

INSTRUCTION MANUAL USE AIG MAINTENANCE 45/17





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1 GENERAL INFORMATION

1.1 Manufacturer

Pactur srl has a long experience in the manufacturing of shrink wrapping machines. In fact, during many years of collaboration with customers and distributors all over the world, the company acquired a specialised, technological know how.

1.2 Certification

The machine is produced in compliance with the safety regulation in force at the time of its manufacturing. As the machine is not included in the IV Attachment of the 89/392/CEE rule, Pactur srl produces its own self certification.

CE CERTIFICATION

See attachment

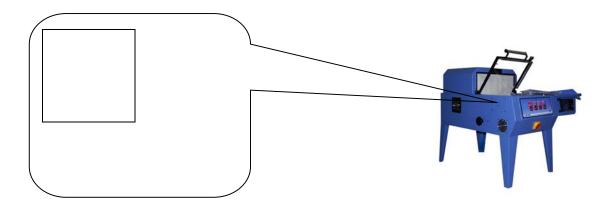
The CE Certification is a major part, composing this instruction manual

1.3 Assistance

Pactur srl has distributors and assistance centres all over the world. For this machine the distributor in charge is:

Distributor's stamp:

In case of need for technical information, technical intervention or spare parts, our customers are kindly requested to contact our authorised assistance centres and to provide the machine data, which are written on the label (**picture no. 1**).



1.4 Warranty

Pactur grants 1 year warranty, except for conveyorbelts, electrical and electronic components and any part which is worn out by normal use.

Warranty includes only the components and not the labour.

The following situations are out of the warranty conditions:

- any damage caused during transport, loading, unloading, collocation of the machine
- any operator's fault
- lack of maintaining
- any fault which is independent of the machine functioning.

1.5 Customer's requirements

Except for special, particular agreements, the following operations are at customer's charges:

- preparation of the place, where the machine has to be installed (wiring, etc)
- electrical supply of the machine in compliance with the rules in force in the customer's country

1.6 Instruction manual organisation

The machine user is kindly requested to read the present manual very carefully, as the regular collaboration between customer and supplier is based on correct installation, maintaining and use of the machine

1.6.1 Purpose and contents

This instruction manual is meant to provide the customer with all the necessary information:

- to move the machine correctly and safely, no matter whether still packed or unpacked
- to install the machine correctly
- to know its way of functioning
- to know its safe use
- to maintain and to make size change over according to the safety rules
- to dismount the machine in an environmental friendly way and in compliance with the workers' safety regulation in force where the machine is placed.

It is taken for granted that the premises, where the machine is working, comply with the safety regulations



Before operating the machine, technicians and workers have to read carefully the present instruction book.

In case of doubts on the correct meaning of some instructions, pls do not hesitate to take contact with the manufacturer directly for explanations.



It is forbidden to make any operation on the machine, before this instruction book has been carefully read and understood.

1.6.2 Consignee

This manual is meant for the operators and for the technicians in charge of the machine maintaining. The owner is not allowed to make any operation, which is up to the operator or to the maintaining technician.

The manufacturer is not responsible for any damage due to disregard of this warning.

1.6.3 Instruction manual keeping

The instruction manual must be kept in a safe place, where it is easy to get it for, at least, ten years and/or as long as the machine is in use. In order to keep the manual constantly complete and readable, pls follow this advice:

- when you look up into the manual, handle it carefully, so as not to spoil any
- single part
- do not pull out, tear or rewrite any part of the manual
- keep the manual in a non humid place and far away from any source of heating
- do not touch the manual with dirty or greasy hands, which could compromise the integrity of the manual itself



1.6.4 Used symbols

GENERAL DANGER

It warns about any risk, even deadly risk, for the operator



ELECTRIC SHOCK DANGER

It warns about the danger to get an electrical shock, if the operation is not carried out according to the instructions



WARNING

It points out a major function or some important information.

Pls pay attention to the items of text, which are emphasised by this symbol.



