



USER MANUAL
HSE30



READ ALL INSTRUCTIONS CAREFULLY BEFORE OPERATING EQUIPMENT

TABLE OF CONTENTS







with minipack®- torre

Foreword	3
Preface	
Machine Dimensions	
Machine Usage	4
Film to be Used	
Film Width Calculation	
Max Weight and Dimensions for Packages	
Items that may be Packaged	
Items which must not be Packaged	
Safety Standards	5
Machine Installation	7
Transport and Positioning	
Description of Safety Stickers	
Electrical Connections	
Auto Transformer Wiring	
Machine Settings	9
Control Panel	
Turning on Power	
Selection of Program and Setting Parameters	
Sealing Only	
Sealing and Shrinking	
Parameters	
Partial Cycle Counter	
Machine Adjustments	12
Film Roll Installation	
Adjustment of the Perforation Wheels	
Product Support Grill Adjustment	
Film Rack and Loading Tray Adjustment	
Packaging a Product	13
Making the First Seal	
Introducing the Product to be Packaged	
Packaging	
Machine Alarms	14
Maintenance	15
Maintenance Table	
Cleaning the Sealing Blade	
Plastic Film and Other Scrap Removal	
Machine Cleaning	
Replacing the Rubber and Non-stick Tape	
Changing the Sealing Blade	
Troubleshooting	15
Troubleshooting	
Disassembling, Demolition and Recycling Instructions	
Notes	18

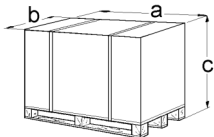
PREFACE

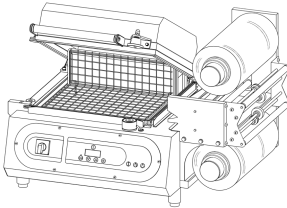
This manual is meant for all users in order to enable them to use the machine correctly. Keep it in a place which can be easily accessed in the proximity of the machine and which is known to all users. This manual is an integral part of the machine for safety reasons. The table below specifies the warning symbols present on the machine.

	ATTENTION: Accident prevention rules for the operator. This warning indicates the presence of dangers which can injure the person operating on the machine.
	ATTENTION: Hot parts. Shows the danger of burning, thus involving the risk of a serious accident for the exposed person.
	ATTENTION: Don't touch!
	WARNING: It indicates the possibility of damaging the machine and/or its components.

All reproduction rights of this manual are reserved to the manufacturer. Partial or complete reproduction is forbidden as provided by the law. Descriptions and pictures provided in this manual are not binding. Therefore; the manufacturer reserves the right to make any change considered necessary. This manual cannot be transferred for viewing to third parties without authorization in writing from Heat Seal.

MACHINE DIMENSIONS

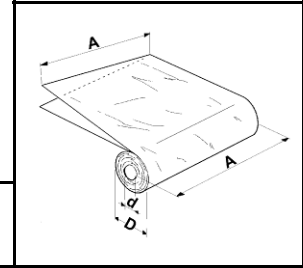
	HSE30	English	Metric
	Width "a"	41 in	1041.4mm
	Length "b"	29 in	736.6mm
	Height "c"	28 in	711.2mm
	Weight	200 lbs	90.7Kg

	HSE30	English	Metric
	Width "a"	33.07 in	840mm
	Length "b"	23.2 in	589.3mm
	Height "c" (hood closed)	19.3 in	490mm
	Height "c" (hood open)	22.5 in	571.5mm
	Weight	149.91 lbs	68Kg
	Maximum production	300 packs/hour	300 packs/hour

FILMS TO BE USED

The machine can work with polyolefin heat-shrink film between 9 and 25 micron thick, both technical and suitable for food. To guarantee the best results, use high quality cross-linked and irradiated films.

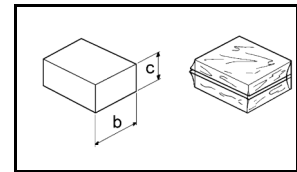
A = 14.96 in MAX D = 6.69 in MAX d = 3 in
 A = 380mm MAX D = 170mm MAX d = 77mm



	Consult the data and safety sheets of the films in use and observe the corresponding instructions!
---	---

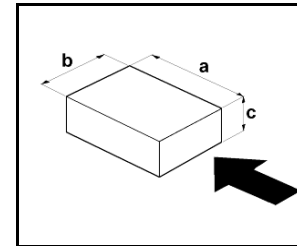
FILM WIDTH CALCULATION

Film Width = $b + c + 3.94$ in
 Film Width = $b + c + 100$ mm



MAX WEIGHT AND DIMENSIONS FOR PACKAGES

a = 13.78 in b = 9.45 in c = 5.51 in Weight = 17.64 bs.
 a = 350mm b = 240mm c = 140mm Weight = 8Kg



Note: measurements shown refer to the maximum for the single dimension.

Refer to Film Features. dimension of pack (b x c); the addition of (b + c) is equal to film roll width

ITEMS THAT MAY BE PACKAGED

These machines are capable of packaging a wide range of completely different products.

They are used successfully in the following sectors : Foods, Marketing, Graphics, Mailing, Large Distribution, Laundry, and Hospitality.

ITEMS WHICH MUST NOT BE PACKED

The products listed below must absolutely NOT be wrapped to avoid permanent damages to the machine and serious injury to the operator.




- Wet and unstable products
- Liquids of any kind in dense, fragile containers
- Flammable and explosive materials
- Pressurized gas cylinders of any kind
- Bulk and volatile powders
- Any materials and products not listed but which might harm operator and cause damages to the machine.

