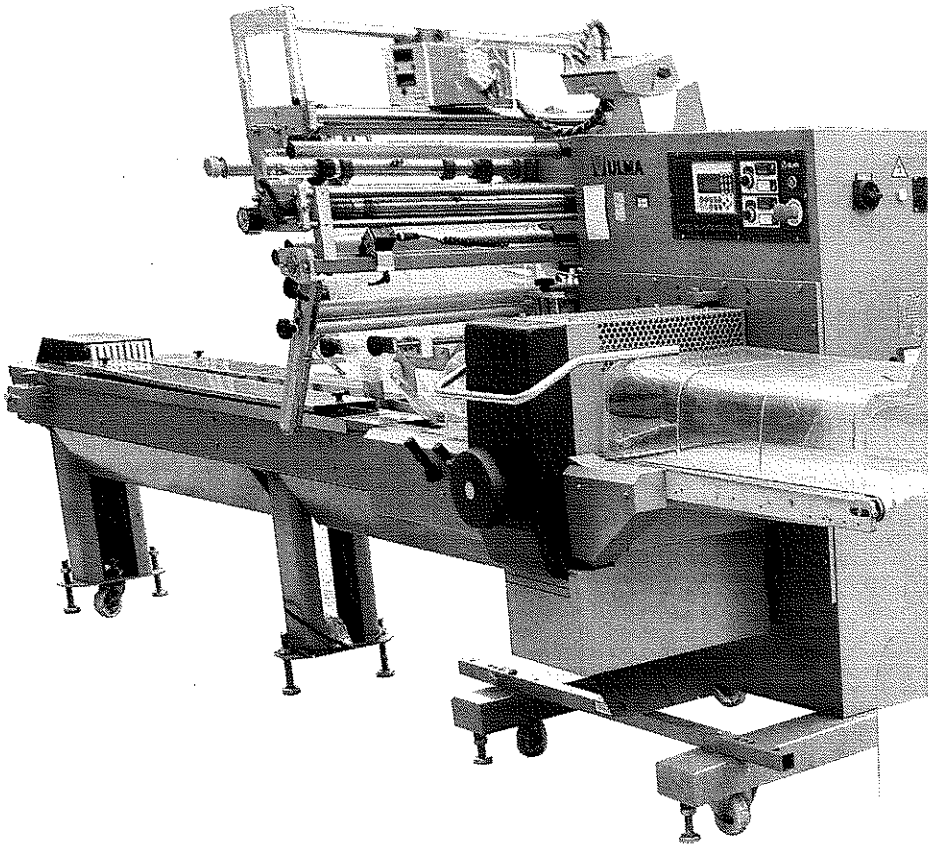
PPN PROCESS PLANT NETWORK

ULMA

FLORIDA E

Horizontal Flow Wrapper



#22331

ProcessPlantNetwork

ULMA
Packaging

INSTRUCTIONS MANUAL
FLORIDA E
(Nº-141104)

CE

Fabricante / Manufacturer / Fabricant:

Ulma Packaging, S. Coop.

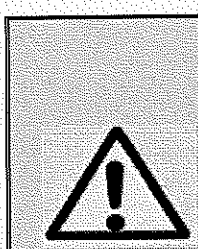
Barrio Garibai, nº 28 - 20560 Oñati (Guipúzcoa) - SPAIN

Tel. (34) (943) 739200 — Fax. (34) (943) 783218

Vendedor / Seller / Vendeur:

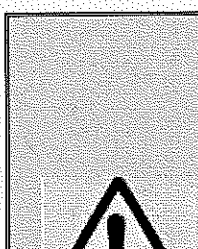
TECHNICAL MANUAL

FLORIDA B&R PP15
PACKAGING MACHINE



WARNING

THE SAFETY OF THE PEOPLE INVOLVED IN OPERATING INDUSTRIAL MACHINERY CAN ONLY BE ENSURED BY MEANS OF A WELL DESIGNED SAFETY PROGRAMME THAT IS, IN TURN, STRICTLY OBSERVED BY THE USERS OF THE MACHINE..



