

Translation of the original instructions

Vacuum packaging machines Automatic inline sealing machines Industrial models (TSK350, TSK470)



 **Before starting work, read these instructions!**

ERME AG SWISS VACUUM SOLUTIONS

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1 General information

1.1 Subject of these instructions

The automatic vacuum inline sealing machine described here was manufactured and put into circulation 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:

- Specialists authorised by the owner to perform assembly and installation work.
- Operating personnel — operation and cleaning instructions.
- Maintenance personnel — troubleshooting and maintenance instructions.
- Specialists who are tasked by the 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.

i	NOTE
	<ul style="list-style-type: none"> ▶ Observe the information — in particular, the warning messages — contained therein.

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 \[▶ 7\]](#))




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:




General symbols

Symbol	Meaning
	General information and helpful tips on handling
	Special information on working safely
	Information about possible material damage


Warning symbols

Symbol	Meaning
	General warning message
	Danger due to electricity
	Danger due to hot surfaces
	Danger of pulling in
	Danger of hand injuries!
	Risk of crushing!

Mandatory signs

Symbol	Meaning
	Observe the operating instructions
	Wear protective gloves
	Wear foot protection

Prohibition signs


Symbol	Meaning
	Do not remove protective facilities

1.3.4 Structure of the warning messages

The warning messages in these operating instructions are introduced by signal words that express the extent of the hazard.


The warning symbol also indicates the nature of the hazard.

The following warning messages are used in these operating instructions:

	⚠ DANGER
	<p>Risk to life!</p> <p>Consequences of non-compliance...</p> <p>▶ Information about avoidance</p>


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

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

	⚠ WARNING
	<p>Risk of injury!</p> <p>Consequences of non-compliance...</p> <p>▶ Information about avoidance</p>

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.

	⚠ CAUTION
	<p>Personal injuries due to...</p> <p>Consequences of non-compliance...</p> <p>▶ Information about avoidance</p>


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.

	NOTICE
	<p>Material damage due to...</p> <p>Consequences of non-compliance...</p> <ul style="list-style-type: none"> ▶ Information about avoidance

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.

	SAFETY INSTRUCTIONS
	<p>Working safely during...!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none"> ▶ Information on working safely

This notice contains important information and information on working safely during the following activity steps. Follow the instructions in this notice to avoid accidents and injuries.

	NOTE
	<p>Notice text...</p> <p>Consequences</p>

A notice identifies additional information that is important for further processing or which makes the described work step easier.

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

i	NOTE
	<p>► Observe the information — in particular, the safety instructions — contained therein.</p>

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.

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)

i	NOTE
	<p>We recommend that the operator conclude a maintenance agreement with ERME AG.</p> <p>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.</p>

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)

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.

In addition to the general safety instructions provided in this chapter, further safety instructions that are relevant to the corresponding chapter are listed in each activity chapter.

Hazards that can occur in a specific activity step are described prior to the activity step.

Knowledge of the safety and user instructions set out in these operating instructions provides the basis for safe handling and trouble-free operation of this machine.

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

	SAFETY INSTRUCTIONS
	<ul style="list-style-type: none">▶ Always observe the warnings and instructions listed here.▶ Always store the operating instructions at the operating location of the machine.▶ The operating instructions must be freely accessible to operators and maintenance personnel at all times.

2.2 Intended use

The machine is exclusively intended for vacuum sealing food containers.

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** [▶ 26]" 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.

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

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 hot surfaces

Hot surfaces can cause serious injuries.

The machine reaches high temperatures during operation.

- Take safety precautions against fires, burns and overheating.
- Wear personal protective equipment.
- Do not touch the machine, particularly the sealing plate.
- After stopping operation, let the machine sufficiently cool down.

2.4.3 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.

2.4.4 Danger due to oxygen-displacing gases

Risk of suffocation due to high inert gas concentrations.

Higher concentrations of inert gas can result in suffocation, since they displace the atmospheric oxygen.

- Only operate the machine at a well-ventilated location.
If necessary, install a device for monitoring the ambient air.
- Keep the air slots and openings free and clean.
- Make sure that the inert gas equipment is regularly checked for leaks.
- To ensure safe handling, observe the safety data sheet for the inert gas.

2.4.5 Danger of pulling in and crushing

There is a danger of pulling in and crushing due to moving mechanical parts.

- Observe the warning signs.
- Never reach into moving parts.
- Do not remove any protective facilities.

2.5 Noise emission

Refer to the technical data for the machine's noise emission (see "Technical data [► 26]").

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:

- 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.

Skilled 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 electricians

- 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.

The machine may be used by persons with limited physical, sensory or mental capabilities or with insufficient experience if they are supervised or have been instructed in its safe use and have understood the associated dangers.



NOTE

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

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.

i	<i>NOTE</i>
	For better tracking, document the performance of the training programs and have the participants confirm their participation with their signature.

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.
- Observe the signs in the work area concerning the use of personal protective equipment.
- Adhere to the safety requirements defined by the owner.

Wear the following protective equipment for special work:



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



Work gloves to protect against injuries.

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
- Safety and pressure relief valves
- The motors are protected with motor protection switches.
- Protective covers
- EMERGENCY STOP button on the control panel

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.

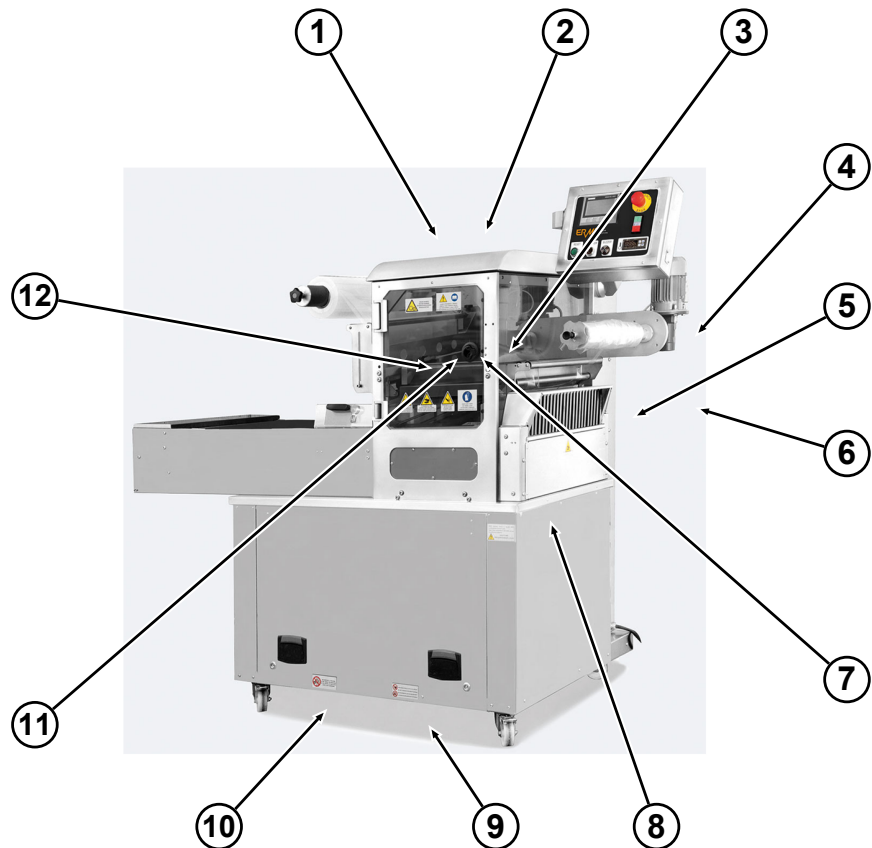


Fig. 1: Signage

1 Danger of pulling in	2 Observe the operating instructions
3 Wear protective gloves	4 Type plate (rear of the machine)
5 Risk of crushing!	6 On rear of machine: Warning of electrical voltage Do not remove safety screws
7 Danger of cutting: caution, blades.	8 General warning! Do not intake any flour or liquid products, and do not package hot dishes.
9 Do not remove safety screws	10 Do not remove protective facilities!
11 Risk of crushing!	12 Danger due to hot surfaces

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.

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.

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


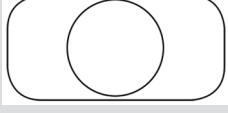


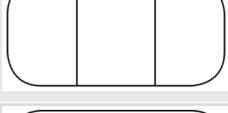
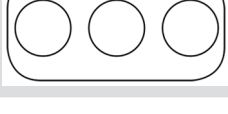
- 1 Immediately shut down the machine.
- 2 Initiate first aid measures.
- 3 Rescue people from the danger zone.
- 4 Notify the responsible personnel at the operation site.
- 5 Alert the emergency services.
- 6 Clear the access roads for the rescue vehicles.

3 Technical data

3.1 Machine data

Model	TSK350 In-line	TSK470 In-line	Unit
Machine dimensions (width x depth x height)	1930 x 810 x 1660	2500 x 990 x 1660	mm
Total weight	420	520	kg
Power supply	400 three-phase	400 three-phase	V
Frequency	50	50	Hz
Suction power of vacuum pump	100	100	m ³ /h
Max. sealing	280 x 210	400 x 285	mm
Max. tray height	90	100	mm
Max. film reel width	350	470	mm
Max. film reel diameter	220	220	mm
Power consumption	3.9	3.9	kW
Pneumatic connection	6	5	bar
Compressed air requirement	200	200	l/min
Mains fuse	16	16	A
Noise emission	<70	<70	db(A)

3.2 Tray use

Model	TSK350 In-line	TSK470 In-line	Fig.
1-fold use	308 x 210 mm Skin 280 x 200	400 x 275 mm Skin 380 x 270 mm	
1-fold use	Ø 210 mm	Ø 275 mm	
2-fold use	148 x 210 mm Skin 120 x 200	275 x 190 mm Skin 270 x 180 mm	
2-fold use	Ø 145 mm	Ø 190 mm	
3-fold use	-	125 x 275 mm Skin 280 x 190 mm	
3-fold use	-	Ø 125 mm (At least 100 mm)	

3.3 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

3.4 Type plate

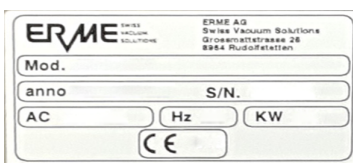


Fig. 2: Type plate

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

- Manufacturer address
- Model designation
- Year of manufacture
- Serial no.
- Input voltage
- Frequency
- Power
- CE label

4 Structure and function

4.1 Functional description

The machine is exclusively intended for vacuum sealing food containers.

The container positioned on the feed conveyor is inserted up to the centre of the bell. The film required for the packaging process is unwound from a film reel and guided through the machine.

The vacuum chamber is closed by raising the bell.

The air is extracted from the container with the packaged product using a vacuum pump. The corresponding inert gas is then conducted into the vacuum chamber.

The container is sealed with the film. The film is stamped at the edges of the container.

On completion of the sealing process, the vacuum chamber is ventilated and the bell is lowered.

The packaged container is transported out of the machine via the unloading opening. The remaining film is also wound up on the residue winder, thus preparing the films for the current cycle.