PROHIBITION

This symbols indicates all the operations which are strictly forbidden, as they represent a serious danger for the operator and anybody nearby the machine



PROHIBITION TO EXTINGUISH FIRE WITH WATER

This symbol warns about the prohibition to extinguish fire with water or with anything containing water



PERSONAL PROTECTION

This symbol, next to the operation description, indicates the necessity for personal protections, otherwise the operator is under risk



QUALIFIED TECHNICIAN

It indicates the operations, which can be carried out only by qualified technicians.



2 - MACHINE DESCRIPTION

2.1 Main functioning

The machine, model 45/N, is made of:

- an impulse sealing system, suitable for sealing centre folded film in roll and made of a nichelchrome blade, which cuts and seals the film, thanks only to the manual pressure on the sealing arm
- a motorised conveyor belt, which takes the wrapped product into the shrink tunnel and, after a set time, it takes the product either back to the operator or out from the opposite side
- a shrink tunnel, heated by armoured heaters.

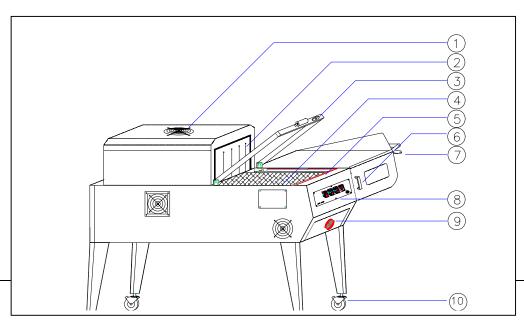
The operator has to put the product manually into the film, to place it onto the conveyor belt (inside the sealing area) and to pull down the sealing arm.

2.2 Main composing parts

Picture 2

- 1 Tunnel top cooling fan
- 2 Entry of the shrink tunnel
- 3 Manual sealing arm
- 4 Conveyor belt for product transportation
- 5 Sealing blade
- 6 Handle for film trolley adjustment
- 7 Rollers for film unwinding and film microperforation
- 8 Electronic control board
- 9 Single phase main switch
- 10 Wheels with break

Picture 2





2.3 Environmental conditions

The machine 45/N does not require any special environment, provided that it is placed in a factory or warehouse, with light, air and levelled floor. Acceptable temperature: from 5°C to 40°C: with humidity within 50%, up to 40°C with humidity more than 50%,up to 20°C



2.4 Lighting

The lighting of the working place must be in compliance with the rules in force in the country, where the machine is working and, in any case, any part of the machine must be clearly visible, without any dangerous reflex; control boards and emergency buttons must be immediately and easily identified.

2.6 Vibrations

Provided that the machine is used correctly, no vibration creates any dangerous condition.

2.7 Sound emissions

The machine is designed and produced, so as to reduce sound emissions at the origin.

The sound level of the machine is:

power sound level Lwa = 68,5 dB (measured value)

measurements were taken according to the law EN here attached.

Sound was measured in the working areas of the machine and both machine noises and environmental noises were taken into consideration.

Warning:

The given noise values are emission levels and they do not represent necessarily noise levels of the machine in operation.

Though emission and exposition levels are connected, there is no fixed rule, indicating whether further precautions are necessary.

The exposition levels, to which the operators are subject, depend on the exposition time, the characteristics of the working place and other sources of noise (number of machines, working processes nearby....).

Furthermore, also the accepted exposition levels change according to the country regulation. Anyhow, the mentioned information allows the operator to better evaluate danger and risk.

2.8 Technical data

Hereby the main technical data are recorded.

Total machine length: (mm)1.150
Total machine width (mm)1.080
Working table height (mm)880
Machine weight (Kg.)150
Max film roll length (mm)450
Max film roll diameter (mm)250
Max product height (mm)150
Sealing dimensions (mm)340 x 450
Power consumption(See metal label on the machine)
Power supply(See metal label on the machine)
Max shrink temperature 180 °C

Warning:

If ALL the product dimensions coincide with the max acceptable dimensions of the machine, the machine cannot fit that product and it is necessary to choose a bigger model.

Chapter 3

3. SAFETY

3.1 General warning

Whenever industrial machinery is in operation, it has to be taken into consideration, that any moving mechanical part, all electrical parts under power supply, any heated part, etc. might be the cause of serious injuries for people or damages for material things.