WARNING

THE SERVICING OF THE MACHINE BY QUALIFIED PERSONNEL ONLY IS EQUALLY AS IMPORTANT. ADVISORY GUIDELINES MUST ALSO BE OBSERVED TO ENSURE THAT THE STRICT SAFETY REGULATIONS THAT THIS MANUAL IS BASED ON ARE COMPLIED

SAFETY REQUIREMENTS

AND

RECOMMENDATIONS

WARNING

DO NOT ATTEMPT TO INSTALL, ADJUST OR OPERATE THE MACHINE WITHOUT FIRST READING THE CONTENTS OF THIS MANUAL. DESPITE THE FACT THAT THIS MACHINE IS FITTED WITH SAFETY GUARDS TO PROTECT USERS AND SERVICE PERSONNEL, CARE MUST BE TAKEN WHEN OPERATING, ADJUSTING AND SERVICING IT.

WARNING

THE MACHINE SHOULD BE INSPECTED CAREFULLY AFTER IT HAS BEEN UNPACKED TO CHECK IF IT HAS BEEN DAMAGED DURING TRANSPORT. IF THE MACHINE HAS BEEN DAMAGED IN ANY WAY INFORM THE HAULAGE COMPANY IMMEDIATELY AND DO NOT TOUCH IT UNTIL THE HAULAGE COMPANY AGENT HAS CARRIED OUT AN INSPECTION, WRITTEN A REPORT, ETC.

The requisite safety features have been incorporated into the design of the machine in order to eliminate the risk of accidents whilst it is being used or serviced.

Safety regulations currently in force in the EU have been observed in designing and constructing this machine.

A number of different hazard areas are referred to in this document.

It is strongly recommended that the warnings given in this document are read carefully.

SAFETY RECOMMENDATIONS

CERTAIN SMALL MODIFICATIONS MADE BY THE USER MAY INCREASE THE RISK OF DAMAGE AND/OR ACCIDENTS.

THE FOLLOWING RECOMMENDATIONS MUST BE STRICTLY OBSERVED TO ENSURE THAT THE MACHINE IS INSTALLED, OPERATED AND SERVICED SAFELY:

1) Do not attempt to start or operate the machine until all the safety notices, installation instructions, operating guide and service procedures have been read, fully understood and implemented.

2) Only qualified service personnel can carry out checks, repairs and servicing. In doing so they must follow the instructions contained in this manual and perform lockout/tagout procedures.

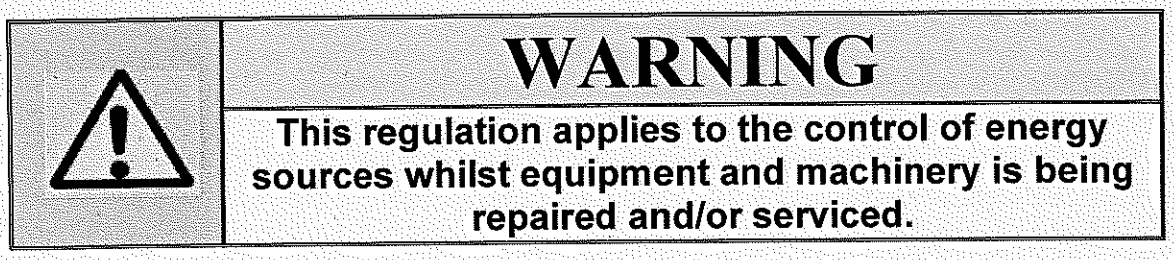
3) Machine operators must never put their hands or any cloths, etc. inside the machine whilst it is operating.

4) Do not put any tools, parts or other objects on top of or inside the machine.

5) Always switch the machine off at the mains before cleaning or servicing it.

6) Always keep the machine clean, lubricated, greased and in good working condition.

LOCKOUT/TAGOUT PROCEDURE



Objective:

This procedure sets out the minimum requirements for the lockout/ tagout of energy isolating devices. It is implemented to ensure that the machine is not connected to any potentially dangerous energy source and that it is locked out and tagged out before maintenance personnel undertake any service or repair work.

Liability:

The corresponding personnel (maintenance and start-up technicians) must be trained in the safety aspects of the lockout procedure. Any technicians that have recently been appointed or hired to carry out such operations must first have received the appropriate training.

Lockout/tagout procedure: preparatory steps:

Identify all the mechanisms and energy sources (switches, valves, etc.) so that they can be easily located when undertaking lockout/ tagout procedures:

1) **Electrical control boxes**: Cut the electricity supply and remove fuses.