4.2 Machine overview

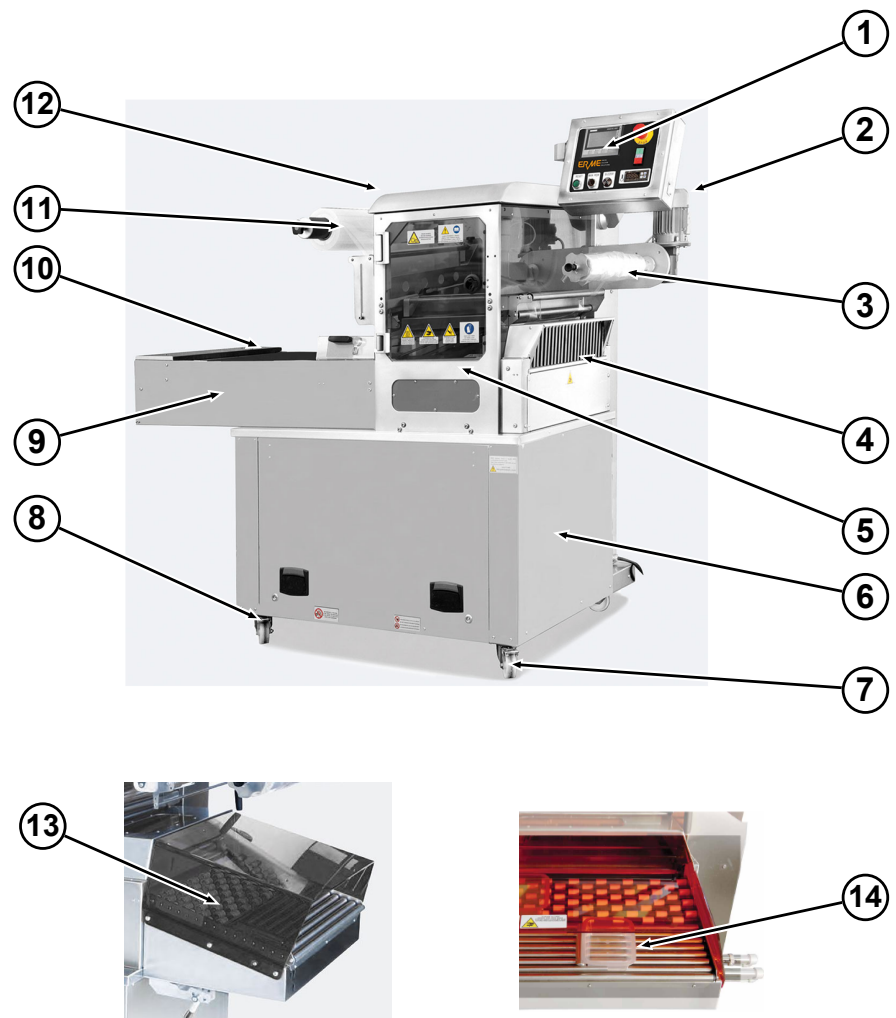


Fig. 3: Machine front

1 Control panel	2 Residual film winding drive motor
3 Residual film winding	4 Product output
5 Maintenance door	6 Machine housing
7 Transport rollers	8 Locking brake
9 Guide carrier	10 Product infeed
11 Film reel	12 Main machine switch (on the side of the machine)
13 Outlet chute	14 Serialiser (optional)

4.3 Control panel

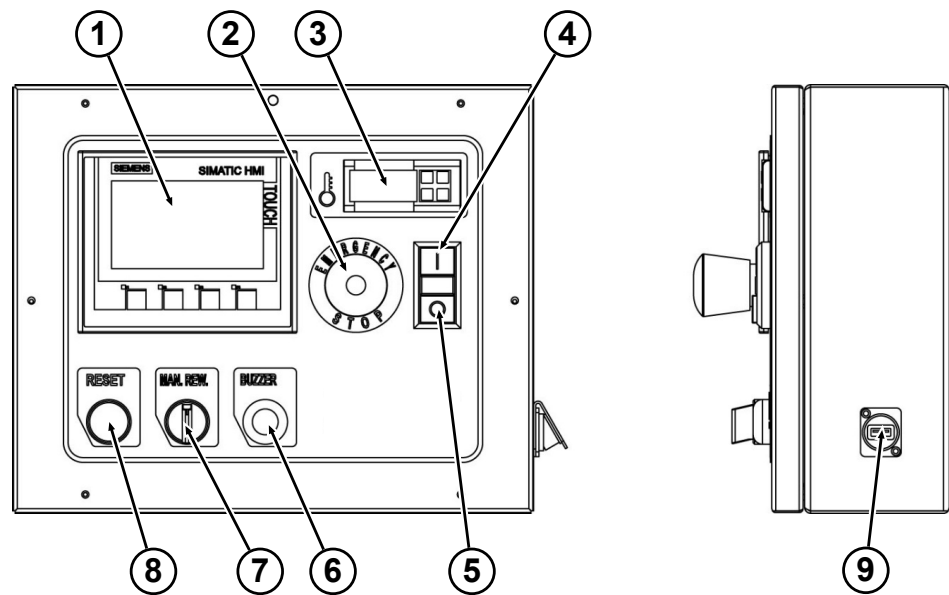


Fig. 4: Control panel

1 Touch screen	2 EMERGENCY STOP button
3 Digital thermostat	4 "Start cycle" button Starts the packaging cycle
5 "Stop cycle" button Stops the packaging cycle	6 Buzzer
7 "Manual residue winding" switch	8 "RESET" button. Resets the error messages
9 USB connection	

4.4 Digital thermostat

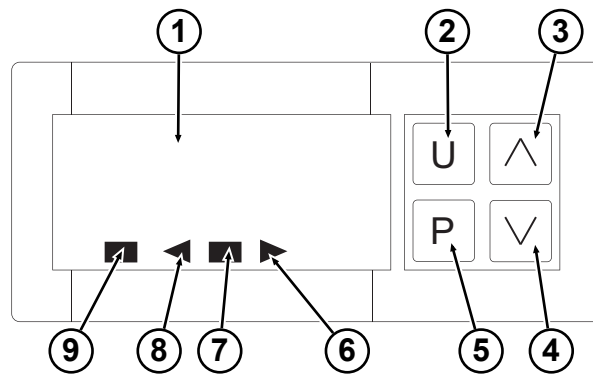


Fig. 5: Digital thermostat

1 Display	2 "U" button Without function
3 "^" button Used to increase the temperature value.	4 "v" button Used to reduce the temperature value.
5 "P" button Used to select and save temperature values.	6 LED temperature indicator (high temperature) Lights up when the temperature of the sealing plate is higher than the set temperature.
7 LED temperature indicator (temperature OK) Lights up when the temperature of the sealing plate corresponds to the set temperature.	8 LED temperature indicator (low temperature) Lights up when the temperature of the sealing plate is lower than the set temperature.
9 LED operation indicator lamp Lights up after switching on until the temperature of the sealing plate corresponds to the set temperature.	

4.5 Description of the user interface

4.5.1 Structure of the screen display

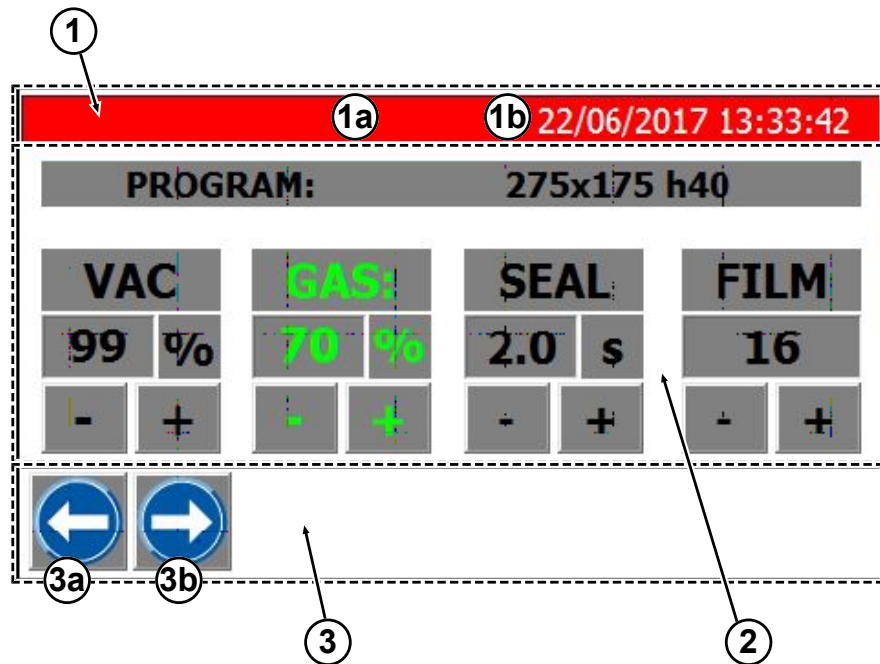




Fig. 6: Subdivision of the display area

No.	Element	Function
1	Title line	Display <ul style="list-style-type: none"> – Machine designation (1a) – Current system time (date and time) (1b) The "Date and time" [41] screen opens on actuation.
2	Visualisation area	Visualisation area for the content of the current page
3	Footer	Control panels for quick navigation between the menu pages
3a	Control panel " 	On actuation, the previous screen is displayed.
3b	Control panel " 	On actuation, the next screen is displayed.

4.5.2 Description of the menu pages

4.5.2.1 Start page

After the control system has booted and the error messages have been reset, the sealing plate is heated to the temperature set via the digital thermostat, and the message "Low temperature" – "Please wait" is shown on the display. After reaching the set temperature, the start page is displayed.

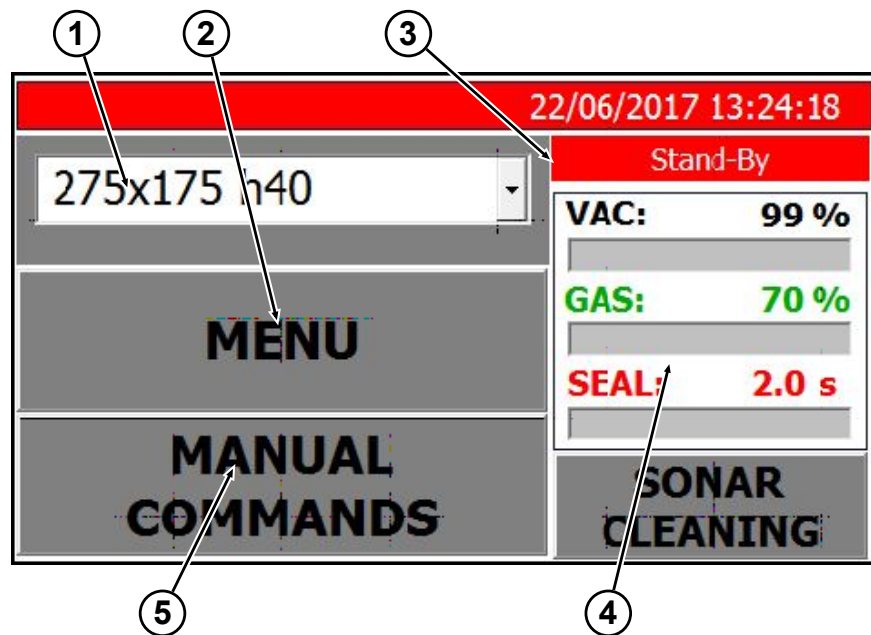


Fig. 7: Start page

No.	Element	Function
1	"Program" selection field	Used to select the desired program. After selection, the program name is displayed.
2	"MENU" control panel	The "Menu" [▶ 34] screen opens on actuation.
3	"Operating status" display field	Displays the current operating status of the machine.
4	"Parameter" area	Shows the vacuum value, gas level and sealing time parameters defined in the program. The "Settings (Page 1)" [▶ 36] screen opens on actuation.
5	"MANUAL COMMANDS" control panel	The "Manual commands" screen opens on actuation.

4.5.2.2 "Menu" screen

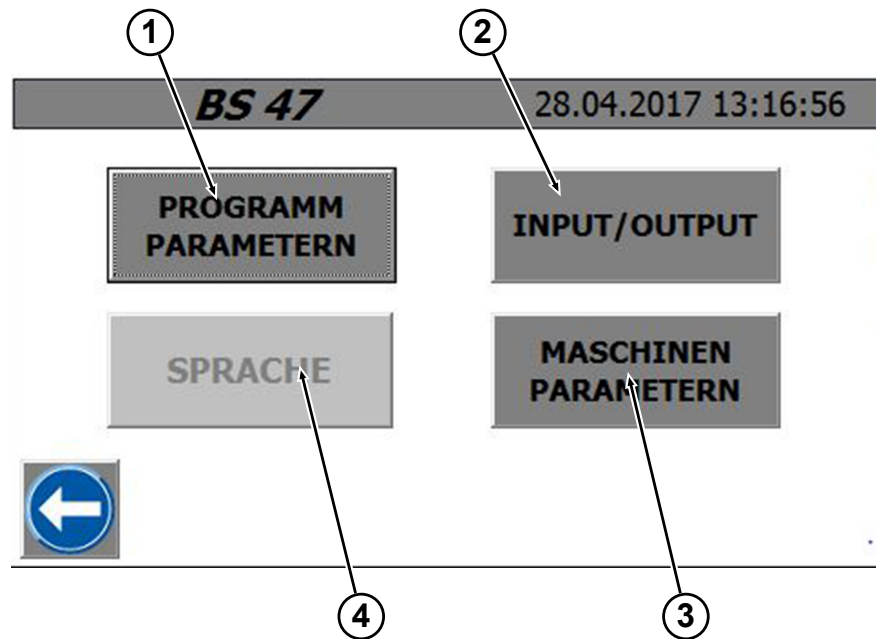


Fig. 8: "Menu" screen

No.	Element	Function
1	"PROGRAM PARAMETERS" ("PROGRAMM PARAMETER") control panel	The "Program parameters" [35] screen opens on actuation.
2	"INPUT/OUTPUT" control panel	The "INPUT/OUTPUT" screen opens on actuation.
3	"MACHINE PARAMETERS" ("MASCHINEN PARAMETER") control panel	The "Machine parameters" screen opens on actuation.
4	"LANGUAGE" ("SPRACHE") control panel	The screen for selecting the system language opens on actuation.