WARNINGS

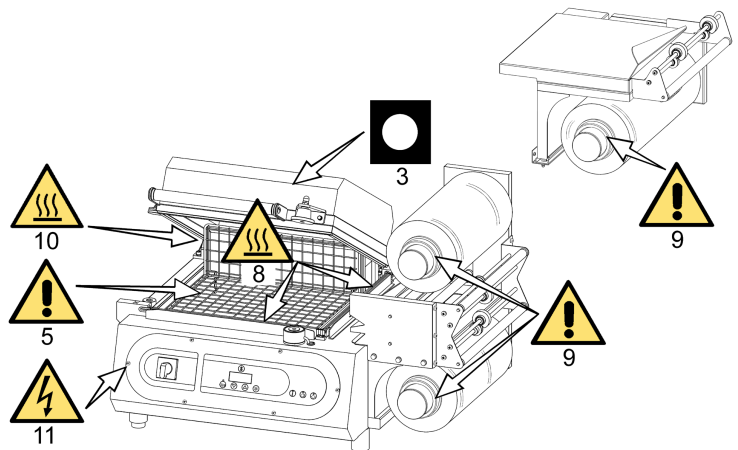
It is extremely important to read this entire chapter as it contains important information regarding risks that personnel are subject to, in the event of incorrect use of the machine. These basic standards must be observed as well as specific standards applicable in the country of installation.

- The machine must be installed by trained and authorized technicians.
- This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack experience and knowledge, unless they have been given supervision or instruction concerning use of the machine by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the machine.
- Never use the machine for purposes other than as specified in the sales contract.
- Never allow unauthorized personnel to perform repairs or other operations on the machinery.
- The operator must be familiar with all warnings related to the tasks in hand and always be informed by the head of the site regarding risks.
- Ensure that all clothing is tight fitting, with particular reference to cuffs or other loose clothing.
- Ensure that all operating areas and transit zones are kept clear, clean and adequately lit at all times.
- Eliminate all safety hazard conditions before using the machine and always notify the head personnel of any malfunction.
- Never use the machine in the event of fault.
- Never tamper with safety devices or circuits.
- Never perform modifications on the machine without prior authorization from the manufacturer.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The electrical enclosure must remain closed during operation.
- Smoking is forbidden while the machine is operating!
- Never perform maintenance and/or adjustments to the machine during operation. Guards may only be disassembled by suitably trained and qualified maintenance engineers.
- Never operate the machine without all guards fitted. Ensure correct position of all guards before resuming normal operation.
- If it is necessary to leave the machine unattended, switch it off by turning the main switch to the "0" (OFF) position!
- The manufacturer declines all liability for damage or physical injury caused by failure to observe safety standards.




THE MACHINE CAN NOT BE USED BY UNTRAINED PERSONNEL!

	<p>During work pay attention to all hot parts of the machine. The temperature it can reach can cause burns.</p>
---	--

- Do not touch the sealing blade (8) soon after sealing by reaching beyond the safety guard. Danger of burns due to residual heat on the sealing blade (8)
- Do not keep on sealing if the sealing blade breaks (8). Replace it at once
- Do not touch the chamber closing flap (10) during warm-up. Danger of burns
- Do not touch the fan while moving or using the machine without the reticulated plate (5)
- Make sure the film reel is properly lodged in its place (9)
- When the machine is not in use, leave the upper hood (3) open.



INDIVIDUAL PROTECTION DEVICES

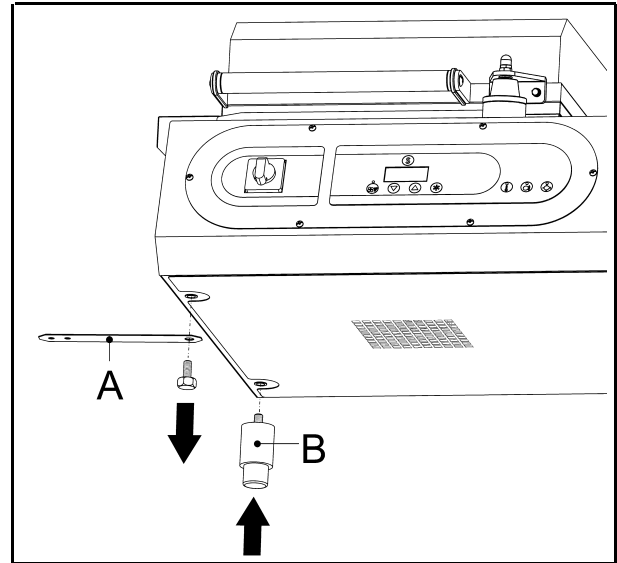
	<p>Wear safety shoes that protect feet from impacts, crushing and compression while moving or handling the machine.</p>
	<p>Wear safety gloves that protect the hands from crushing and mechanical hazards and while moving or handling the machine.</p>
	<p>Wear safety gloves that protect the hands against cutting risks while changing the sealing blade.</p>
	<p>Wear safety gloves that protect the hands against the specific risks associated with the materials to be packed (mechanical, chemical) and against coming into contact with the high temperatures present on the seals and/or sealing blade (up to 100°C).</p>
	<p>Wear safety gloves that prevent the hands from coming into contact with food when pack-aging them.</p>

TRANSPORT AND POSITIONING



Handle with great care during transport and positioning!
Before any movement, make sure that the lifting means is suitable for the load to be lifted!

- Cut the straps and remove the cardboard cover.
- Remove the screws and plate intended to fasten the machine to the pallet.
- Lift the machine and add the 4 feet.
- Cut the strap to release the upper hood.



ENVIROMENTAL CONDITIONS

- Place the machine level on a table in a suitable environment free from humidity, gases, explosives, combustible materials. The machine may only be installed on smooth, flat non-inflammable surfaces.
- Leave a minimum space of 1.5' around the machine so that not to obstruct air inlets

Working environment conditions:

- Temperature from 41°F to 104°F , (5°C to 40°C)
- Relative humidity from 30% to 90%, without condensation.

The lighting of the operation room shall comply with the laws in force in the country where the machine is installed. However, it shall be uniform and allow good visibility in order to safeguard the operator's safety and health.

MACHINE PROTECTION FACTOR = IP20

THE AIRBORNE NOISE MADE BY THE MACHINE IS LOWER THAN 70 dB(A)



ELECTRICAL CONNECTIONS

Voltage (V): 115
Frequency (Hz): 50/60
Maximum absorbed power (W): 2,250
Maximum absorbed current (A): 19.0

Connection of the machine to the facility power supply must be performed by authorized and properly trained personnel. The machine is shipped without a connector. If a connector is to be used, it must be rated for the proper voltage and current draw of the machine.