2) **Compressed air system**: This must also be disconnected.

3) **Place a tag on the machine** stating that it is not connected to the power supply and is currently out of use.

Lockout/tagout procedure: sequence:

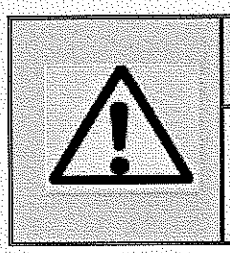
1. Inform all personnel involved that a lockout/tagout procedure is being carried out and the reasons why.

2. Stop the machine by following the usual disconnection procedure.

3. Deactivate the switch and the compressed air system and unplug the machine at the mains.

4. Lock out and tag out the energy isolating devices, assigning a lock or tag to each one. When deactivating a switch, tag and/or lock it. Plugs should also be tagged after being disconnected.

5. After checking that there are no people within close proximity of the machine, and as a means of checking that the power supply has been disconnected, press the start button or other controls to check that the machine does not start.



WARNING

SWITCH THE OPERATING CONTROLS BACK TO "OFF" AFTER PERFORMING THIS TEST.

6. Once the procedures described in the previous sections have been carried out the machine will be locked out and tagged out.

Returning the machine to normal operating mode

1. Once the machine has been repaired, serviced, cleaned or other procedures have been performed, and once it has been checked to ensure it is ready to operate, inspect the area around the machine to ensure there is no one within close proximity of it.

2. Once all the machine tools have been removed, the guards have been repositioned and the technicians and other personnel are at a safe distance, remove the locks and tags, reactivate the fuses and operate the energy isolating devices to restore the electricity supply to the machine.

Steps to be taken if more than one person is involved in the procedure

If more than one person is involved in the procedures described in the sections above, each technician shall lock out and tag out energy isolating devices. Service personnel shall use multiple locks.

When an electrician and a mechanic work together both of them must lock out and tag out and no one, apart from the people placing the tag, can remove it. The machine must not be connected to the power supply while a tag is in place.

Basic guidelines for lockout/tagout procedures

All machines must be locked out and tagged out to prevent the machine starting accidentally or inadvertently and to prevent any possible accidents or damage.

Do not attempt to operate any switch, valve or other energy isolating devices whilst they are locked out and tagged out.

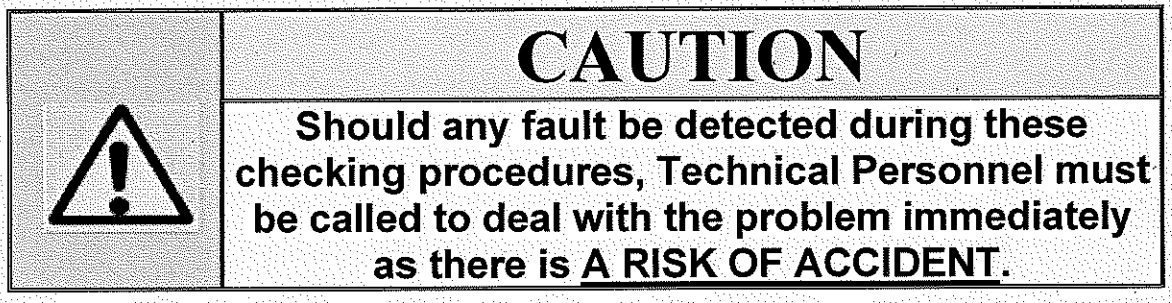
NOISE LEVEL

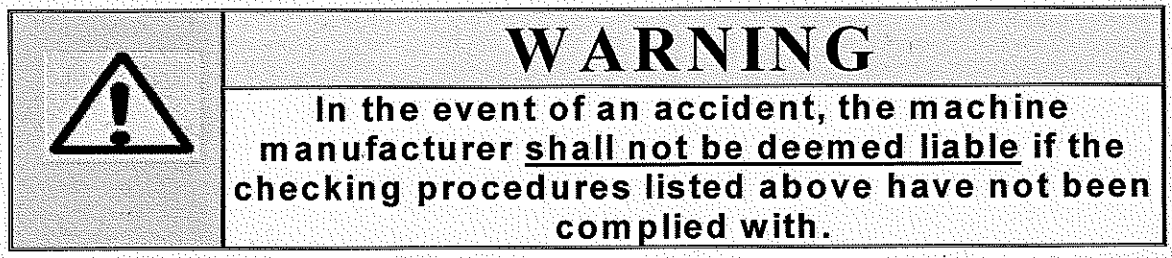
Continuous noise levels in the workplace must not exceed a Time Weighted Average of 70 dBA.