4.5.2.3 "Program parameters" screen

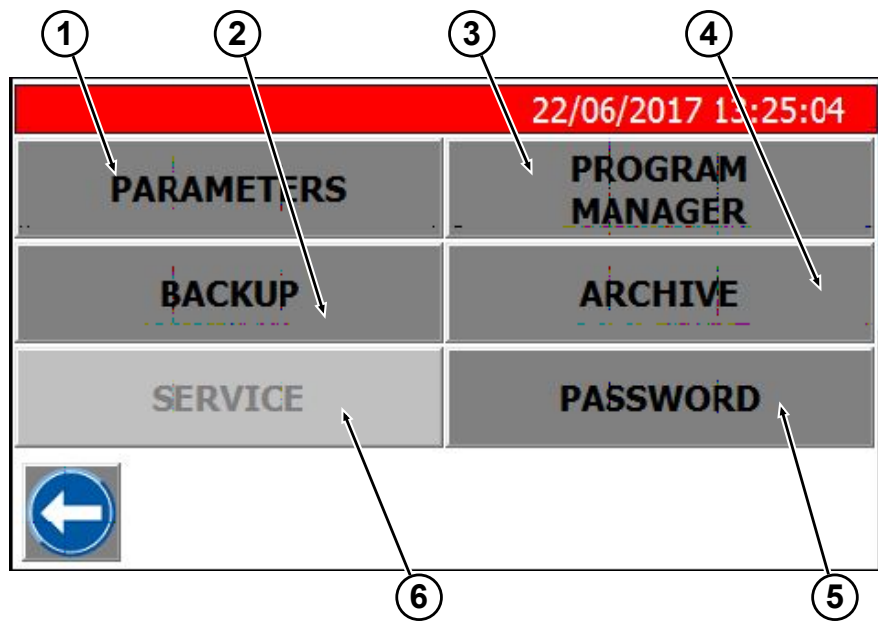


Fig. 9: "Program parameters" screen

No.	Element	Function
1	"PARAMETERS" control panel	The "Settings (Page 1)" (MAP mode) [▶ 36] screen or the "Settings (Page 1)" (SKIN mode) [▶ 38] screen opens on actuation depending on the position of the "MODE" switch on the "Settings (Page 2)" [▶ 40] screen.
2	"BACKUP" control panel	The "USB back-ups" [▶ 44] screen opens on actuation.
3	"PROGRAM MANAGER" control panel	The "Recipe change" [▶ 42] screen opens on actuation.
4	"ARCHIVE" control panel	The "Archive" [▶ 43] screen opens on actuation.
5	"PASSWORD" control panel	The screen for password entry opens on actuation.
6	"SERVICE" control panel	The "Service" screen opens on actuation. This screen can only be called with the corresponding right.

4.5.2.4 "Settings (Page 1)" screen (MAP mode)

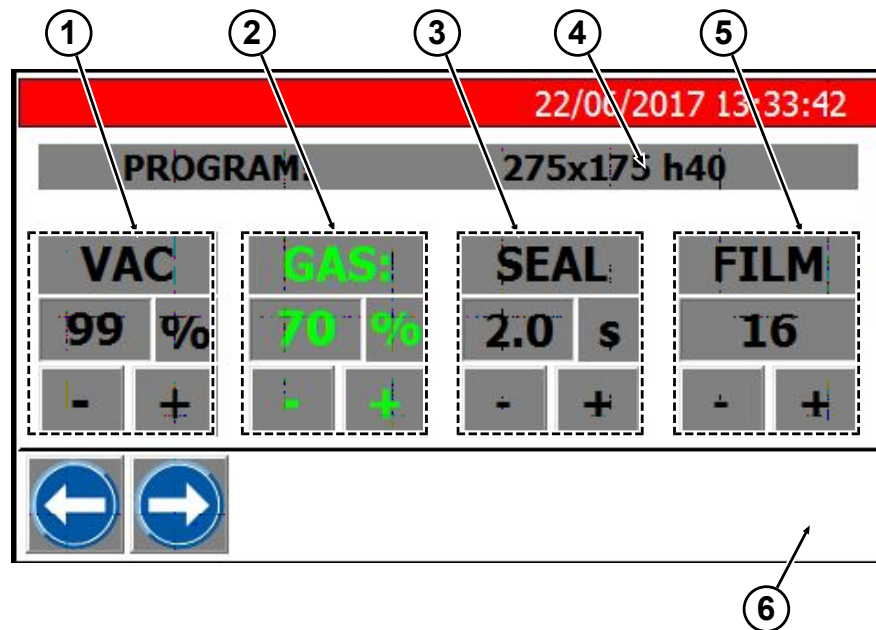



Fig. 10: "Settings (Page 1)" screen (MAP mode)

No.	Element	Function
1	"VAC" area	<p>Used to change the percentage of the vacuum inside the suction chamber.</p> <p>Actuating the "+" button increases the value; actuating the "-" button reduces the value.</p> <p>Input range: 0 – 99%</p> <p>The set value is displayed.</p>
2	"GAS" area	<p>Used to change the percentage of the inert gas inserted into the suction chamber.</p> <p>Actuating the "+" button increases the value; actuating the "-" button reduces the value.</p> <p>Input range: 0 – 99%</p> <p>The set value is displayed.</p> <p>On machines with two gas inlets (OPTION), the gas quantity can be set separately for both inlets.</p> <p>The gas quantity value may not exceed the set vacuum value.</p>
3	"SEAL" area	<p>Used to change the sealing time.</p> <p>Actuating the "+" button increases the value; actuating the "-" button reduces the value.</p> <p>Input range: 0.0 – 9.9 seconds</p> <p>The set value is displayed.</p> <p>If 0.0 seconds are set, idling is activated.</p>

No.	Element	Function
4	"PROGRAM" display area	Displays the current program name.
5	"FILM" area	Used to change the length of the unwound film. Actuating the "+" button increases the value; actuating the "-" button reduces the value. Input range: 0 – 99 One unit corresponds to approx. 2 cm of unwound film. The set value is displayed. If 0 is set, film unwinding is deactivated.
6	 Control panel "	The settings are saved on actuation.

4.5.2.5 "Settings (Page 1)" screen (SKIN mode)

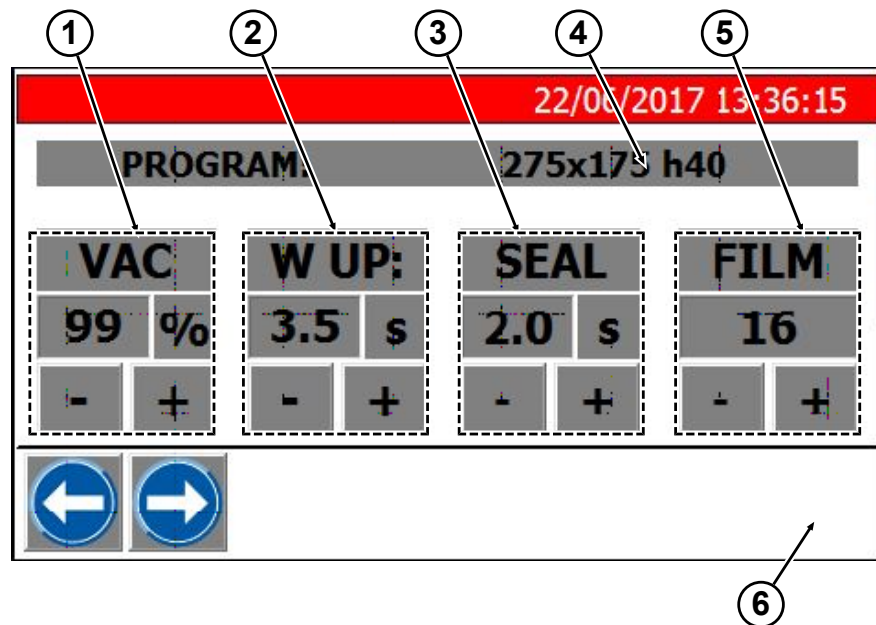



Fig. 11: "Settings (Page 1)" screen (SKIN mode)

No.	Element	Function
1	"VAC" area	Used to change the percentage of the vacuum inside the suction chamber. Actuating the "+" button increases the value; actuating the "-" button reduces the value. Input range: 0 – 99% The set value is displayed.
2	"W UP" area	Used to change the film preheating time. Actuating the "+" button increases the value; actuating the "-" button reduces the value. Input range: 0.5 – 20.0 seconds The set value is displayed. The film preheating time is dependent on the technical characteristics of the film and the temperature of the sealing plate.
3	"SEAL" area	Used to change the sealing time. Actuating the "+" button increases the value; actuating the "-" button reduces the value. Input range: 0.0 – 9.9 seconds The set value is displayed. If 0.0 seconds are set, idling is activated.
4	"PROGRAM" display area	Displays the current program name.

No.	Element	Function
5	"FILM" area	Used to change the length of the unwound film. Actuating the "+" button increases the value; actuating the "-" button reduces the value. Input range: 0 – 99 One unit corresponds to approx. 2 cm of unwound film. The set value is displayed. If 0 is set, film unwinding is deactivated.
6	Control panel " 	The settings are saved on actuation.

4.5.2.6 "Settings (Page 2)" screen

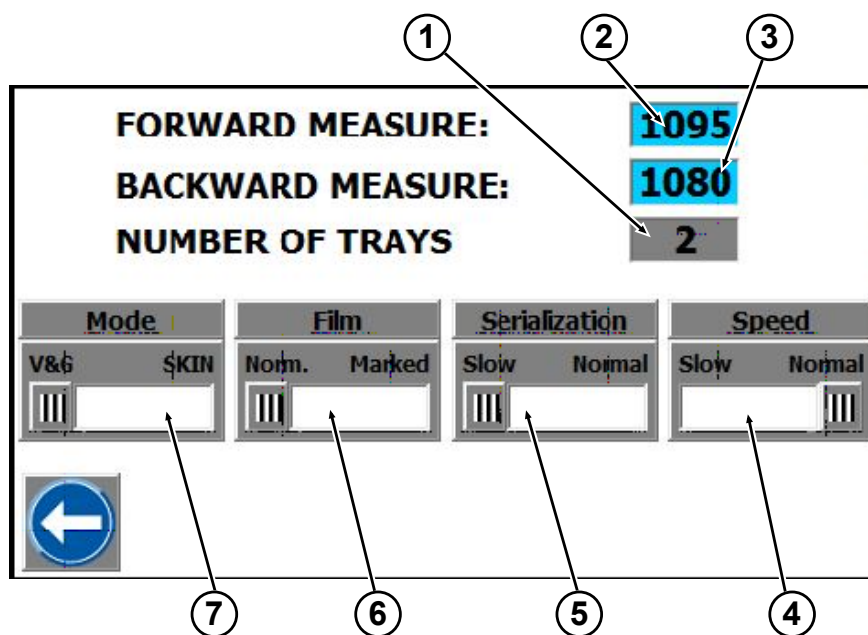


Fig. 12: "Settings (Page 2)" screen

No.	Element	Function
1	"NUMBER OF TRAYS" display field	Displays the number of trays.
2	"FORWARD MEASURE" display field	Displays the position of the trays. This parameter is used to centre the trays and can be changed after entering a password.
3	"BACKWARD MEASURE" display field	Displays the position of the pusher rods. This parameter is used to centre the trays and can be changed after entering a password.
4	"Speed" switch	Used to set the loading speed. Setting options: Slow = slow loading speed Norm. = normal loading speed
5	"Serialization" switch	Used to set the unloading speed (option). Setting options: Slow = slow unloading speed Norm. = normal unloading speed
6	"Film" switch	Used to set the film type (option). Setting options: Print. = film with notch Norm. = transparent film without notch

No.	Element	Function
7	"Mode" switch	Used to set the packaging mode (option). Setting options: V&G = MAP mode is activated Norm. = SKIN mode is activated

4.5.2.7 "Date and time" screen

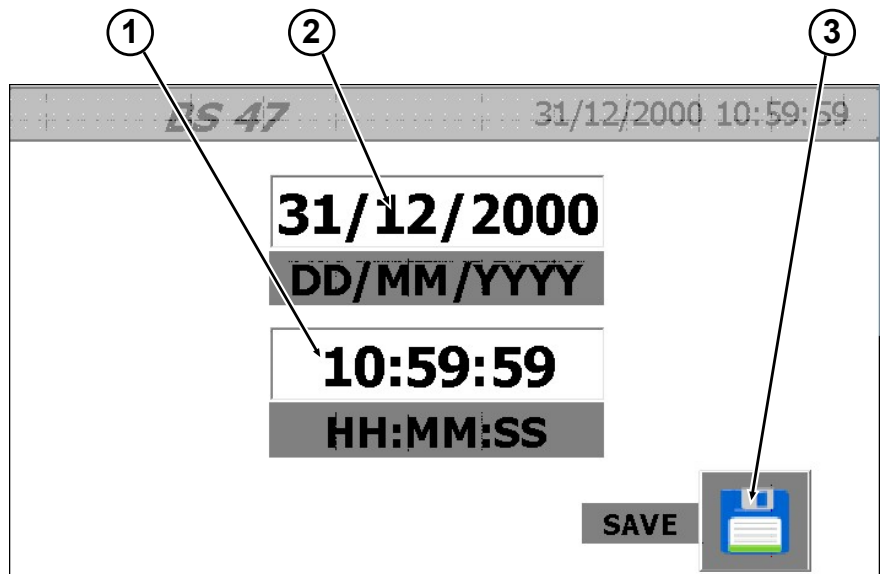



Fig. 13: "Date and time" screen

No.	Element	Function
1	"Time" input fields	Used to set the time.
2	"Date" input fields	Used to set the date.
3	Control panel " 	The settings are saved on actuation.