CONTROL PANEL

The machine is fitted with a control panel, from which all programming and operation functions can be set.

Q1 Main switch

▼ Button "DECREASE".

Reduces set function values

▲ Button "INCREASE".

Increases set function values

3 Button "Soft Shrink".

Reduces the fan speed

L1 Temperature warning light

L2 Shrinking warning light

L3 Sealing warning light

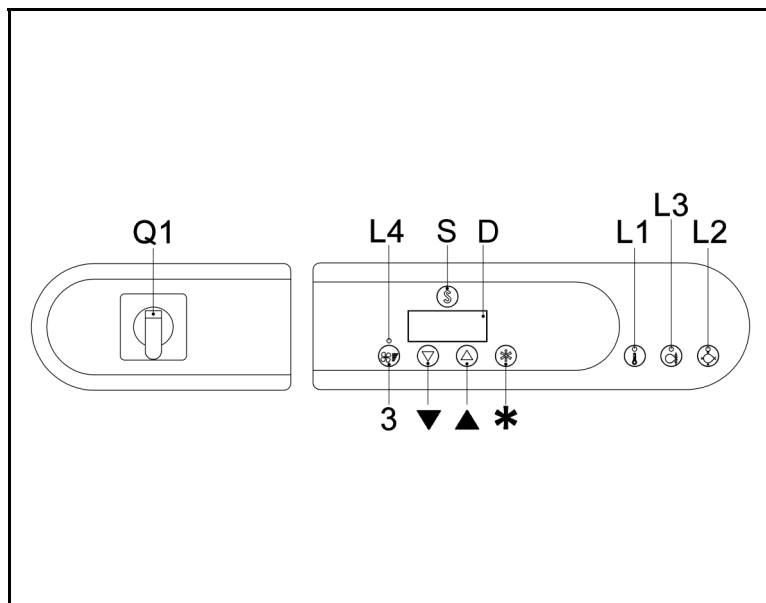
L4 LED Soft Shrink

D Display.

Displays selected functions and relative settings

* Cycle counter selection button

S Parameters selection button



TURNING ON POWER

Turn the main switch (Q1), clockwise.

The display (D) turns on and the number of the currently selected program will appear.

Switching the machine on supplies power to the shrinking heat element which begins to heat up.

Before using the machine, wait until the adjusting temperature is reached. This is signaled by the extinction of the warning light (L1).

SELECTION OF PROGRAM AND SETTING PARAMETERS

The machine has 10 programs (Pr 1 - Pr 10) that can be selected by pressing (▲) and (▼).

The programs are identical and, with the appropriate settings, can make 2 different types of packaging:

SEALING ONLY

This program seals the film to make a bag without shrinking.

The film melts due to the heat of the sealing blade. The pressure between the sealing blade and the hood edge lined in Teflon separates the 2 edges of the film. Pulling on the film along the outside edge of the hood during the end of the sealing time ensures that the film will separate.

The product to be packed is enclosed in a slack bag.

This is obtained by setting:

- Heat chamber temperature "TEMP" = OFF and "SHRINK TIME" to 0.0.

SEALING AND SHRINKING

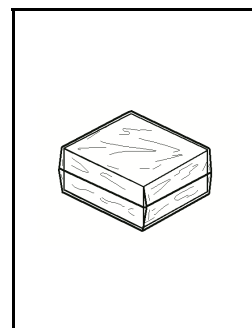
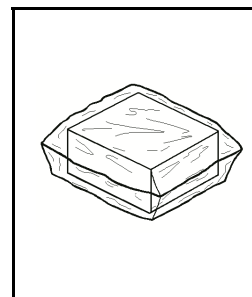
This program seals and shrinks film simultaneously.

Shrinking is produced by the forced circulation of hot air around the package. Air is heated by passing through a heat element. Pulling on the film along the outside edge of the hood during the end of the sealing time ensures that the film will separate.

The product to be packed is enclosed in a bag which perfectly adheres to its shape.

This is obtained by setting:

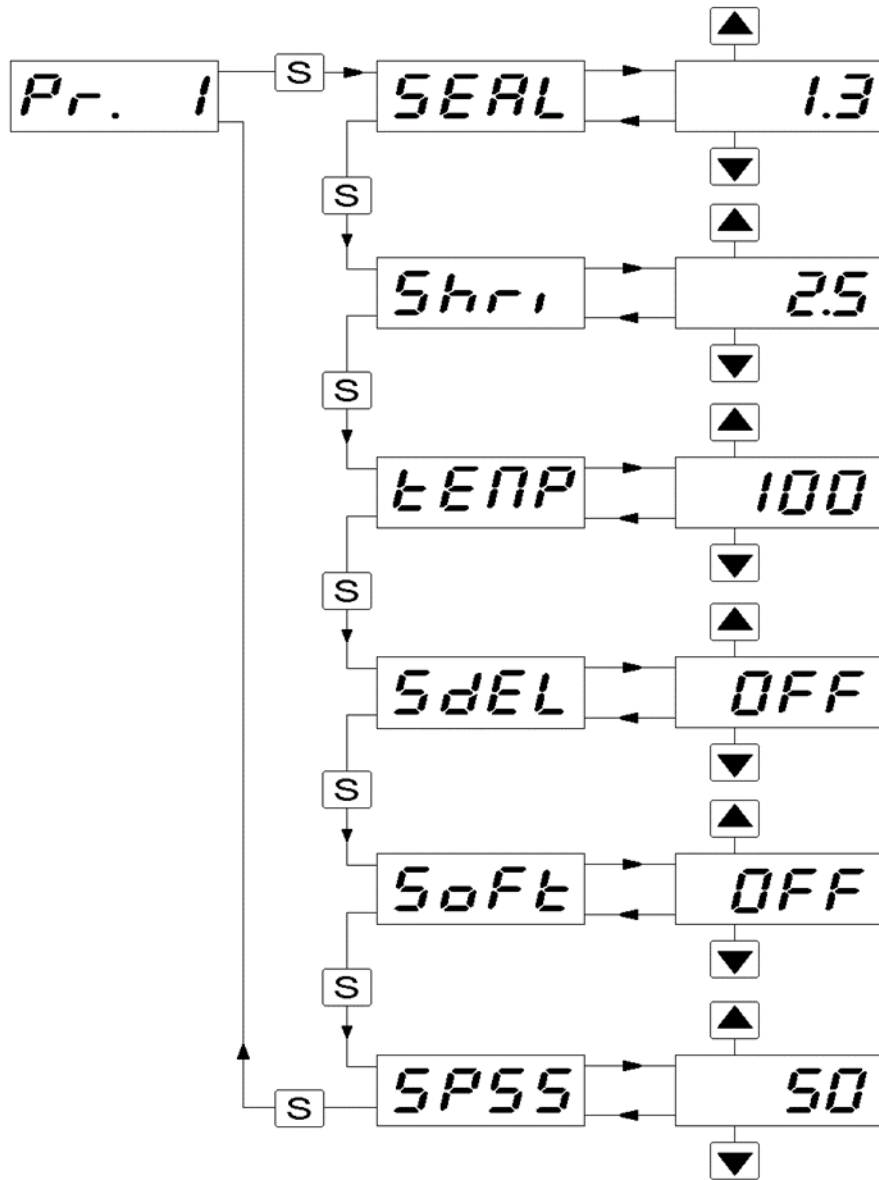
- Heat chamber temperature "TEMP" = to the desired value,
- Shrinking time "Shri" = to the desired value.