(VERY IMPORTANT)

The following checks should be carried out every week:

- Main switch in proper working order.
- Emergency stop push button in proper working order.
- Micro-sensors on the upper, side, and cleaning safety guards in proper working order.
- Check to ensure that the guards prevent arms and hands from coming into contact with danger areas while the machine is operating.
- Check to ensure that the guards are properly secured to the machine and do not present any danger for users.
- Check to ensure that the electrical control box, push button and inspection box covers are all properly closed.





INDEX

1.-DO'S AND DON'TS

1.1.-BEFORE WORKING WITH MACHINE

1.- Read and understand this entire manual
2.- Instruct operators correctly
3.- Follow transportation and installation instructions
4.- Check electrical and pneumatic connections

1.2.-BEFORE BEGINNING PRODUCTION

1.- Check that all guards are closed
2.- Make a maintenance and cleaning schedule.
3.- Only use original spare parts.
4.- Keep your stock of spare parts up to date.
5.- If you have any doubts call your authorized distributor or the machine's manufac turer.

1.3.-DON'T

1.- Never cancel the safety devices
2.- Never clean the machine when it is in production or running
3.- Never over charge the machine
4.- Don't use mobile phones inside the control cabin.
5.- Do not work with productions over than those required or recommended by ULMA Packaging (with frequent stops).
6.- Do not do anything if you are not sure of the consequences.
7.- Do not try to change the machine's program, if you are not licensed to do so.
8.- Don't work with high voltages or inside the electrical cabinet if you do not have proper training or the necessary knowledge for said work.

1.4.-POTENTIAL RISK POINTS

These are the most dangerous spots of this machine.

1.-SPACE BETWEEN THE CART BLADES AND CHAIN :

All fingers are at risk when inserted between the blades or inserted in the space between the cart base while it is operating.

2. SPACE BETWEEN THE FEED CART AND MOLD

All fingers are at risk when inserted in the space between the last blade and the mold while the cart is operating.

3.- UNWINDING ROLLERS:

Is an area especially dangerous for fingers if you insert your fingers between the rollers while they are working. Do not try to insert film between the rollers when the machine is working or when pressing the start button.

4.- LONGITUDINAL SEALING ROLLERS

There is a potential risk for fingers when you remove the two plates located under the group of sealing rollers. The rollers are hot and there is a dangerous blade on the las pair of rollers.

While the machine is operating there is high temperatures in both top plates located over the group of longitudinal sealing rollers.

Once the machine is off or you press the emergency stop button the sealing roller heaters are shut off but the rollers continue to be hot for a long period of time.