4.5.2.8 "Recipe change" screen

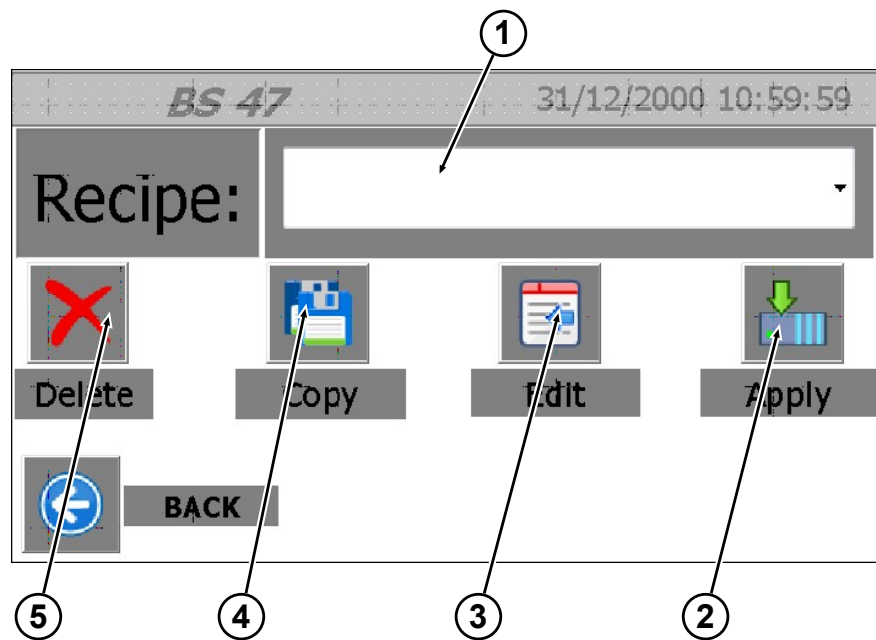


Fig. 14: "Recipe change" screen

No.	Element	Function
1	"Recipe" selection field	Used to select the recipe. After selection, the program name is displayed.
2	"Apply" control panel	On confirmation, the selection is confirmed and the start page is displayed.
3	"Edit" control panel	The "Settings (Page 1)" [▶ 36] screen opens on actuation.
4	"Copy" control panel	On actuation, a copy of the selected recipe is saved under a new name.
5	"Delete" control panel	On actuation, the selected recipe is deleted.

4.5.2.9 "Alarm archive" screen (machine)

The machine error messages are displayed on this page.

No.	Time	Date	Text
1	18:19...	06/02/...	Motor: protection switch
2	18:19...	06/02/...	Low temperature
7	18:19...	06/02/...	Sealing Failure
8	18:19...	06/02/...	Film breakage
6	18:19...	06/02/...	Emergency pushed
5	18:19...	06/02/...	Door open
4	18:19...	06/02/...	Gas1 low pressure
3	18:19...	06/02/...	Air low pressure
2	18:19...	06/02/...	Low temperature

Navigation icons: Left arrow, Right arrow, and the word **ALARMS** in red.

Fig. 15: "Alarm archive" screen (machine)

4.5.2.10 "Alarm archive" screen (control system)

The control system error messages are displayed on this page.

No.	Time	Date	Text
290...	13:2...	22/06...	Transfer not possible: No connection PLC.
290...	13:2...	22/06...	Transfer not possible: No connection PLC.
290...	13:2...	22/06...	Transfer not possible: No connection PLC.
290...	10:2...	22/06...	Transfer not possible: No connection PLC.

Navigation icons: Left arrow and the text **SIEMENS ALARMS** in red.

Fig. 16: "Alarm archive" screen (control system)

4.5.2.11 "USB back-up" screen

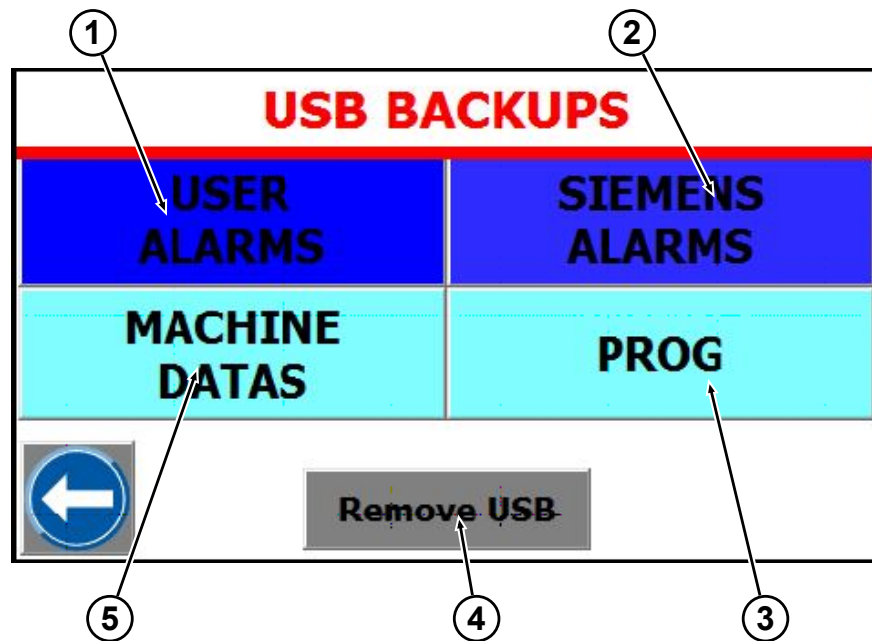


Fig. 17: "USB back-up" screen

No.	Element	Function
1	"USER ALARMS" control panel	On actuation, a csv file with a list of the machine error messages that have occurred since saving was last carried out is saved to the SD card in the HMI panel.
2	"SIEMENS ALARMS" control panel	On actuation, a csv file with a list of the control system error messages that have occurred since saving was last carried out is saved to the SD card in the HMI panel.
3	"PROG" control panel	The "Recipe back-up" [▶ 45] screen opens on actuation.
4	"Remove USB" control panel	After actuation, a removable USB storage device connected to the USB interface can be removed.
5	"MACHINE DATAS" control panel	On actuation, a csv file with a list of the machine parameters is saved to the SD card in the HMI panel.

4.5.2.12 "Recipe back-up" screen

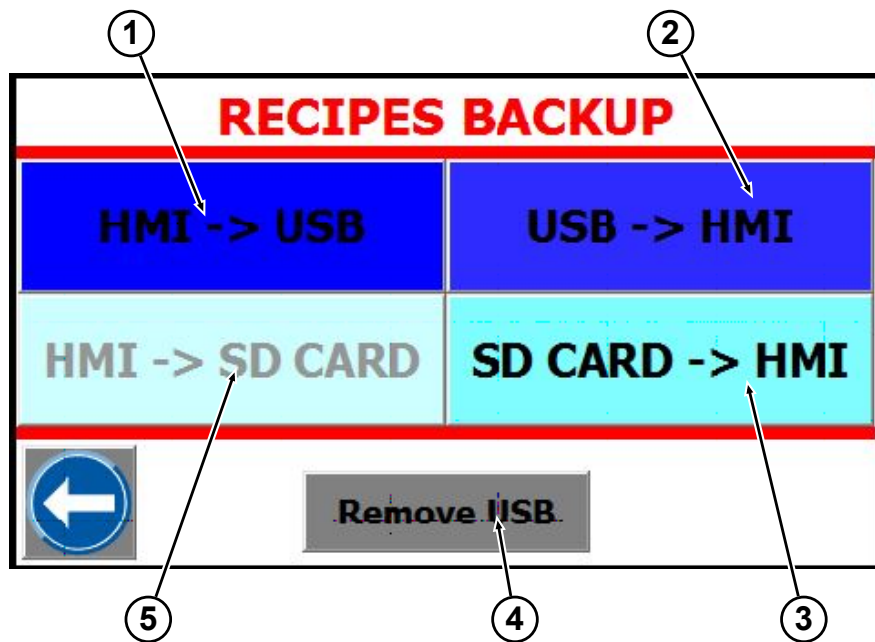


Fig. 18: "Recipe back-up" screen

No.	Element	Function
1	"HMI -> USB" control panel	On actuation, the "record1.csv" file with the packaging programs stored on the HMI panel is saved to a removable USB storage device connected to the USB interface.
2	"USB -> HMI" control panel	On actuation, a back-up of the packaging programs is restored from a removable USB storage device. The "record1.csv" file must be present on the removable USB storage device connected to the USB interface.
3	"SD CARD -> HMI" control panel	On actuation, a back-up of the packaging programs is restored from the SD card. The "record1.csv" file must be present on the SD card.
4	"Remove USB" control panel	After actuation, a removable USB storage device connected to the USB interface can be removed.
5	"HIM -> SD CARD" control panel	On actuation, the "record1.csv" file with the packaging programs stored on the HMI panel is saved to the SD card. This is only possible at service level.

4.5.2.13 "Manual controls" screen

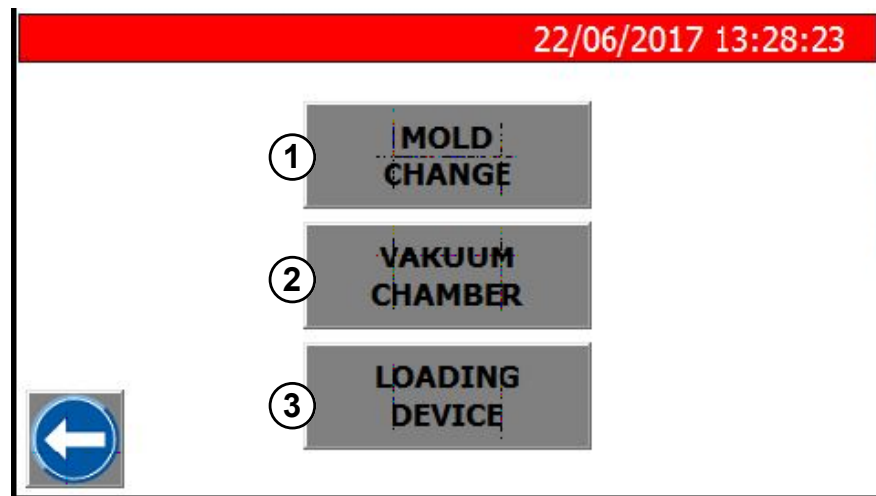


Fig. 19: "Manual controls" screen

No.	Element	Function
1	"MOLD CHANGE" control panel	The "Mold change" [▶ 47] screen opens on actuation.
2	"VAKUUM CHAMBER" control panel	The "Vakuum chamber" [▶ 48] screen opens on actuation.
3	"LOADING DEVICE" control panel	The "Loading device" [▶ 49] screen opens on actuation.

4.5.2.14 "Tool change" screen

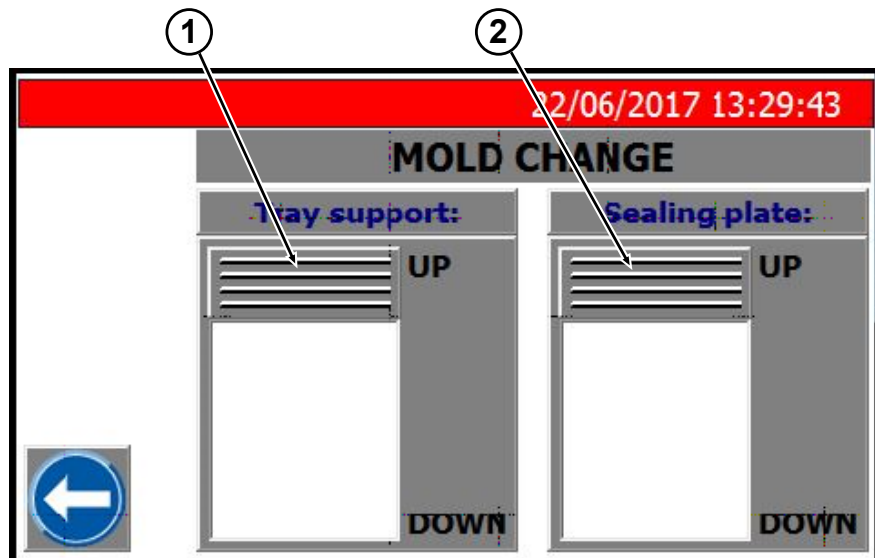


Fig. 20: "Mold change" screen

No.	Element	Function
1	"TRAY SUPPORT" switch	Used to position the tray bracket. Setting options: UP = move tray bracket to the upper position DOWN = move tray bracket to the lower position
2	"SEALING PLATE" switch	Used to position the sealing plate bracket. Setting options: UP = move sealing plate bracket to the upper position DOWN = move sealing plate bracket to the lower position

4.5.2.15 "Chamber closing" screen

This screen is used to close the suction chamber before cleaning the machine so that no water or dirt residues are deposited inside the chamber during cleaning, thus contaminating it.