MACHINE SETTINGS

Once the desired program has been selected, press the button (S) to display the program's parameters.
The code (flashing) that identifies the first parameter that will be alternated with the set value will appear on the display.
If the parameter indicates a function that can be linked to an LED indicator on the panel, said LED will flash to show that a parameter for the linked function is being programmed.
Then press (▲) and (▼) to change the value.
Once the desired value has been set, press the button (S) again to go to the next parameter and so on until you exit the parameters programming mode indicated by the return of the display to indication of the program selected.

Note: the (▲) and (▼) buttons move at one digit at a time but if they are pressed for more than one second the value increases or decreases quickly.





The operating parameters for each program are:

Parameter	Description	Range	Default
<i>SEAL</i>	Sealing time Time in which film sealing occurs.	OFF / 0.1 - 3.0 sec.	1.3
<i>Shr.</i>	Shrinking time Time in which shrinking occurs (operation of the fan).	OFF / 0.1 - 10.0 sec.	2.5
<i>TEMP</i>	Heat chamber temperature Temperature that the heat chamber must reach. The indicated value will correspond to: 0 = 0° (the heating element is switched off) 1 ... 150 = 212° ... 748°F (2°C each point)	OFF / 1 - 150	100
<i>SDEL</i>	Fan delay time after sealing Delay time between the end of sealing and the start of shrinking (operation of the fan).	OFF / 0.1 - 1.0 sec.	OFF
<i>Soft</i>	Soft Shrink Reduces the fan speed to the value set in the next parameter "SPSS". To quickly enter/remove the "SoFt" function use the Soft-Shrink (3) button that, when pressed/released, enters/removes the function. If the function is entered the display immediately shows the "SPSS" parameter of the active program which can then be changed. To exit this mode simply start an operating cycle or press the button (S). This function is useful for packaging light products.	OFF - On	OFF
<i>SPSS</i>	Speed Soft Shrink Parameter for adjusting the fan speed.	40 - 100 %	50

PARTIAL CYCLE COUNTER

When the machine is in PROGRAM SELECTION mode, the display shows the program in execution (e.g. "Pr. 1").

In this mode press (*) to enter the "partial cycle counter" function in which the display shows the partial counter value reached.

Press the (*) button again to return to the selection of programs.

The partial cycle counter increases at each sealing up to a maximum of 9999 cycles (displayed), after which the count is stopped until reset.

The partial cycle counter reset command occurs only when you are in the cycle counter mode by pressing the (*) button and keeping it pressed for more than 3 sec.

When the reset command has been given the display will then show "0".