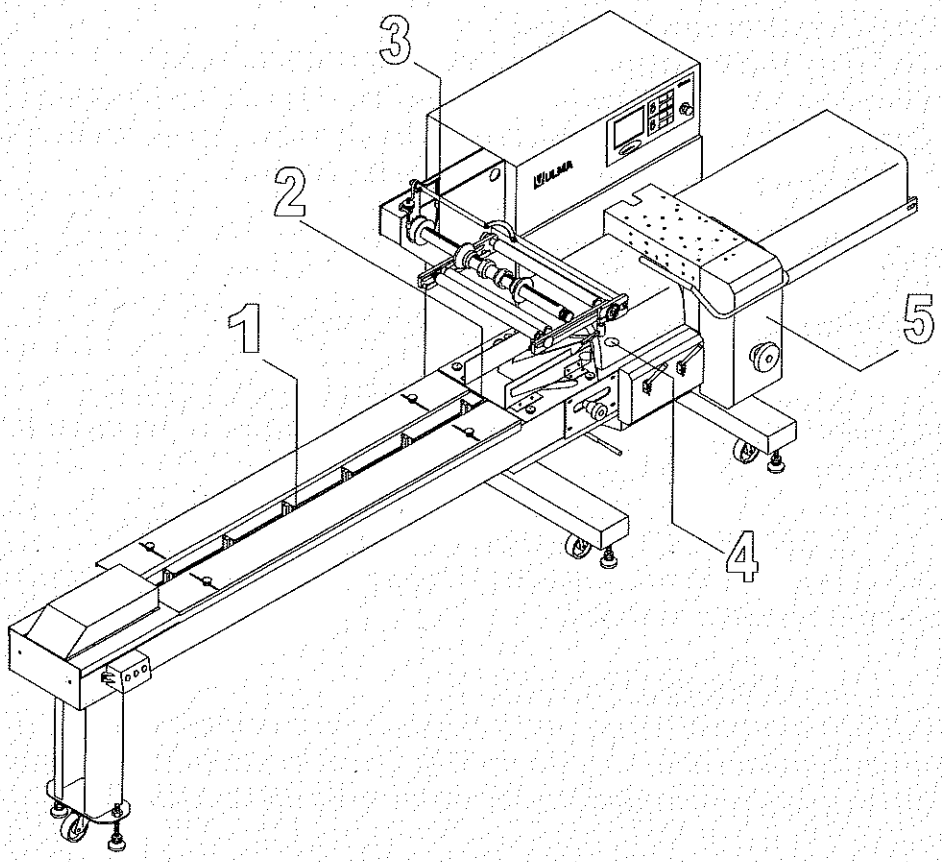
5.- CROSS-SEALING HEAD (GROUP OF CLAMPS)

There is a potential risk for hands during the movement of the clamps and due to the high temperature during production. Do not insert your hands in this device while the machine is running.

Once the machine is off or you press the emergency stop button the clamp heaters are shut off but the clamps continue to be hot for a long period of time.

6.- OTHER ELEMENTS

Once the machine is shut off or the emergency stop is pressed the elements that are controlled pneumatically can close, which makes them a potentially risky area.



2.-INTRODUCTION

2.1.-OVERVIEW

The horizontal packaging machine, FLORIDA, is the base model for the ULMA flow-pack range.

Its design and manufacturing process has been based on the quality of its construction, reliability, easy handling, hygiene and ergonomics, ensuring a final product that answers to a wide range of applications.

The result is an ideal machine to satisfy the most demanding needs of the small and medium businesses.