Fig. 21: "Chamber closing" screen

No.	Element	Function
1	"CLOSE" control panel	On actuation, the suction chamber is closed. The display changes to "OPEN". On actuation again, the suction chamber is opened again. The suction chamber is also opened on actuation of the "RESET" button after switching the machine on.

4.5.2.16 "Chain movement" screen

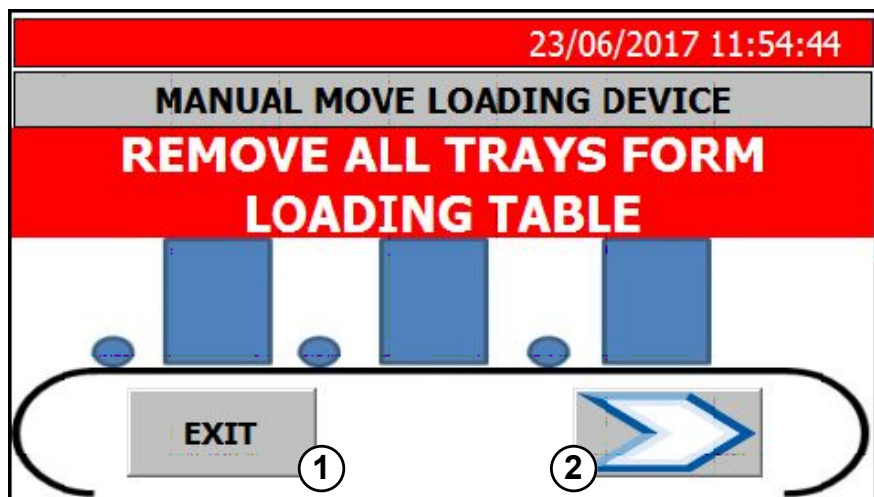



Fig. 22: "Chain movement" screen

No.	Element	Function
1	"EXIT" control panel	The Start page [▶ 33] opens on actuation.
2	Control panel 	Actuate and hold the control panel to move the chain forwards. Beforehand, make sure that all trays have been removed from the loading area, the chain can move freely and there are no obstacles which may hinder the forwards movement.

4.5.2.17 "Alarm display" screen



Fig. 23: "Alarm display" screen

This screen is displayed when a malfunction occurs.

Eliminate the cause of the displayed malfunction (see [Troubleshooting \[▶ 73\]](#)) and press the "PRESS RESET" button on the control panel. The display automatically switches to the previous screen.

4.5.2.18 "Perform maintenance" screen

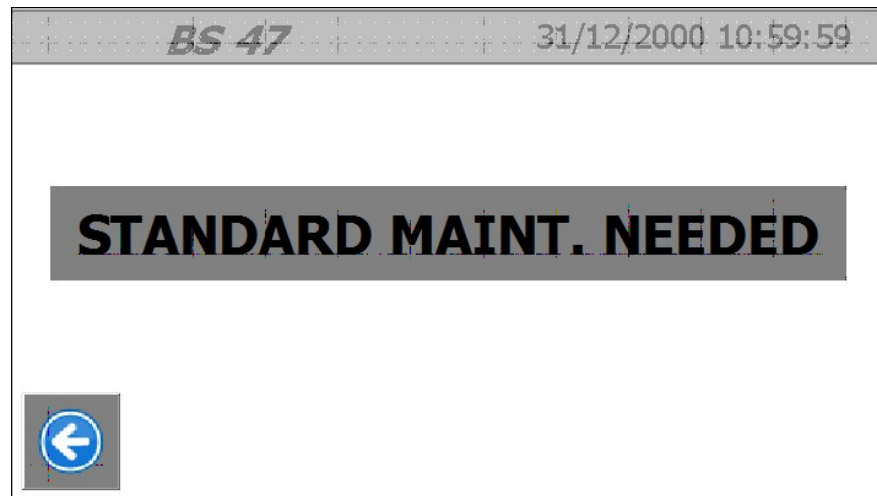


Fig. 24: "Perform maintenance" screen

The machine must undergo maintenance at regular intervals. This is indicated by the appearance of this screen.

We recommend contacting the customer service department to have this necessary maintenance work performed (see Legal notice page 2).

The time remaining until the next required maintenance can be viewed after entering a password.


4.6 Options

The machine can be equipped with the following options:

- Facility for lining up the trays
(only for tools with double mounting)
- Extendible, mobile stainless steel roller conveyor
(can be extended up to a length of 3.5 m)
- Double gas inlet
(for use with various gas mixtures)
- Additional tool for fast tool exchange
- Skin Pack option
- Conveyor belt
- Automatic labelling machine
- Integrated module for remote maintenance
- Tray stacker

5 Transport

5.1 Safety instructions

	SAFETY INSTRUCTIONS
	<p>Working safely during transport!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none"> ▶ Adhere to the regulations listed in Chapter Safety [▶ 15] during all work on/with the machine. ▶ Refrain from unsafe working methods. Transport work may only be performed by trained specialists. ▶ Perform the work only as per the regulations in these operating instructions. ▶ Adhere to the corresponding national regulations on working safety and the locally valid safety regulations. ▶ Wear the specified personal protective equipment. ▶ Lift heavy loads only with suitable lifting and fastening equipment at the intended attachment points. ▶ Do not remain or work under suspended loads. ▶ Observe the corresponding national regulations on the transport of goods (paying particular attention to load securing). ▶ Do not use the attachment facilities of individual parts (e.g. transport eyelets) for the transport of other parts. ▶ Make sure that no persons are endangered by the transport.

Special safety instructions:

- Observe the information on the packaging regarding the designated attachment points.
- Do not lift the unit on protruding machine parts or on eyelets of fitted components. Check that the lifting equipment is securely attached.
- Only use approved lifting gear and fastening equipment with sufficient load-bearing capacity.
- Do not use any damaged ropes and/or belts.
- Do not lay ropes or straps over sharp edges or corners. Do not knot or twist them.

Eccentric centre of gravity

Packages may have an eccentric centre of gravity. If the package is fastened incorrectly, it may tilt and cause life-threatening injuries.

- Observe the markings on the packages.
- Attach the crane hook so that it is located at the centre of the gravity.

Incorrect transport

Improper transportation may result in significant 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.

6 Installation

6.1 Safety instructions

	SAFETY INSTRUCTIONS
	<p>Working safely during connection work!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none">▶ Adhere to the regulations listed in Chapter Safety [▶ 15] during all work on/with the machine.▶ Refrain from unsafe working methods. Work on the connections may only be performed by trained specialists.▶ Perform the work only as per the regulations in these operating instructions.▶ Adhere to the corresponding national regulations on working safety and the locally valid safety regulations.▶ Wear the specified personal protective equipment.

Additional warnings:

Danger due to electrical voltage!

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


- 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.

Danger due to pressurised lines and components!

Serious injuries may occur due to pressurised lines and components.

- Have work on the pneumatic system performed exclusively by trained specialists.

6.2 Electrical connection

	⚠ DANGER
	<p>Risk to life!</p> <p>There is a risk of fatal injury in case of contact with live parts.</p> <ul style="list-style-type: none"> ▶ Electrical connection work may only be carried out by trained specialist electricians. ▶ Switch off the voltage during all connection work. Only switch on the voltage during commissioning.

During electrical connection, observe the following instructions to ensure safe and fault-free 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** [▶ 26] chapter for the fuse necessary for operating the machine.
 - ✓ Make sure that the power cable is not damaged and not routed over sharp edges.
 - ✓ The connection cable 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 (residual current circuit breaker with a trip current of 30 mA) 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.
 - ✓ Route the connection cable so that no tripping hazard exists.
- 1 Make sure that the main switch (1) is in position "0" (off).
 - 2 Route and connect all electrical lines as per the wiring diagram.
 - 3 Connect the mains plug to the socket.



Fig. 25: Main switch

6.3 Compressed air connection



⚠ WARNING

Risk of injury!

An incorrect compressed air connection can lead to various injuries.

- ▶ Connection work may only be carried out by a corresponding specialist.
- ▶ Route compressed air lines so that they are protected from damage.

When doing this, ensure that no tripping hazard is created and that the lines cannot whip around, causing damage or injury.

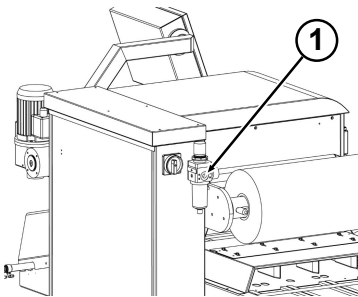


Fig. 26: Compressed air connection

- 1 Connect the compressed air supply to the compressed air connection (1).

6.4 Connection for inert gas (option)

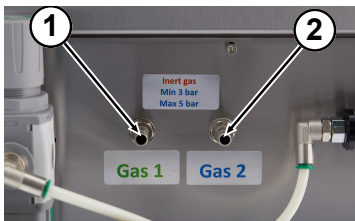


Fig. 27: Inert gas connection

- 1 Connect the inert gas supply to the inert gas connection (1).
- 2 On machines with the option "Double gas inlet": connect a second inert gas supply to the second inert gas connection (2).




Fig. 28: Securing the gas cylinder

- 3 On use of gas cylinders, position them near to the machine and secure them against falling with suitable equipment.

7 Control/operation

7.1 Safety instructions

	SAFETY INSTRUCTIONS
	<p>Working safely during operation!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none"> ▶ Adhere to the regulations listed in Chapter Safety [▶ 15] during all work on/with the machine. ▶ Refrain from unsafe working methods. The machine may only be operated by trained operators. ▶ Perform the work only as per the regulations in these operating instructions. ▶ Adhere to the corresponding national regulations on working safety and the locally valid safety regulations. ▶ Wear the specified personal protective equipment. ▶ Operate the machine only if no damage is apparent and when all safety facilities are in perfect condition.

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.
- The machine must be installed in a well-ventilated, dry room. Direct contact with water or vapour must be avoided.
- The machine may only be operated if the locking brakes on the transport rollers are closed (pressed down).

7.3 Inserting a film reel

- ✓ Compressed air is connected and functional.
- ✓ The machine's main switch is switched off.

1 Open the front door lock (1) with an appropriate key, pull the handle and open the door.

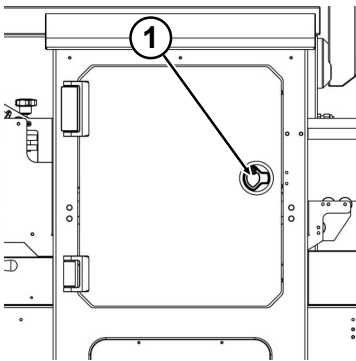


Fig. 29: Door lock

2 Pull the securing pin (2) down and remove the locking bolt (3) at the same time.

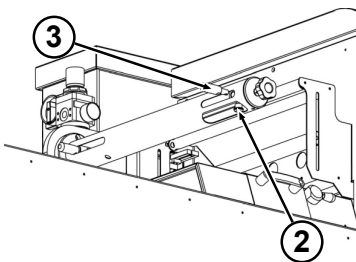


Fig. 30: Removing the locking bolt

3 Position the film reel (4) on the reel bracket so that the inner, sealing part points downwards (see Figure [Unwinding film](#) [► 58], item 8).

4 Pull the securing pin (2) down and reinsert the locking bolt (3) at the same time.

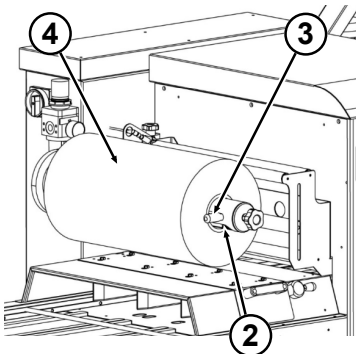


Fig. 31: Positioning a film reel

7.4 Drawing in film

- ✓ The film reel is inserted.
- ✓ The machine's main switch is switched off.
- 1 Pull the rod (5) forwards using the disc (6).
- 2 Pull the handle (7) up to release the drive roller lock.