Therefore, he who is responsible for the machine safety in the company, has to check carefully that:



- no incorrect operation is carried out
- no safety device is removed
- maintaining service is regularly made
- only original spare parts are used, mainly for the protection and safety parts of the machine
- the operator (the user) reads carefully this instruction manual, mainly the present chapter about safety instructions.



In order to comply with the above warning, it is necessary that:

- the documentation is always available next to the machine operation seat
- boxes containing packed products and products to be packed are present next to the machine
- the present manual is carefully read and the instructions are strictly respected and followed
- only trained people work on the machine.



It is strictly forbidden:

- to operate the machine after removing the safety protection devices
- to switch off the machine securities
- to clean the machine, when electrical or pneumatic parts are still on
- to modify any part of the machine (mechanical, electrical, software)
- to clean the commands or the panels with acids, benzine or solvent
- to wear dresses which could cling to the machine
- to wear rings, bracelets or neck laces, which could cling to the machine
- to remove or to modify the original labels

to use the machine when the operator is not in normal psycho-physical conditions.



3.2 Correct use

The machine 45/N was conceived for packing products in shrink film. The machine must be manually operated.

3.3 Forbidden use

The machine cannot be used:

- for any use different from the description of paragraph 3.2
- in explosive, aggressive atmosphere, when there is a high concentration of powder or of oil substances
- in risk of fire
- under climatic inclemency
- with electric bridges and/or mechanical devices, which exclude some parts/use of the machine
- with unsuitable materials to the machine characteristics

An incorrect use of the machine and the non respect of the safety rules could compromise the machine itself, beyond creating risk conditions for the operator.

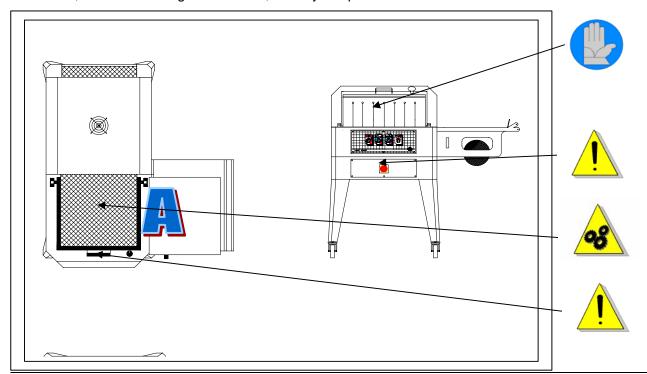
The level of risk, deriving from an incorrect use, depends on the incorrect or forbidden use itself.

3.4 Dangerous areas

Picture 3

The area, where the product is loaded, is called working area (A).

The area where the film is sealed and the conveyorbelt, which takes the product automatically into the tunnel, are called "dangerous areas", as they are parts in movement . Picture 3



3.5 Protection devices

The machine is provided with suitable devices, meant to protect the operators from the heating parts.



3.6 Stop functions

The machine is completely stopped by turning off the main switch, which cuts off the power supply to all the machine elements.

3.7 Safe working procedures

The machine is projected and manufactured in purpose to eliminate any risk during the normal use.



As it is meant to cut and seal film and as it is a manual machine, where the sealing area cannot be closed, it is impossible to prevent the operator from touching the hot sealing blade. The possible risks, are:

- possibility to slightly burn one's fingers, due to the contact with the still hot sealing blade
- possibility to get entangled to the machine (mainly due to the use of not tight enough dresses)



IN BOTH CASES, THERE IS NOT RISK OF PERMANENT INJURY, AS THE MACHINE HEATING AND THE MACHINE MECHANISMS ARE NOT DANGEROUS.
THE RISK AREAS ARE INDICATED BY WARNING LABELS ON THE MACHINE ITSELF.