Film reel insertion

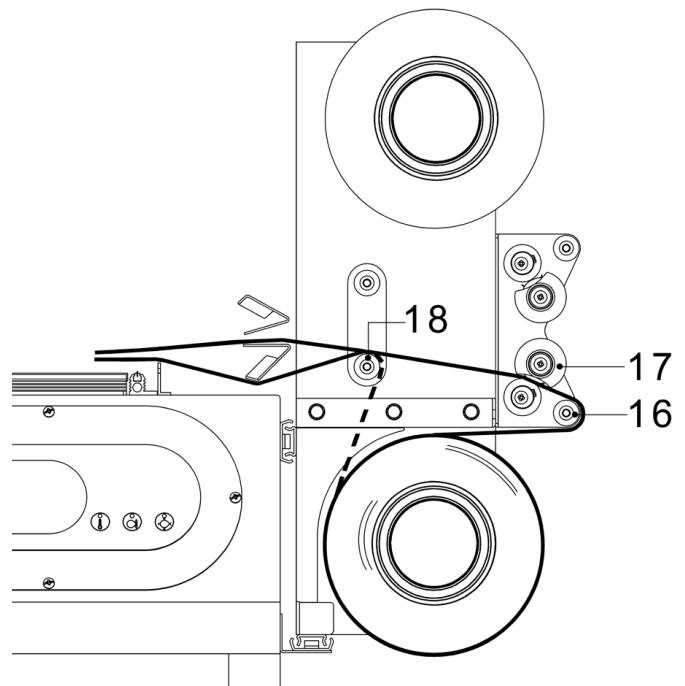
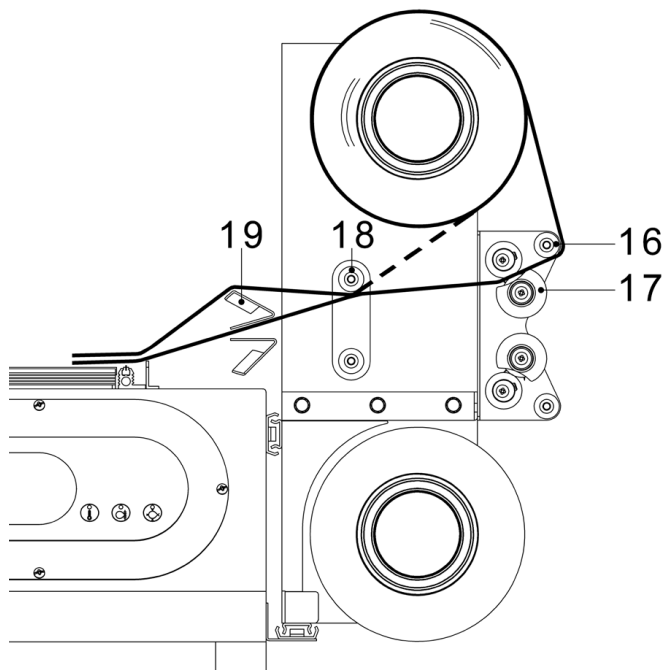
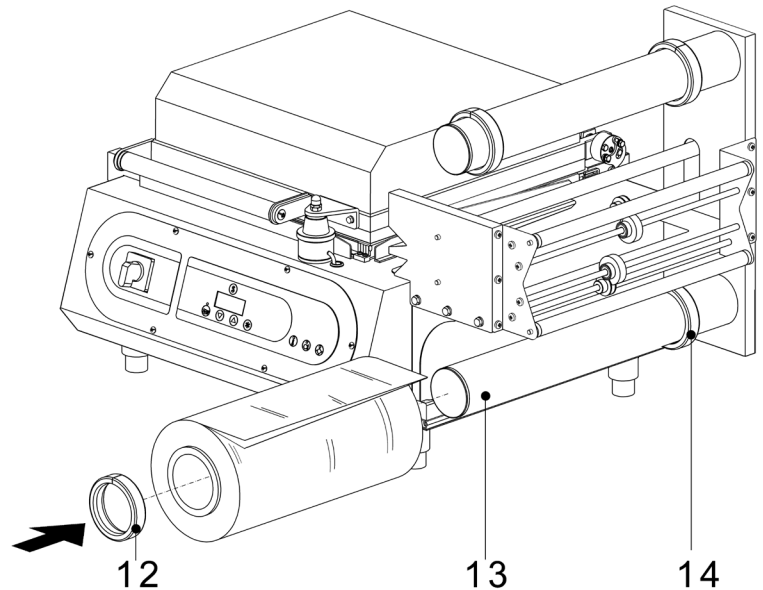
It is possible to place 2 reels of film on the support (6) at the same time.

This allows you to save time every time you need to change the reel (the presence of the second reel allows you to avoid machine downtime).

It is also possible to install 2 film reels with different characteristics (film type, reel width, film thickness).

Insert the reel of film as per the following instructions:

- Remove the front centering cone (12) from the roller (13)
- Insert the film reel on the roller (13) until it rests against the rear centering cone (14)
- Insert the front centering cone (12) until the coil is stuck between the two cones



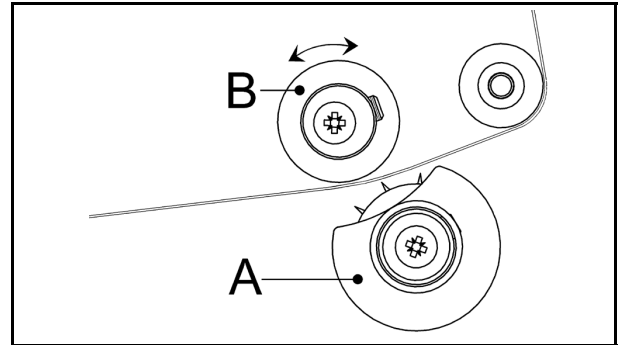
- Pass the film around the roller (16)
- Pass the film through the microperforator (17) (if perforation of the film is not necessary, pass the film directly around the roller (18))
- Pass the film around the roller (18)
- Pass the lower edge of the film under the opening plate (19)
- Pass the upper edge of the film over the opening plate (19).

ADJUSTMENT OF THE PERFORATION WHEELS

The correct positioning of the micro-perforators allows for optimal heat-shrinking and avoiding tears along the seal.

It is possible to adjust the distance between the microperforator (A) and the upper wheel (B) by rotating the upper wheel.

The holes in the film are larger when the distance is reduced.



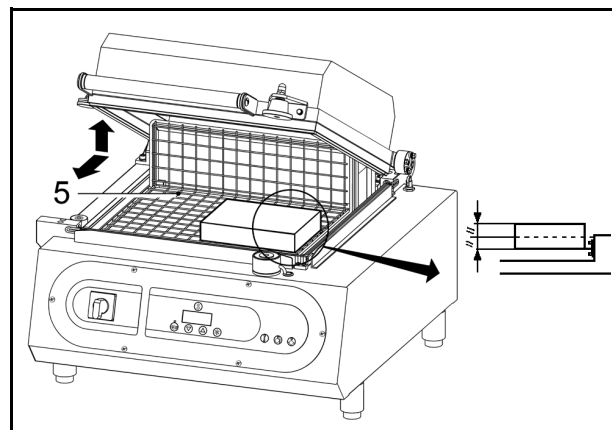
PRODUCT SUPPORT GRILL ADJUSTMENT

The grill plate (5) can be positioned according to the object being packaged.

For a proper seal, the grill should be positioned so that the seal of the film is half of the package height.