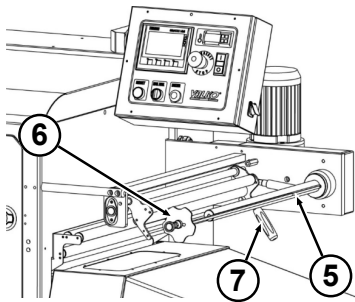


Fig. 32: Releasing the drive roller

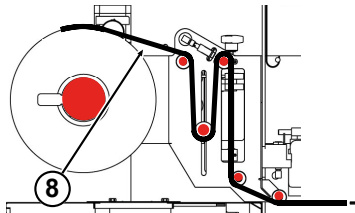


Fig. 33: Unwinding film

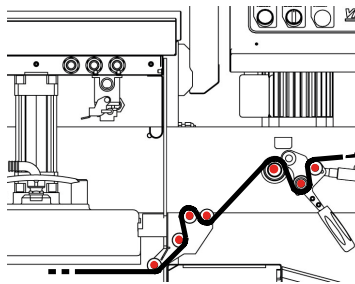


Fig. 34: Unwind the film further

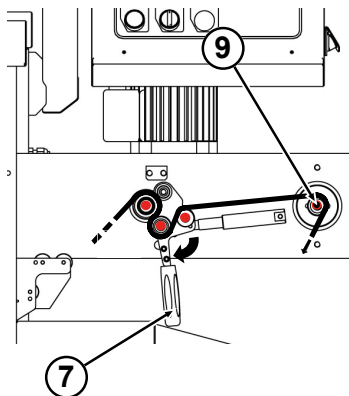


Fig. 35: Fixing the film in position

- 3 Unwind the film and guide it through the machine up to the inlet into the bell as per the adjacent figure.



⚠ WARNING

Danger of burning!

The sealing plate inside the upper bell can reach a temperature of 200°C!

- ▶ Avoid contact with hot surfaces and wear protective gloves.
- ▶ Let hot components cool down before starting work.

- 4 Unwind the film further and guide it through the machine as per the adjacent figure.
- 5 Make sure that no obstacle prevents correct unwinding of the film beneath the bell.
- 6 Continue unwinding the film up to the residue winder (9), then press the handle down (7) to fix the drive roller in position.

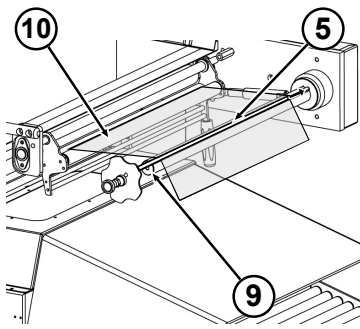


Fig. 36: Fixing the film end in position

7 Insert the rod (5) as far as the lock in the designated bracket to fix the film (10) in position between the residue winder (9) and the rod (5).

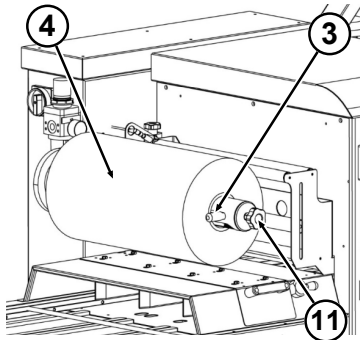


Fig. 37: Adjusting the locking bolt

8 Use the rotary knob (11) to adjust the position of the locking bolt (3) so that the film reel (4) is braked slightly and centred.

9 Close the front door and lock it with the corresponding key.

10 Switch on the machine (see Chapter **Switching on** [▶ 70]).

11 Switch on the "Manual residue winding" switch.

⇒ The film is drawn through the machine and wound up on the residue winder.



NOTE

- ▶ Make sure that the film is unwound correctly without obstacles or excessively high stresses.

12 After a few turns of the residue winder, switch off the "Manual residue winding" switch.

7.5 Removing the residual film reel

Proceed as follows to remove the residual film reel:

✓ The main machine switch is switched off.

1 Separate the films between rollers (1) and (2).

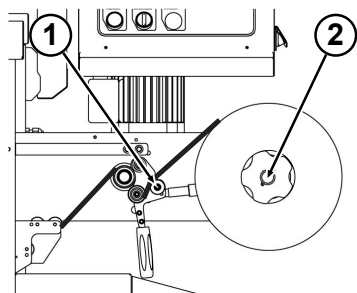


Fig. 38: Separating the film

2 Hold the disc (3) and turn the handle (4) 90° to release the lock.

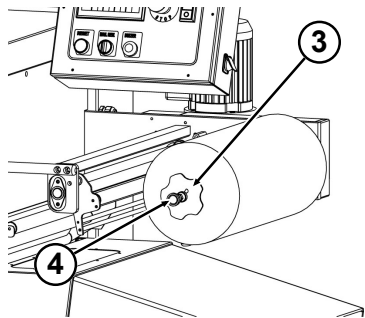


Fig. 39: Unlocking the rod

3 Turn the disc (4) 90° and pull out with the rod (5).

4 Pull out the residual film reel.

5 To insert the rod, see Chapter Drawing in film [▶ 58].

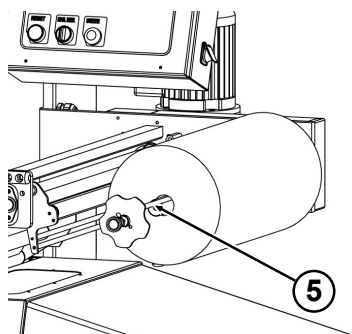


Fig. 40: Removing the rod

7.6 Format change

7.6.1 General information

During a format change, the following components are exchanged:

- Sealing plate (in the upper bell)
- Mould (in the lower bell)
- Tray bracket (in the lower bell)
- Guide carrier
- Loading area

7.6.2 Exchanging the sealing plate



⚠ WARNING

Danger due to hot surfaces!

Parts of the machine can become very hot during operation and lead to injuries on contact.

- ▶ Avoid contact with hot surfaces and wear protective gloves.
- ▶ Let hot components cool down before starting work.

1 Call up the "Tool change" screen. To do this, actuate the "MANUAL CONTROLS" control panel on the start page and actuate the "TOOL CHANGE" control panel on the "Manual controls" screen.

2 Turn the spool slightly to unwind the film.

3 On the "Tool change" screen, move the "SEAL. PLATE" switch to the "DOWN" position to lower the sealing plate bracket.



Fig. 41: Unwinding film

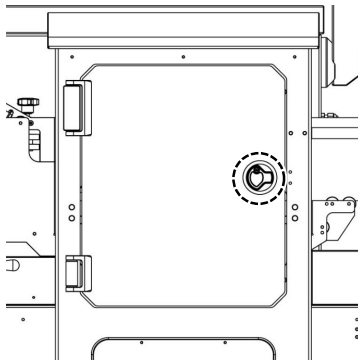


Fig. 42: Door lock

4 Open the front door lock with an appropriate key, pull the handle and open the door.

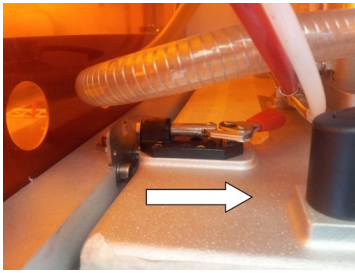


Fig. 43: Safety lock

5 Press the lever to the right to release the safety lock on the upper suction chamber.

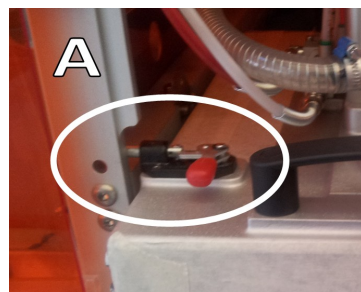
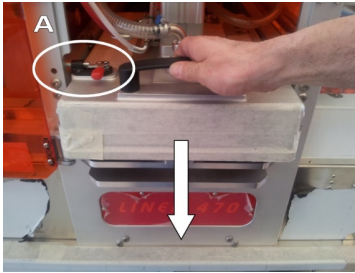


Fig. 44: Position the bell.

6 Pull the bell forwards slightly, engage the safety lock again and pull the bell out until it engages.



Fig. 45: Locking bolt

7 Press the locking bolt up and slide it to the left.

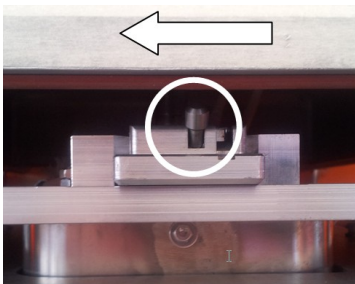


Fig. 46: Locking bolt

8 In the open position, press the locking bolt down.

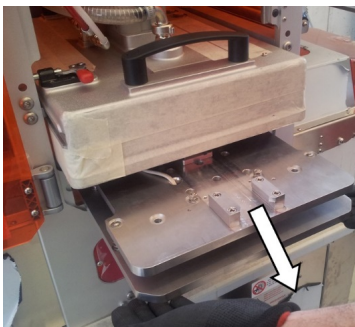


Fig. 47: Removing the sealing plate

9 Remove the sealing plate from the bell.

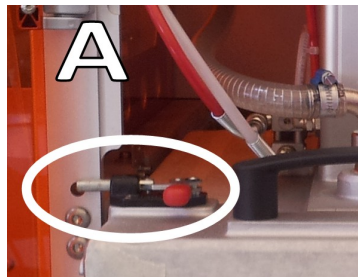
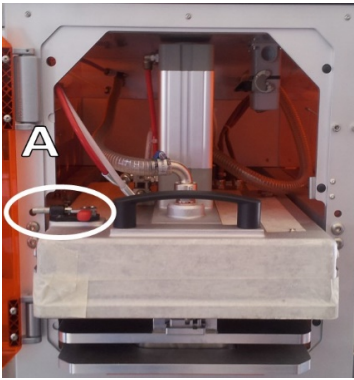


Fig. 48: Positioning the bell

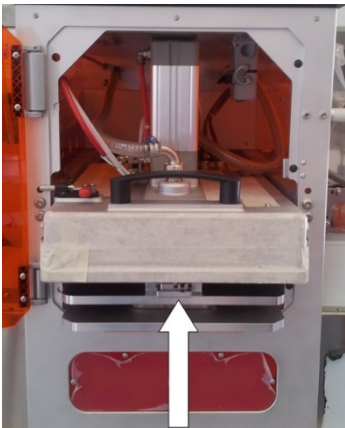


Fig. 49: Mounting the sealing plate

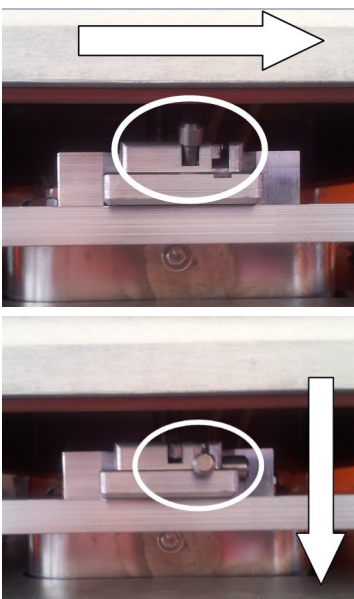


Fig. 50: Locking the sealing plate

10 Move the bell locking bolt to the unlocking position, pull the bell forwards until the locking bolt has passed the base frame (detail A) and move the bell locking bolt back to the locking position.

11 Insert the new sealing plate.

12 Lock the sealing plate with the locking bolt.

⇒ It may not be possible to remove the sealing plate when it is pulled forwards.

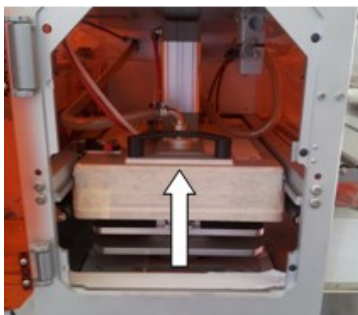


Fig. 51: Positioning the bell

13 Move the bell locking bolt to the unlocking position and slide the bell backwards.

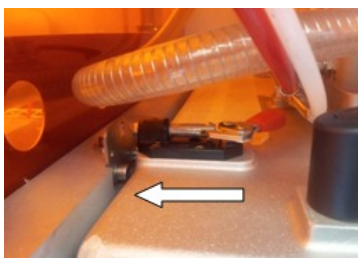


Fig. 52: Locking the bell

14 Lock the bell.

15 Close the front door and lock it with the corresponding key.

16 Press the "RESET" button on the control panel.

17 On the "Tool change" screen, move the "SEAL. PLATE" switch to the "UP" position to raise the sealing plate bracket.



18 On the "Tool change" screen, actuate the "" button to return to the start page.

19 Switch on the "Manual residue winding" switch.

⇒ The film is drawn through the machine and wound up on the residue winder.

i	NOTE
	<p>► Make sure that the film is unwound correctly without obstacles or excessively high stresses.</p>

20 After a few turns of the residue winder, switch off the "Manual residue winding" switch.

7.6.3 Exchanging the lower mould and the tray bracket



⚠ WARNING

Danger due to hot surfaces!