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3.8 Labels

No warning label can be removed, covered or damaged



Chapter

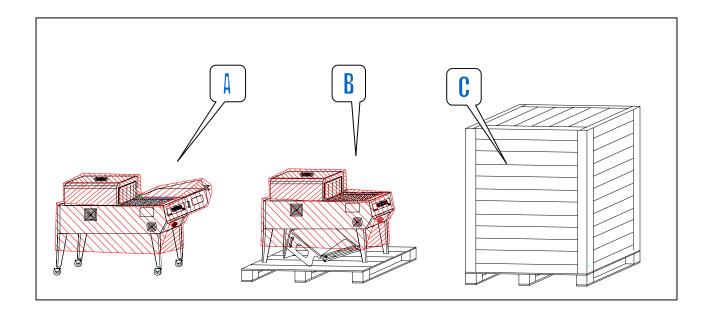
4. INSTALLATION

The under mentioned operations must be carried out only by specialised workers, who are authorised to use fork lifters and to assemble and disassemble packed machinery. Unpacking must be executed in compliance with the rules in force.

4.1 Packing

When the machine is shipped, it can be:
only protected by "bubble" film (see picture no. 4 A)
packed on a wooden pallet and protected by "bubble" film. Picture no. 4 B
packed on a wooden pallet and protected by a wooden box or crate. Picture no. 4 C

Picture 4



4.2 Transport and moving



In order to move the packed machine, a fork lifter, suitable to the machinery weight, has to be used. Pls be sure that no unauthorised people are in the working area, while the packaging is being lifted and moved.

4.2.1 Moving with fork lifter

The forks of the lifter must be set in the centre and opened as much as possible, according to the packaging width. They must get out of the packaging, without any hindrance (see picture no. 5).

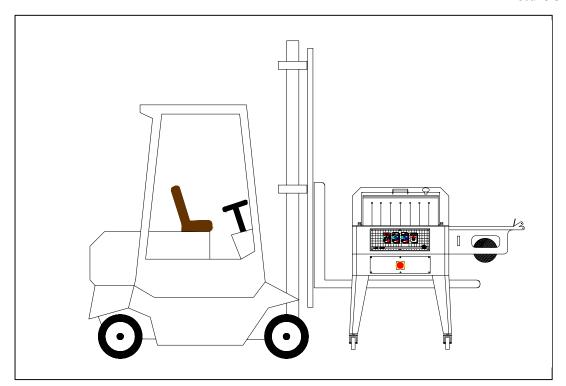
The packaging is lifted and transported to the disassembling area very carefully and through an as smooth as possible way.

UNEXPERIENCED OR UNAUTHORISED PEOPLE ARE NOT ALLOWED TO MOVE THE PACKAGING, AS WELL AS IT IS FORBIDDEN TO USE UNSUITABLE, UNDER DIMENSIONS MEANS TO MOVE THE PACKAGING



Any damage, caused by transport or moving, is not under WARRANTY. In this case, reparation costs are on customer's charges.







4.3 Storage

In case of a long time of inactivity, the machine must be stored cautiously:

- the storage must be in a closed room
- all non painted parts must be covered with grease
- the machine must be protected against pushes and vibrations
- the machine must be protected against humidity and high temperature shifting
- the machine must be protected against any corrosive substance.

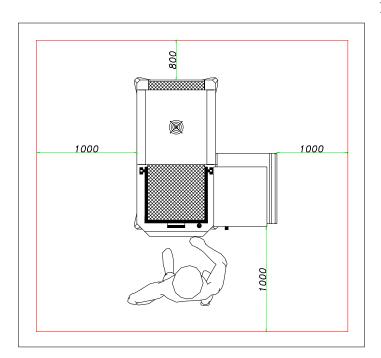
4.4 Preparation

Before installing the machine, a suitable working area must be prepared.

It is extremely important to verify that the floor is strong enough to bear the machine weight.



Picture no. 6



4.5 Machine setting.

The machine setting is up to the customer and the operations depend on the kind of packaging (see paragraph 4.1).



First of all, it is essential to verify the room fits the machine setting

No hindrance should prevent the operator from reaching all access areas of the machine, as well as to get away immediately, in case of danger.