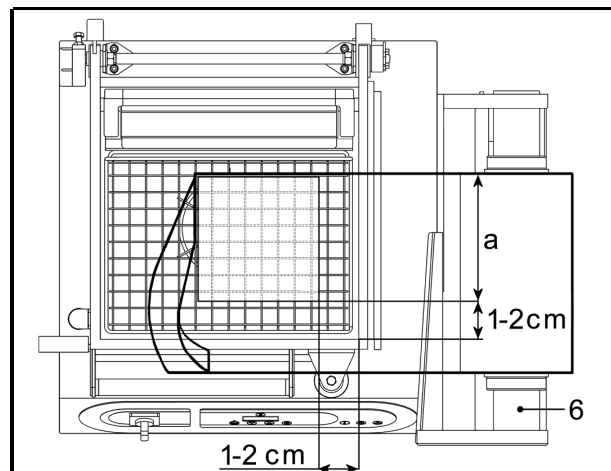
For its placement:

- Pull the grill towards the front of the machine, and then up.
- Reposition the 3 support pins to achieve the desired height.



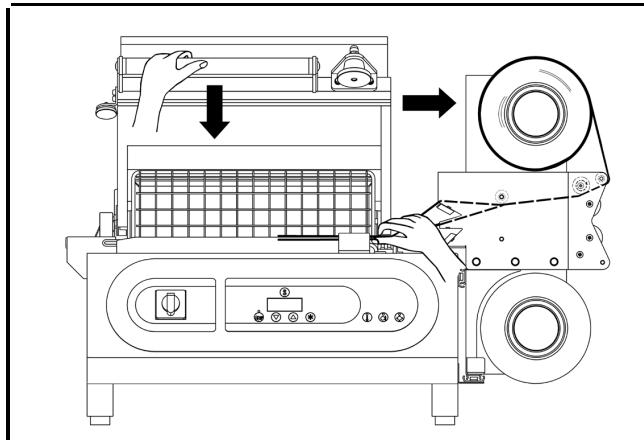
FILM RACK AND LOADING TRAY ADJUSTMENT

The reel support (6) must be adjusted according to the width (a) of the object to be packaged, leaving about 1-2 cm of space between the object and the sealing edge.



MAKING THE FIRST SEAL

Place film as shown in the picture to carry out the 1st seal.
Lower the cover using the handle until the magnet latches.
Machine will automatically operate and the first seal will be carried out on the side of the film.
Pulling on the film along the outside edge of the hood during the end of the sealing time ensures that the film will separate.

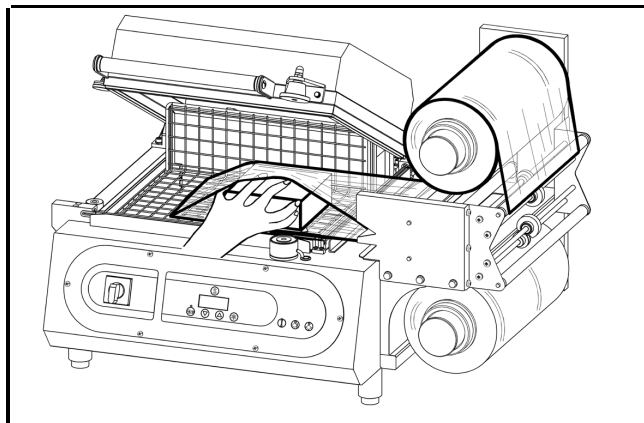


INTRODUCING THE OBJECT TO BE PACKAGED

While opening the film with your left hand; place the product under the top layer of film at the back of the loading tray.

Move the product into the sealing area and place it on the grill leaving a space of 0.5-0.75", (1-2 cm) between the product and the front and left edge of the chamber. Make sure that enough film is present outside the front of the chamber.

Remove all tension from the film so that it lays flat on the sealing blade.



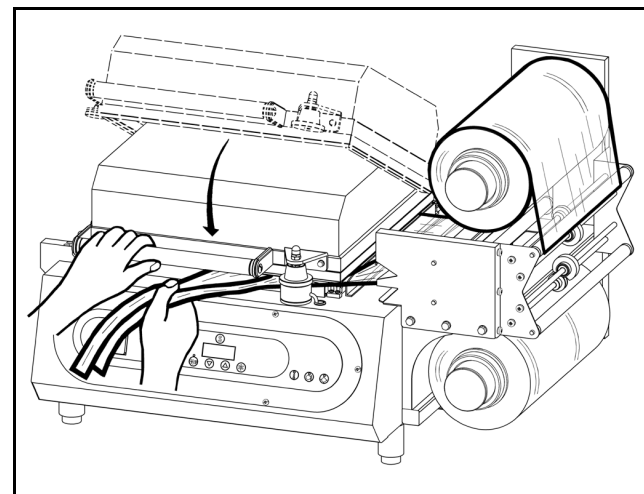
PACKAGING

Lower the cover using the handle until the magnet latches. During the sealing time the film is automatically sealed on the open sides (right and front).

Pulling on the film along the outside edge of the hood during the end of the sealing time ensures that the film will separate.

If the "SEALING AND SHRINKING" function has been set, the fan will start and the film will shrink around the product.

Once the shrink time has elapsed, the hood magnet will release and the hood will raise. The package can now be removed from the chamber.




The electronic board detects series of alarms that indicated on the display by the following messages:

- Limit switch B1 closed when the machine is switched on.**
Possible causes are:
- Machine on and hood down. Lift the hood.
- AL1:**
- Limit switch B1 faulty. Check the operation of the limit switch and replace if required.
- The machine will not execute the cycle in both cases. It is necessary to open the limit switch contact to cancel signaling.
The alarm will disappear as soon as the contact is opened.
- Temperature not reached.**
A possible cause is:
- AL2:**
- The working temperature was not reached in the pre-set time (15 min.).
- Check that the thermocouple is positioned correctly. Check the heating element.
To reset the alarm, switch the machine off and on again.
- Maximum temperature exceeded.**
Possible causes are:
- Thermocouple with broken wires, damaged, or not in contact at the point of attachment on the heat sink.
 - Membrane board damaged with loss of electrical insulation.
 - Shrinking magnet damaged with loss of electrical insulation.
 - The electronic component for the control of the heat sink on the power board is faulty.
- Take electrical measurements and/or replace the components.
To reset the alarm, switch the machine off and on again.
- AL3:**
- Thermocouple interrupted.**
To reset the alarm, switch the machine off and on again.
- AL4:**
- Sealing blade safety device.**
A possible cause is:
- AL5:**
- Sealing transformer short circuit or mains voltage side sealing open circuit.
- To reset the alarm, switch the machine off and on again.
- Chamber safety thermostat tripped due to overheating.**
A possible cause is:
- Malfunction of the heat sink temperature control system.
- AL6:**
- Check that the machine has no faults during operation (strange noises, burning odors, high work temperatures).
Try to manually reset the safety thermostat under the front panel (disconnect the power to the machine before opening the panel).
- Operator safety.**
A possible cause is:
- AL7:**
- QM0 relay short circuit.
- To reset the alarm, switch the machine off and on again.
- Operator safety.**
A possible cause is:
- AL8:**
- QM0 relay open circuit.
 - Limit switch B1 faulty. Check the operation of the limit switch and replace if required.
- To reset the alarm, switch the machine off and on again.
- Hood closed after shrinking.**
If the hood remains closed during a shrinking cycle for longer than the pre-set shrinking time, the machine continues the shrinking for a maximum of 10 seconds, after which it stops running.
To reset the alarm, open the hood.
- ALL:**
- Machine lock.**
Contact technical assistance.
- EEE:**
- OffL:**
- No communication between the display unit and the power unit.**
Contact technical assistance.