Parts of the machine can become very hot during operation and lead to injuries on contact.

- ▶ Avoid contact with hot surfaces and wear protective gloves.
- ▶ Let hot components cool down before starting work.

- 1 Call up the "Tool change" screen. To do this, actuate the "MANUAL CONTROLS" control panel on the start page and then actuate the "TOOL CHANGE" control panel on the "Manual controls" screen.
- 2 On the "Tool change" screen, move the "TRAY" switch to the "DOWN" position to lower the tray bracket.
- 3 Open the front door lock with an appropriate key, pull the handle and open the door.

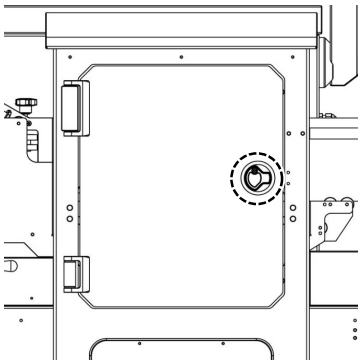


Fig. 53: Door lock

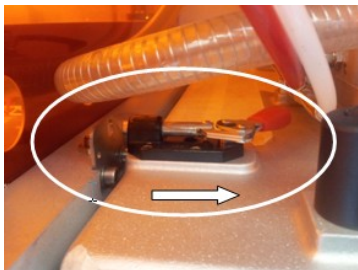


Fig. 54: Safety lock

- 4 Press the lever to the right to release the safety lock on the upper suction chamber.

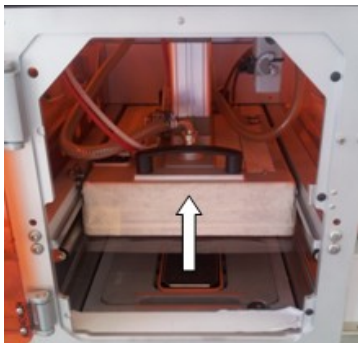


Fig. 55: Bell

- 5 Press the bell backwards.



Fig. 56: Safety lock

6 Release the safety lock with a suitable tool.

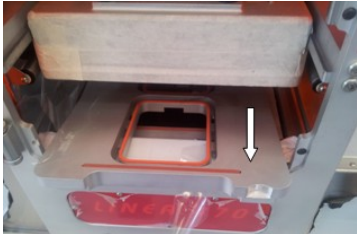


Fig. 57: Pulling out the mould

7 Pull the mould out forwards.

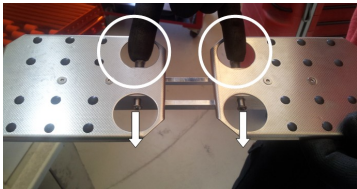


Fig. 58: Quick release facility

8 Remove the tray bracket by actuating the quick release facility.

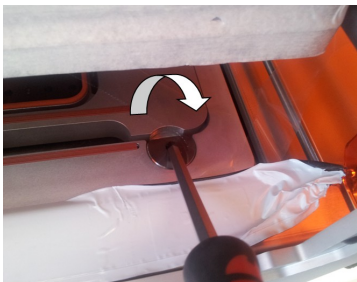


Fig. 59: Locking the tray bracket

9 Insert the new tray bracket and the new mould and lock with the corresponding fastening cam.

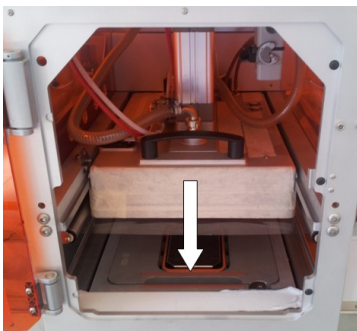


Fig. 60: Positioning the bell

10 Pull the bell forwards to the fastening position.

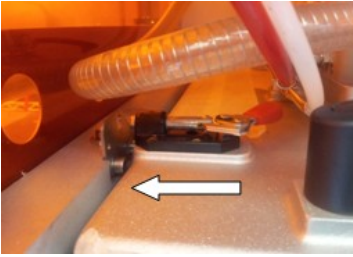


Fig. 61: Locking the bell

- 11 Lock the bell.
- 12 Close the front door and lock it with the corresponding key.
- 13 Press the "RESET" button on the control panel.
- 14 On the "Tool change" screen, move the "TRAY" switch to the "UP" position to raise the tray bracket.



- 15 On the "Tool change" screen, actuate the " " button to return to the start page.

7.6.4 Exchanging the guide carrier



Fig. 62: Unlocking the guide carrier

- 1 Unlock the guide carrier by turning the unlocking knob counter-clockwise.



Fig. 63: Guide carrier

- 2 Pull the guide carrier forwards.



Fig. 64: Guide carrier

- 3 Raise the guide carrier and pull it out.

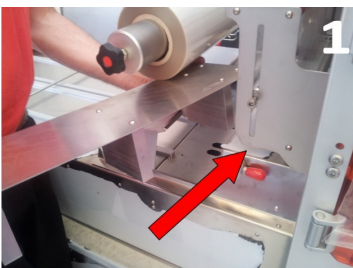


Fig. 65: Positioning the guide carrier

- 4 Position the new guide carrier over the niche.



Fig. 66: Inserting the guide carrier

5 Lower the guide carrier down to the base trough.

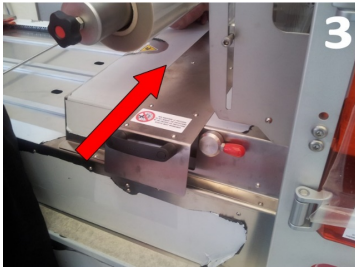


Fig. 67: Inserting the guide carrier

6 Slide the guide carrier into the machine up to the limit stop.



Fig. 68: Locking the guide carrier

7 Lock the guide carrier by turning the unlocking knob clockwise.

7.6.5 Exchanging the loading area



Fig. 69: Opening the flap

1 Open the flap.



Fig. 70: Locking bolt

2 Pull out the locking bolt.



Fig. 71: Removing the loading area

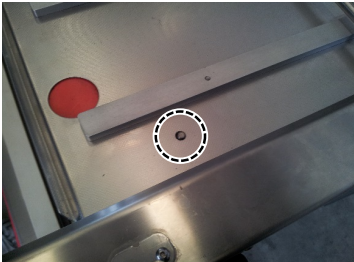


Fig. 72: Locking the loading area

- 3 Remove the loading area.
- 4 With the locking bolt pulled out, insert the new loading area and push it in up to the limit stop.
- 5 Secure the loading area with the locking bolt.
 - ⇒ The bolt must engage in the corresponding hole.
- 6 Close the flap.

7.7 Preparing the machine for injection of inert gas



DANGER

There is a risk of fire due to use of the wrong inert gas.

There is a risk of fire when injecting gas with oxygen.

- ▶ By default, only nitrogen or a mixture of nitrogen and carbon dioxide may be used as an inert gas.
- ▶ Oxygenated gases (over 21%) may only be used after taking special safety measures (special vacuum pump, special oil and safety valves).

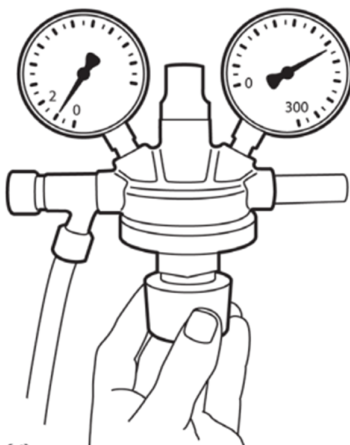


Fig. 73: Valve fitting

- 1 Open the main valve on the gas cylinder.
- 2 Open the knurled screw on the valve fitting (to the left).
The filling pressure of the gas cylinder is displayed on the right pressure gauge.
- 3 Set the gassing pressure to max. 5 bar (displayed on the left pressure gauge).



SAFETY INSTRUCTIONS

- ▶ Food packaged with inert gas must be labelled accordingly.
- ▶ The main tap on the gas cylinder must always be closed when the inert gas is not being injected.

7.8 Switching on

Proceed as follows to switch on the machine:

- 1 Switch on the machine's main switch.
- 2 Switch on the compressed air supply.
 - ⇒ The pressure must be at least 6 bar.
- 3 Switch on the inert gas supply.
 - ⇒ The pressure may be a maximum of 4 bar.
- 4 Actuate the "RESET" button on the control panel.
 - ⇒ The indicator lamp in the button must light up constantly.
- 5 Check the temperature set for the sealing plate on the digital thermostat on the control panel and set the temperature, see Chapter [Set sealing temperature](#) [▶ 71].
- 6 Wait until the control system has booted.
 - ⇒ The start screen is displayed.

7.9 Switching off the unit

Proceed as follows to switch off the machine:

- 1 Make sure that no containers are in the machine.
- 2 Switch off the machine's main switch.
- 3 Switch off the machine's compressed air supply.
- 4 Switch off the inert gas supply.

7.10 Shut-down in an emergency

For shut-down in an emergency:

- 1 Press the EMERGENCY STOP strike button.


7.11 Switching on again after an emergency

Perform the following measures to switch on again after an emergency:

- 1 Rectify the cause of the emergency/have it rectified.
- 2 Release the EMERGENCY STOP button.
- 3 Press the "RESET" button on the control console.
- 4 Check safety facilities.

7.12 Preparing the machine

- 1 Adapt the machine to the desired packaged products (see Chapter Format change [▶ 61]).

	NOTICE
<p>Material damage due to incorrect format parts!</p> <p>Operating the machine with format parts that do not match one another can lead to machine damage.</p> <p>▶ Make sure that all installed format parts match the desired packaged product.</p>	

- 2 Check the film; insert a new film reel if necessary (Inserting a film reel [▶ 57]).
- 3 Switch on the machine (see Chapter Switching on [▶ 70]).

7.13 Set sealing temperature

Proceed as follows to set the sealing temperature:

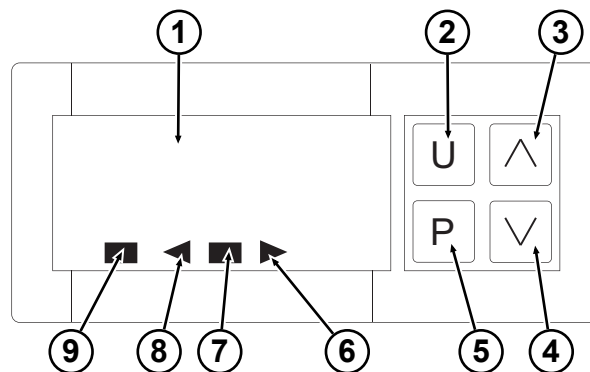



Fig. 74: Digital thermostat


- 1 Press button "P" (5).
 - ⇒ *SP1* is shown on the display (1).
- 2 Use the "^" (3) and "v" (4) buttons to set the desired temperature.
 - ⇒ The temperature is shown in °C on the display (1).
- 3 Press button "P" (5) to save the setting.
 - ⇒ The current temperature is shown in °C on the display (1).
 - ⇒ The LED operation indicator lamp (9) lights up until the set temperature is reached.

7.14 Starting the vacuuming process

- 1 Preparing the machine (see Chapter [Preparing the machine](#) [▶ 71]).
- 2 Preparing the machine for injecting inert gas (see Chapter [Preparing the machine for injection of inert gas](#) [▶ 69]) if a vacuum is to be applied under inert gas.
- 3 Select the desired program and carry out necessary adjustments (see Chapter [Description of the user interface](#) [▶ 32]).

	NOTICE
	<p>Material damage due to incorrect program parameters</p> <p>The trays could break if the machine is operated with incorrect program parameters.</p> <ul style="list-style-type: none"> ▶ Select the program according to the tray type in compliance with the mounted mould parts.

- 4 Load the loading area with the trays to be sealed.

	NOTE
	<ul style="list-style-type: none"> ▶ Insert the trays so that the lower part fits on the tray drawer bracket located on the loading area. ▶ So that the work sequence can begin, all trays that the mounted mould can accommodate must lie simultaneously on the loading area for at least 1.0 second.


- 5 Press and hold the "START" button on the control console for a few seconds.
 - ⇒ The suction pump starts up and the conveyor belt starts with the simulation of vacuum bell loading and unloading.
 - ⇒ The device waits for a certain number of cycles, which has been set as default by the manufacturer, for loading with the trays.
 - ⇒ The packaged trays are output from the machine.

