ul>	<ul> <li>Clean the fine filter (see chapter Cleaning</li> <li>[▶ 35]).</li> </ul>

ERME AG Cleaning | 9

# 9 Cleaning

# 9.1 Safety instructions



#### **NOTICE**

#### Possible material damage during cleaning.

Incorrect cleaning can result in material damage to the machine.

- Make sure that no liquids enter into the suction openings.
- Do not clean the machine with a high-pressure or powerful water jet.

# 9.2 Personnel qualifications

The machine may only be cleaned by personnel who

- have received the corresponding training.
- are tasked to do so by the machine operator.

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9 | Cleaning ERME AG

# 9.3 Cleaning the machine

Proceed as follows for cleaning:

- 1 Switch the machine's main switch to position (0).
- 2 To clean the machine, manually remove the coarse dirt and then wipe it down with neutral, food-safe cleaning agents and a soft cloth.



#### NOTE

- Do not use aggressive cleaning agents when cleaning the machine.
- If you detect damage, notify the responsible personnel.

#### Cleaning the fine filter in the separator

Vacuumed particles and contamination can be removed at the separator (see A and B)

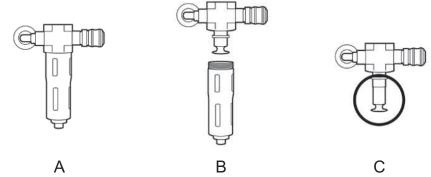


Fig. 8: Cleaning the GreenVac separator

- 3 Unscrew the collecting container. Clean the container, suction hose and manual valve with warm water and rinsing solution.
- 4 Also unscrew and rinse and, if necessary, replace the fine filter (see C).

ERME AG Maintenance | 10

# 10 Maintenance

### 10.1 Safety instructions



#### **∆DANGER**

#### Danger due to electrical current.

There is a risk of death when making contact with lines or components that carry current.

 Work on electrical equipment must only be carried out by a qualified electrician in accordance with electrical engineering regulations.



#### **NOTICE**

# Material damage due to the incorrect performance of the maintenance work.

If maintenance work is not carried out correctly, it can result in damage to the machine.

• Perform the maintenance work correctly and appropriately.

# 10.2 Personnel qualifications

Maintenance work on the machine may only be performed by personnel who

- are authorised to do so due to their training and qualifications.
- $\,-\,$  are tasked to do so by the machine operator.

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10 | Maintenance ERME AG

# 10.3 Measures prior to maintenance

Prior to performing maintenance work:

1 Switch the machine's main switch to position (0).

# 10.4 Maintenance overview

Perform the following maintenance work on the machine:

Work to be performed	Interval	Additional information
Perform a visual inspection of the machine for:	Before starting up the	
<ul> <li>Contamination</li> </ul>	machine each time	
- Damage		
Check the electrical connections and mains cable for	<b>O</b> 1	Have the identified defects
damage.	machine each time	corrected immediately.
Clean the machine.	After each use	See chapter Cleaning the machine.
Check the oil level.	Monthly	See chapter Checking the oil level [> 39].
Clean the separator	As necessary	See Cleaning the machine.

ERME AG Maintenance | 10

# 10.5 Description of the maintenance work

# 10.5.1 Checking the oil level



#### **NOTICE**

#### Vacuum pump damage in case of an insufficient oil level

Operating the vacuum pump with an insufficient oil level can result in damage to the vacuum pump

Do not operate the machine if the oil level is below the "MIN"



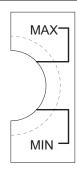


Fig. 9: Checking the oil level

Check the oil level and the condition of the oil at the oil inspection glass (1) each month.

The oil inspection glass is located at the rear of the machine housing.

The oil level must be between the "MIN" and "MAX" marks. If the oil level drops below the "MIN" mark, oil must be added.



# NOTE

Contact the ERME customer service department to replenish or change the oil.

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10 | Maintenance ERME AG

# 10.6 Replacing wearing parts

# 10.6.1 Replacing the input fuse



#### **∆DANGER**

#### Danger due to electrical current.

There is a risk of death when making contact with lines or components that carry current.