If the alarm remains after having carried out the indicated interventions and controls to restore the machine, contact the technical assistance.

REGULAR MAINTENANCE MUST BE CARRIED OUT BY QUALIFIED, APPROPRIATELY TRAINED STAFF.

	Before carrying out maintenance, switch the machine off with the main ON/OFF switch, disconnect it and wait for the machine to cool down!
---	--

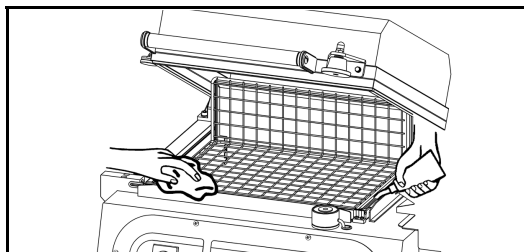
MAINTENANCE TABLE

The type of machine requires reduced maintenance operations; you must nevertheless stick to the Maintenance plan.

FREQUENCY	COMPONENT	TYPE OF OPERATION
Each day	Machine	Clean the machine with a water dampened cloth.
Each day	Sealing blade	Using a dry cloth, wipe any film residues off the sealing blade.
Each day	Upper hood in Plexiglass	Use only soap and water to clean both the outside and the inside of the Plexi-glass hood.
Each day	Lower hood	Use compressed air to remove any film residues from the inside of the hood and in the heat chamber zone.
Each month	Sealing blade	Check that the sealing blade is not worn. Check the wear status of the Teflon and replace if necessary.

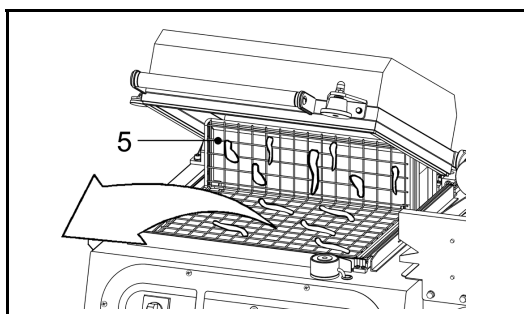
CLEANING THE SEALING BLADE

- Using a dry cloth, wipe any film residue off the sealing blade: do this soon after sealing since it is easier to remove when still warm
- For improved cleaning, regularly lubricate the sealing blade with the non-stick grease supplied with the machine.



PLASTIC FILM AND OTHER SCRAP REMOVAL

- Wait for the machine to cool down completely before removing any scraps stuck to the hot parts of the machine (e.g. , on the flaps of the heat chamber)
- If the lower cover requires cleaning (where the fan is installed), remove the grill (5) and take out any pieces that may have fallen inside

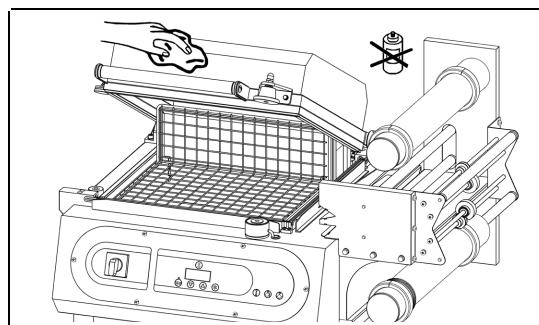


MACHINE CLEANING

To clean the upper hood, clean both the outside and the inside with water and soap only.

Do not use any detergents with solvents which could damage the upper hood and reduce the transparency.

- Use a cloth moistened with water to clean the machine
- If the machine works in a dusty environment it is necessary to clean it more frequently inside as well as outside.



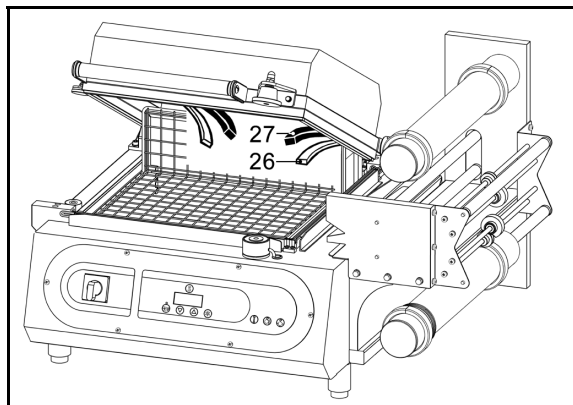
REPLACING THE RUBBER AND NON-STICK TAPE

When the non-stick tape (26) is worn out, it must be replaced.
When applying new tape, make sure the application is clean and level.

Before applying the new tape, clean the rubber (27) with a detergent.

If the rubber (27) is also damaged, replace it as follows:

- Remove the old rubber
- Clean its housing
- Insert the new rubber evenly.
- Clean the rubber with a detergent
- Apply non-stick tape.