4.6 Packing without pallet.

If the machine is delivered without packing on pallet, is it enough to follow this procedure:

- Remove the stretch and bubble film protection with a suitable cutter
- Stop the wheels with their own break
- Connect the machine to the power supply

4.7 Packing with pallet.

If the machine is delivered with packing on pallet, is it necessary to follow this procedure:

- remove the bubble film protection around the machine (with a suitable tool)
- remove the screws, which fix the machine to the pallet
- get the forks of the lifter under the machine (see picture no. 5)
- lift the machine enough so as to take away the pallet
- when the machine is still lifted up, tighten the support wheels
- place the machine correctly onto the floor
- stop the wheels with their brake
- insert the sliding table of the film trolley



It is strictly forbidden

- to have the setting operation done by unqualified people
- to start using the machine without stopping the wheels with their own brake



Chapter

5-1 Electronic control board

The model 45/N is equipped with a potentiometer control board, which allows to control quickly and correctly all the machine functions.



5-2 Tunnel temperature adjustment

The tunnel temperature is adjusted by a simple linear potentiometer.

The temperature must be adjusted, according to the kind of used film, in order to get a good shrinkage result.

When the potentiometer is turned clockwise, the setting of the temperature value is increased; on the contrary, this value is decreased, when the potentiometer is turned anti clockwise.

The display over the potentiometer shows the temperature value.

When the potentiometer is turned clockwise, at the bottom, on the right side of the potentiometer itself two red lights are on, thus showing, that the two heating groups

are heating up the tunnel.

The temperature settings are indicated on the scale.

5-3 Sealing time adjustment

The sealing time increasing or decreasing allows to cut and seal different kinds of film.

This sealing impulse time is increased, when the potentiometer is turned clockwise and it is decreased, when the potentiometer is moved anti clockwise.

It is an impulse time, because the sealing blade is normally cold and it is heated only when the sealing arm is closed.





Picture no. 8



Picture no. 9

The time of the sealing impulse is indicated by the scale, drawn on the potentiometer. These values are in seconds.

When the red light at the bottom on the right is on, it represents the lasting of the impulse.

As there are plenty of different films in the market, it is not possible to provide detailed specifications for every kind of film. We can only give some indications, as follows:

POLYETHILENE		POLYPROPILENE		PVC	
MICRON	TIME	MICRON	TIME	MICRON	TIME
25	0,9	10	0,7	15	0,9
30	1,1	12	0,9	19	1,1
		15	1,1	22	1,3
		19	1,2		
		24	1,5		

Picture no. 10

5-4 Shrink time adjustment

For a good shrinkage, it is necessary to adjust the product permanence time inside the tunnel.

The potentiometer, represented by picture no. 11, allows to adjust this important parameter.

The time is increased, when the potentiometer is moved clock wise and it is decreased, with movement anti clockwise.

If the product stays for a too long time inside the tunnel, the film, by which it is wrapped, gets too hot and it could burn, thus making a hole.

On the contrary, if the permanence time is too short, there is no shrinkage and the film around the product could be loose or with wrinkles.

The adjustment of this time strictly depends on the kind of used film.

The scale shows values from 0 to 5, for a quick adjustment.

The red light on the right side on shows the shrink time.



Picture no. 11

5-5 Packing cycle

The position of the last potentiometer on the right (see picture no. 12) allows to select the packaging cycle:

position no. 1: the conveyor belt does not move, so it does not take the product into the shrink tunnel. The result is only a sealed, but not shrunk bag

position no. 2: when the sealing impulse is over, the conveyor belt moves and takes the product into the shrink tunnel. The conveyor belt stops according to the set time (see paragraph 5-4), then it takes the product back to the operator. This packing cycle is selected: a) when the product is fragile and, therefore, the operator needs to collect it again in his own hands, after it is packed; b) when there is a hindrance behind the machine (for example, a wall) and it is not possible to evacuate the product from the operator's opposite side

position no. 3: when the sealing impulse is over, the conveyor belt moves and takes the product into the shrink tunnel, where it get shrunk. The conveyor belt continues to move forward and makes the product go out of the tunnel from the opposite side. This packing cycle grants a quicker production speed.

Picture no. 12