- Only have the maintenance and/or repair work performed by authorised qualified electricians.
- Fuses may not be repaired or bypassed.
- Only use approved fuses. Original spare parts are available from the ERME customer service department.

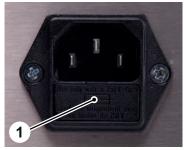


Fig. 10: Fuse

- 1 Unplug the plug on the machine.
- 2 Open the small compartment (1) in the plug socket using a screwdriver.
- 3 Remove the defect fuse and insert a new fuse. A backup fuse is located in the compartment.
- 4 Insert the compartment in the machine again.

# 11 Decommissioning and disposal

## 11.1 Safety instructions



#### **△DANGER**

#### Risk of death due to electrical current and other energies.

Decommissioning/disassembling the machine may result in severe injuries or death if the power supply is not switched off or due to stored energies.

- Prior to disassembling the machine, disconnect it from any external power supplies.
- Depressurise all devices that are under pressure.
- Dissipate any other residual energies.



#### **MARNING**

#### Risk of injury due to improper machine disassembly.

Improperly disassembling the machine may result in serious injuries.

- The machine must only be disassembled and dismantled by appropriately trained specialists in compliance with the local safety regulations.
- Prior to starting work, ensure sufficient space for disassembly.
- Make sure the work area is orderly and clean. Loose components and tools that are stacked on each other or lying around are potential sources of accidents.
- Correctly disassemble the components.
- Secure the components so that they do not fall down or over.

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# 11.2 Personnel qualifications

The machine may only be cleaned by personnel who

- have received the corresponding training.
- are tasked to do so by the machine operator.

# 11.3 Decommissioning

### 11.3.1 Temporary decommissioning

Proceed as follows in case the machine must be temporarily decommissioned:

- 1 Switch off the machine and unplug the mains plug.
- 2 If the machine must be decommissioned for a longer period of time, apply anticorrosion measures and regularly check the anti-corrosion agent.

# 11.3.2 Final decommissioning / disassembly

- 1 Perform the work steps set out in the "Temporary decommissioning" section.
- 2 Disconnect the machine from any external power supplies.
- 3 Remove all connection hoses/pipes.
- 4 Properly dispose of material, components, lubricating and auxiliary materials.

## 11.4 Disposal

Perform the following steps to ensure proper disposal after disassembly:

- Separate metals and plastics and take them to authorised scrapping or recycling facilities.
- Dispose of problematic substances that can no longer be reused, such as lubricants and cleaning agents or electrical components, according to the local applicable regulations.



#### **NOTICE**

#### Environmental damage due to improper disposal!

Incorrect disposal may result in environmental damage.

• Observe the manufacturer's specifications for the lubricants and auxiliary materials to ensure environmentally-friendly disposal.

# 12 Declaration of Conformity

in accordance to the Machinery Directive 2006/42/EC, Annex II 1A

SWISS VACUUM SOLUTIONS

Manufacturer address Grossmattstrasse 25

CH - 8964 Rudolfstetten

We declare that the product:

Product Vacuum packaging machines

Type GreenVac® GV3

complies with the relevant regulations:

Relevant EU directives EC Directive as amended by 2006/42/EC

EMC Directive as amended by 2014/30/EU

Applied harmonised standards: DIN EN ISO 12100: 03/2011:

Safety of machinery — General principles for design — Risk assessment and risk

reduction

DIN EN 60204-1: 06/2007:

Safety of machinery — Electrical equipment of machines — Part 1: General

requirements EN ISO 14159:

Safety of machinery — Hygiene requirements for the design of machinery

Authorised representative for the compilation of technical

documents:

**ERME AG** 

Technical documentation is available.

The operating instructions for the machine are available.

- In the original version
- In the national language of the user

It is assumed that the product will only be operated in accordance with its intended use. Refer to the technical documentation for information about the intended use.

Rudolfstetten, 1 March 2017

Signature

Thomas Meyer

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