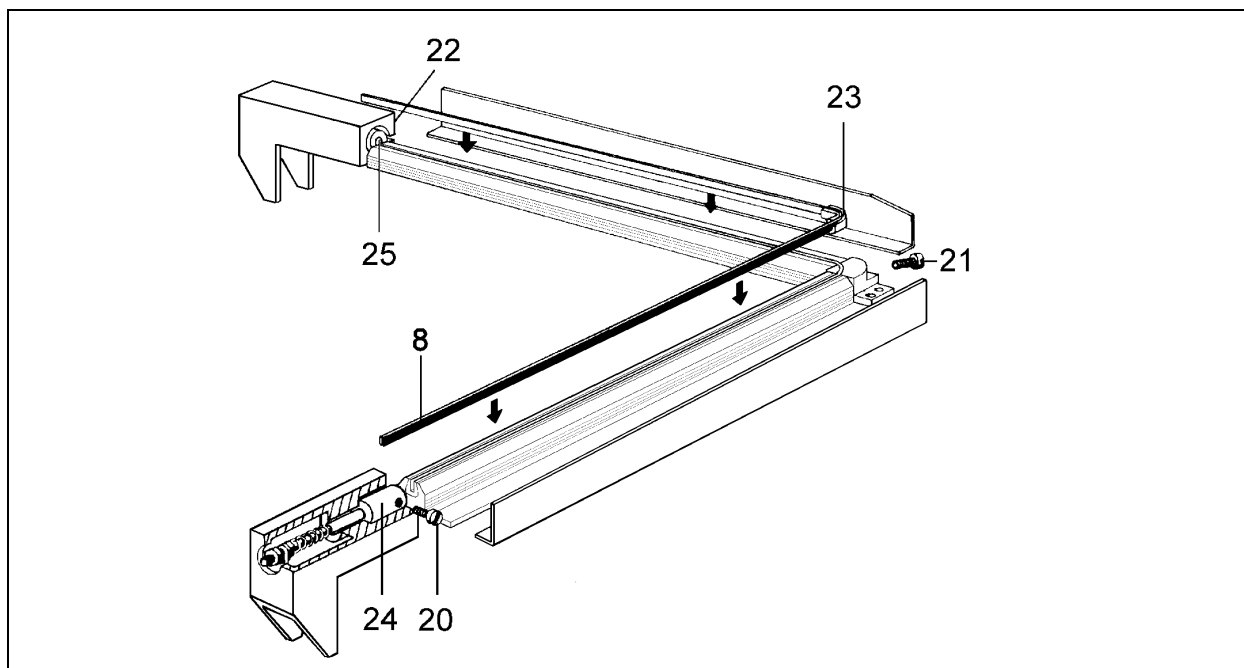


CHANGING THE SEALING BLADE

To change the sealing blade (8) follow this procedure:

- Disconnect power to the machine
- Unscrew the three screws (20), (21), (22)
- Remove the old sealing blade
- Clean the housing and if necessary replace the center corner insulator (23)
- Insert the new sealing blade starting from the center corner clamp and tighten the screw (21)
- Trim the new sealing blade according to the holes of the pistons (24) and (25)
- Complete the insertion of the sealing blade along the housing
- Push the front piston completely (24) towards the sealing blade to make it enter the hole of the piston and then tighten screw (22)
- Push the rear piston (25) completely towards the sealing blade to make it enter the hole of the piston and then tighten screw (20)
- Trim the corner insulator projecting from the center corner clamp

Make sure that the sealing blade is well positioned and under tension.



PROBLEM	CAUSE	SOLUTION
The machine seals but it does not shrink.	The shrink time parameter "Shri" is set on OFF.	Increase the value (0.1 - 10)
	The chamber temperature parameter "TEMP" is to OFF or too low.	Increase the value (1—150)
	The machine is in heating mode	Wait for the machine to reach the set temperature (Led "L1" switch-off)
	The fan does not turn	The fan's motor is faulty. Contact technical assistance.
	The maximum temperature of the heater is exceeded. The safety thermostat intervened, disconnecting the heating element.	Contact technical assistance.
Shrinking takes place, but it is not even and complete	The film is not suitable or of poor quality	Replace the film
	The product is too big	The product is bigger than admitted
Shrinking contains "bubbles" (the film does not adhere to the product)	The film is without perf holes	Make the film properly slide through the perf wheels
	The perf holes are too small	Reduce the distance between the perf wheel and contrast wheel
Sealing opens during shrinking	The sealing blade is dirty or damaged	Clean the sealing blade or replace it if damaged
	Sealing time is incorrect	Adjust the sealing time
	Insufficient hood pressure	Slightly increase pressure on the hood's handle
Sealing is irregular	The film is not suitable or of scarce quality	Replace the film
Sealing does not take place	Sealing time is not enough	Increase the set value
	The sealing blade does not receive current	Repair the power supply circuit of the sealing blade. Contact the after-sales technical assistance.
	The Teflon and/or gasket of the cover are worn	Replace the non-stick tape and/or gasket of the cover
	The sealing blade is damaged	Replace the sealing blade
Fumes present during sealing	Sealing time is long	Decrease the set value
	Residues present on the sealing blade	Clean the sealing blade

If the machine does not work properly after the above-mentioned checks, contact technical service.

DISASSEMBLING, DEMOLITION AND ELIMINATION OF RESIDUALS

	<p>ATTENTION! <i>All disassembling and demolition operations must be done by qualified personnel with mechanical and electrical expertise required to work in safe conditions.</i></p>
--	--

Proceed as follows:

- Disconnect machine from power mains
- Disassemble components.

All wastes must be treated, eliminated or recycled according to their classification and to the procedures in force established by the laws in force in the country where the equipment has been installed.

	<p>The symbol indicates that this product shall not be treated as household waste. By making sure that the product will be properly disposed of, you will facilitate the prevention of potential negative effects for the environment and human health, which might be otherwise caused by the improper waste treatment of this product. For more detailed information about the recycling of this product, please contact the product seller or, as an alternative, the after-sales service or the corresponding waste treatment service.</p>
--	---

HEATSEAL[®] with minipack[®] - torre