7.15 Activities after use

- 1 Make sure that no trays are on the loading area or in the machine.
- 2 Close the main tap on the inert gas cylinder if the vacuum is generated under inert gas.
- 3 Clean the machine (see Chapter [Cleaning the machine](#) [▶ 80]).

8 Troubleshooting

8.1 Safety instructions

	SAFETY INSTRUCTIONS
	<p>Working safely during troubleshooting!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none"> ▶ Adhere to the regulations listed in Chapter Safety [▶ 15] during all work on/with the machine. ▶ Refrain from unsafe working methods. Troubleshooting work may only be performed by trained specialists. ▶ Perform the work only as per the regulations in these operating instructions. ▶ Adhere to the corresponding national regulations on working safety and the locally valid safety regulations. ▶ Wear the specified personal protective equipment.

Additional warnings for troubleshooting:

Danger due to electrical voltage!

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

- 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.
- De-energise the machine, check that zero voltage is present and secure to prevent reactivation.

Danger due to pressurised lines and components!


Serious injuries may occur due to pressurised lines and components.

- Switch off the machine and depressurise any pressurised parts.

Danger due to hot surfaces!

Parts of the machine can become very hot during operation and lead to injuries on contact.

- Observe the warning signs.
- Avoid contact with hot surfaces, or wear protective gloves.
- Let hot components cool down before starting work.


	NOTICE
	<p>Material damage due to incorrect troubleshooting.</p> <p>If pending faults are ignored or not correctly rectified, it can result in damage to the machine.</p> <ul style="list-style-type: none"> ▶ In case of active faults, shut down the machine. ▶ Properly rectify the malfunction or have it rectified by appropriate specialists.

8.2 Personnel qualifications

Troubleshooting may only be performed by persons who:

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

8.3 Instructions on troubleshooting

	NOTE
	<p>If the measures listed here do not rectify the fault, contact the customer service department of the company ERME AG.</p> <p>See chapter "Customer service [▶ 14]".</p>

8.4 Fault displays

The following error messages may be shown on the display:

Error message	Possible causes	Remedy
1 – MOTOR PROTECTION SWITCH!	One or more motor protection switches have tripped due to overload.	Notify the customer service department.
2 – LOW TEMPERATURE!	The sealing plate has not yet reached the set temperature.	Wait until the start page appears on the display.
3 – LOW AIR PRESSURE!	The compressed air supply pressure is insufficient or the machine is not connected to the compressed air supply.	Check the compressed air supply, set the pressure.
4 – LOW GAS PRESSURE!	The inert gas supply pressure is insufficient.	Make sure that the gas cylinder tap is open. Exchange the gas cylinder.

Error message	Possible causes	Remedy
5 – OPEN DOOR!	The front door is open.	Close the door and press the "RESET" button.
6 - EMERGENCY SWITCH!	The EMERGENCY STOP button has been pressed.	Eliminate the cause of the EMERGENCY STOP, release the EMERGENCY STOP button by turning it counter-clockwise and press the "RESET" button.
7 – TORN FILM!	The film has torn or the reel is spent.	Exchange the film and press the "RESET" button.
	The film is not tensioned correctly, the sensor for checking film unwinding is defective or not set correctly, the control roller is damaged and not turning.	Notify the customer service department.
8 – SEALING DEFECT!	Sealing was not carried out correctly.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
9 – DANGER OF FILM TEARING!		Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
11 – DEFECT IN EXTRACTION SYSTEM!	The extraction cycle has exceeded the permissible maximum time and was not ended.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
12 – GAS DEFECT!	The gas filling cycle has exceeded the permissible maximum time and was not ended.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
13 – OPEN FLAP!	The flap on the loading area is open.	Close the flap and make sure that the closing mechanism is not damaged. Press the "RESET" button.
14 – DAMAGE TO THE CHAIN SENSOR!	The loading chain control sensor does not detect the rods for loading the trays. The sensor is either set incorrectly or defective.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.


Error message	Possible causes	Remedy
15 - TIMEOUT ON INSERTING THE TRAYS!	The insertion cycle has exceeded the permissible maximum time and was not ended.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
16 - TIMEOUT ON UNLOADING!	The unloading cycle in the suction chamber has exceeded the maximum time and was not ended.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
17 - TIMEOUT ZERO POSITION!	The packaging cycle is finished but tray unloading is not started.	Check the tray bracket, lower bell and sealing plate sensors. One of these facilities is not positioned correctly, thus preventing tray output. Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
18 – SONAR 1 SOILED!	Sensors for removing the trays on the loading area soiled.	Clean the sensors with a moist cloth, making sure not to damage them.
	Sensors, cables or plugs damaged.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
19 – MISSING TRAY!	One or more trays have not been detected by the sensors.	Clean the sensors for detecting the trays on the loading area with a moist cloth, making sure not to damage them.
	Sensors, cables or plugs damaged.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
20 – CONVEYOR CHUTE BLOCKED!	The photocell at the outlet (tray unloading) has been interrupted.	Make sure that no tray is blocking the outlet; clean the photocell and the reflector. Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.

Error message	Possible causes	Remedy
21 – BELL NOT FASTENED!	Mechanical blocking above the bell is not engaged.	Make sure that the mechanical blocking above the bell is engaged.
	Sensors, cables or plugs damaged.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
22 – INVERTER DEFECT!	The inverter that controls the speed of the conveyor belt for loading with trays is defective.	Make sure that the loading area is clear and that no obstacles (dirt residues, previously inserted trays, etc.) are preventing the chain from sliding. Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
23 – FILM CLAMP OPEN!	The film clamp on the residue winder is open.	Press the handle of the film clamp on the residue winder down.
	Sensors, cables or plugs damaged.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
24 – GUIDE FLAP OPEN!	The guide carrier is not installed correctly or the sensor did not detect it. The sensor is set incorrectly or defective.	Check the installation of the guide flap and press the "RESET" button. If the error message appears again, notify the customer service department.
25 – PHOTOCCELL INLET!	The photocell at the inlet (tray loading) has been interrupted.	Make sure that no tray is blocking the inlet; clean the photocell and the reflector. Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
26 – VAC ERROR!	The pressure monitor determines no pressure value in the suction chamber and no work procedure is in progress.	Press the "RESET" button. If the error message appears again, notify the customer service department.

Error message	Possible causes	Remedy
28 – SONAR 2 SOILED!	Sensors for detecting the trays on the loading area soiled.	Clean the sensors with a moist cloth, making sure not to damage them.
	Sensors, cables or plugs damaged.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
29 – SONAR 3 SOILED!	Sensors for detecting the trays on the loading area soiled.	Clean the sensors with a moist cloth, making sure not to damage them.
	Sensors, cables or plugs damaged.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
33 – SENSOR SEALING!	After the sealing process, the sealing plate has not moved up again or it has moved up again but the sensor does not determine its position.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
34 – SENSOR LOWER BELL!	The lower suction chamber is not open or the sensor cannot determine its position.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
35 – SENSOR TRAY BRACKET!	The tray bracket has not moved up or the sensor cannot determine its position.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
36 – TIMEOUT DOSING FACILITY! (optional)	The facility for dosing the product is not OK.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.
37 – TIMEOUT PARALLEL SERIAL POSITIONER! (optional)	The facility for lining up the trays during unloading is not OK.	Press the "RESET" button and restart the cycle. If the error message appears again, notify the customer service department.

9 Cleaning

9.1 Safety instructions

	SAFETY INSTRUCTIONS
	<p>Working safely during cleaning!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none"> ▶ Adhere to the regulations listed in Chapter Safety [▶ 15] during all work on/with the machine. ▶ Refrain from using unsafe working methods. ▶ Perform the work only as per the regulations in these operating instructions. ▶ Adhere to the corresponding national regulations on working safety and the locally valid safety regulations.

Additional warnings for cleaning:

Danger due to hot surfaces!

Parts of the machine can become very hot during operation and lead to injuries on contact.

- Observe the warning signs.
- Avoid contact with hot surfaces, or wear protective gloves.
- Let hot components cool down before starting work.

	NOTICE
	<p>Possible material damage during cleaning.</p> <p>Incorrect cleaning can result in material damage to the machine.</p> <ul style="list-style-type: none"> ▶ 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.

9.3 Cleaning the machine

Proceed as follows for cleaning:

- 1 Call the "Chamber closing" screen on the touch screen and actuate the "CLOSE" control panel.
- 2 Switch off the machine and unplug the mains plug (see Chapter **Switching off the unit** [▶ 70]).
- 3 Let the surfaces to be cleaned cool down.
- 4 To clean the machine, manually remove the coarse dirt and then wipe 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.

10 Maintenance

10.1 Safety instructions

	SAFETY INSTRUCTIONS
	<p>Working safely during maintenance!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none"> ▶ Adhere to the regulations listed in Chapter Safety [▶ 15] during all work on/with the machine. ▶ Refrain from unsafe working methods. Maintenance work may only be performed by trained specialists. ▶ Perform the work only as per the regulations in these operating instructions. ▶ Adhere to the corresponding national regulations on working safety and the locally valid safety regulations. ▶ Wear the specified personal protective equipment.

Additional warnings for maintenance:

Danger due to electrical voltage!

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

- 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.
- De-energise the machine, check that zero voltage is present and secure to prevent reactivation.

Danger due to pressurised lines and components!

Serious injuries may occur due to pressurised lines and components.

- Switch off the machine and depressurise any pressurised parts.

Danger due to hot surfaces!

Parts of the machine can become very hot during operation and lead to injuries on contact.

- Observe the warning signs.
- Avoid contact with hot surfaces, or wear protective gloves.
- Let hot components cool down before starting work.

**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.


10.3 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: <ul style="list-style-type: none"> – Contamination – Damage 	Before starting up the machine each time	Have the identified defects corrected immediately.
Check the electrical connections and mains cable for damage.	Before starting up the machine each time	Have the identified defects corrected immediately.
Check the pneumatic system for damage	Before starting up the machine each time	Have the identified defects corrected immediately.
Clean the machine.	After each use	See Chapter Cleaning the machine [▶ 80].
Check function of the EMERGENCY STOP button	Before starting up the machine each time	See Chapters Shut-down in an emergency [▶ 70] and Switching on again after an emergency [▶ 70].

11 Decommissioning and disposal

11.1 Safety instructions

	SAFETY INSTRUCTIONS
	<p>Working safely during maintenance!</p> <p>Perform all work while observing the safety instructions listed in the following:</p> <ul style="list-style-type: none"> ▶ Adhere to the regulations listed in Chapter Safety [▶ 15] during all work on/with the machine. ▶ Refrain from unsafe working methods. Decommissioning and disposal work may only be performed by trained specialists. ▶ Perform the work only as per the regulations in these operating instructions. ▶ Adhere to the corresponding national regulations on working safety and the locally valid safety regulations. ▶ Wear the specified personal protective equipment.

Additional warnings for decommissioning and disposal:

Danger due to electrical voltage!

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

- 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.
- De-energise the machine, check that zero voltage is present and secure to prevent reactivation.

Danger due to pressurised lines and components!

Serious injuries may occur due to pressurised lines and components.

- Switch off the machine and depressurise any pressurised parts.

Danger due to hot surfaces!

Parts of the machine can become very hot during operation and lead to injuries on contact.

- Observe the warning signs.
- Avoid contact with hot surfaces, or wear protective gloves.
- Let hot components cool down before starting work.

11.2 Personnel qualifications

The unit may only be decommissioned and disposed of by personnel who

- are authorised to do so due to their training and qualifications.
- 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 Disconnect the machine from the compressed air supply.
- 3 Disconnect the machine from the inert gas supply.
- 4 If the unit must be decommissioned for a longer period of time, apply anti-corrosion 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.

	SAFETY INSTRUCTIONS
	<ul style="list-style-type: none"> ▶ Make sure that the machine is voltage-free; observe residual voltages (e.g. with frequency converter)! ▶ Make sure that the machine is completely depressurised; observe the pressure reservoir!

- 3 Remove all connection hoses/pipes.
- 4 Properly dispose of materials, 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.

	<p data-bbox="970 517 1118 555">NOTICE</p> <p data-bbox="663 591 1262 622">Environmental damage if improperly disposed of!</p> <p data-bbox="663 651 1283 683">Incorrect disposal may result in environmental damage.</p> <ul style="list-style-type: none"><li data-bbox="663 712 1414 784">▶ Observe the manufacturer's specifications for the lubricants and auxiliary materials to ensure environmentally-friendly disposal.
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12 Declaration of Conformity

(Translation of the original declaration of conformity)

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

Name of the manufacturer

ERME AG
SWISS VACUUM SOLUTIONS

Manufacturer address

Grossmattstrasse 25
CH - 8964 Rudolfstetten

Product

We declare that the product:

Vacuum packaging machines

Type

Automatic inline sealing machines (TSK350, TSK470)

Relevant EU directives

complies with the relevant regulations:

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, 8 January 2018

Signature



Thomas Meyer