TECHNICAL CHARACTERISTICS

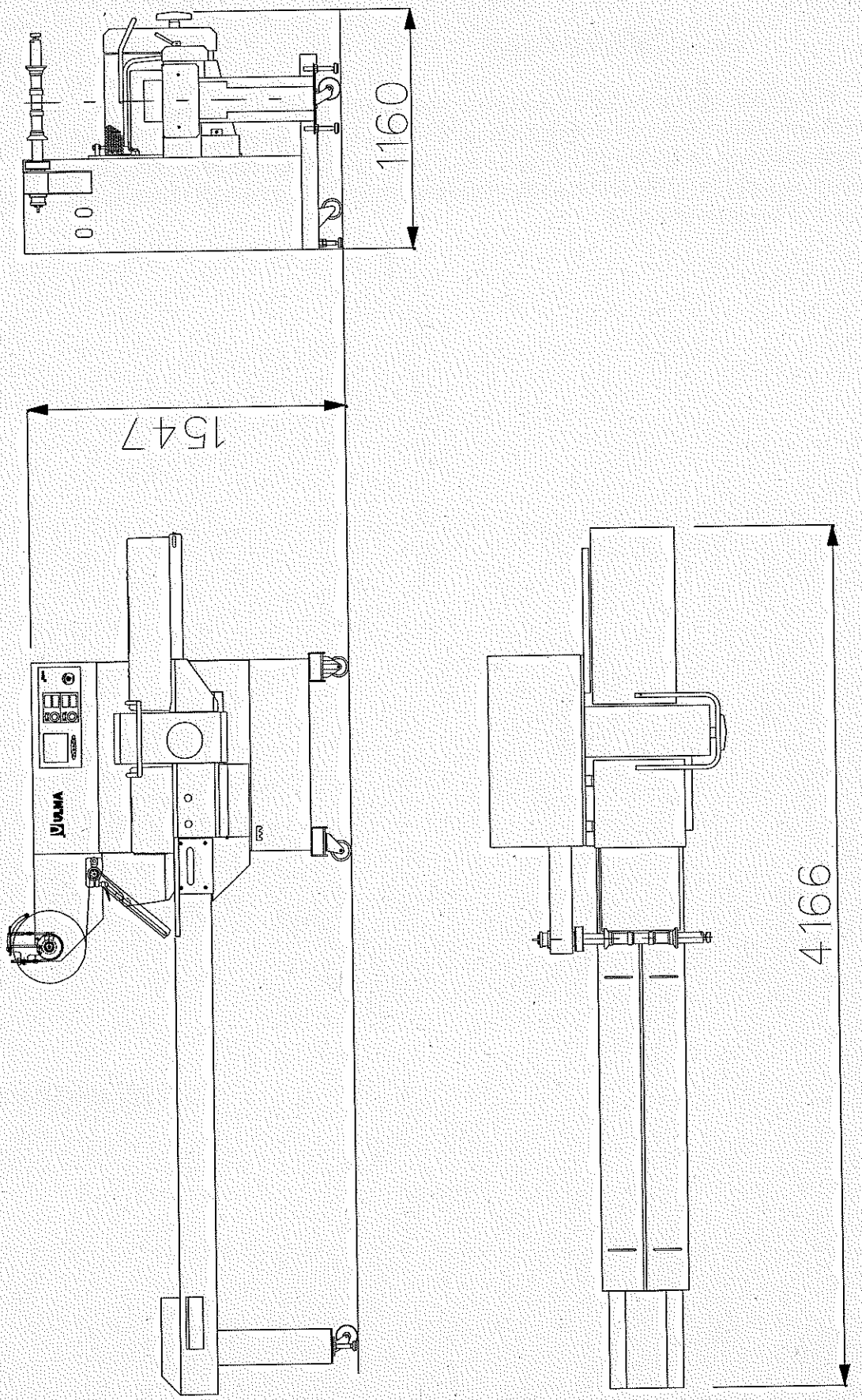
- Vertical plate construction for maximum hygiene and machine cleanliness.
- Operating direction from left to right.
- Rotating cross-sealing clamps.
- Three pairs of film longitudinal feed, sealing and folding rollers.
- Self-centering motorised reel holder with brake.
- Feed cart, 2 m long.
- Adjustable forming mold.
- Sets format length from LCD screen (continuous version).
- LCD to set machine parameters, diagnostics and machine status data.

MAIN OPTIONS

- Different types and lengths of feed carts (continuous version).
- Photocell for printed film centering (continuous version).
- Double self-centering reel holder.
- Machine with left version.
- Stainless steel for humid environments.

CHARACTERISTICS		MACHINE MODEL	
		FLORIDA	
Product Dimensions (Maximum and minimum dimensions cannot be combined into one machine) (Other dimensions will be made upon recommendations)	Clamp Diameter	***Diameter 144 mm.***	***Diameter 200 mm.***
	Bag Length	90 – 450 mm.	125 – 265 mm.
	Product Length	60 – 350 mm.	90 – 500 mm.
	Product Width	10 – 250 mm.	10 – 250 mm.
	Product Height	5 – 70 mm.	5 – 70 mm.
PRODUCTION (Maximum and minimum dimensions are not compatible with maximum production)		Up to 150 packs/min – 25 m/min of film (According to product characteristics and dimensions and type of film to use)	
PACKAGING MATERIAL (FILM)		Thermo-sealable films: BOPP (bio-oriented polypropylene), PVC, Polyester, films with cellulose/ cold-sealable films	
FILM WIDTH		500 mm. (700 mm. Option)	
MAXIMUM REEL DIAMETER		300 mm	
MANDRIL DIAMETER		76 mm. – 3"	
ELECTRICAL DATA	VOLTAGE	Three-phase 230 / 400 V. ±10 % + Neutral + Ground – 50 / 60 Hz	
	CONSUMPTION	4 kW / 8 Amp. – 380 V – 14 Amp. / 220 V. (Standard version)	
PNEUMATIC CONSUMPTION		50 l/min 6 Bar. (As per version and options)	
APPROXIMATE WEIGHT		700 Kg.	
AIR NOISE EMITTED RUIDO AEREO EMITIDO (The air noise emitted can vary according to the options installed in the machine **never** passing the value shown in this table.)		70 dB(A)	

2.2.1-MEASUREMENTS AND DIMENSIONS

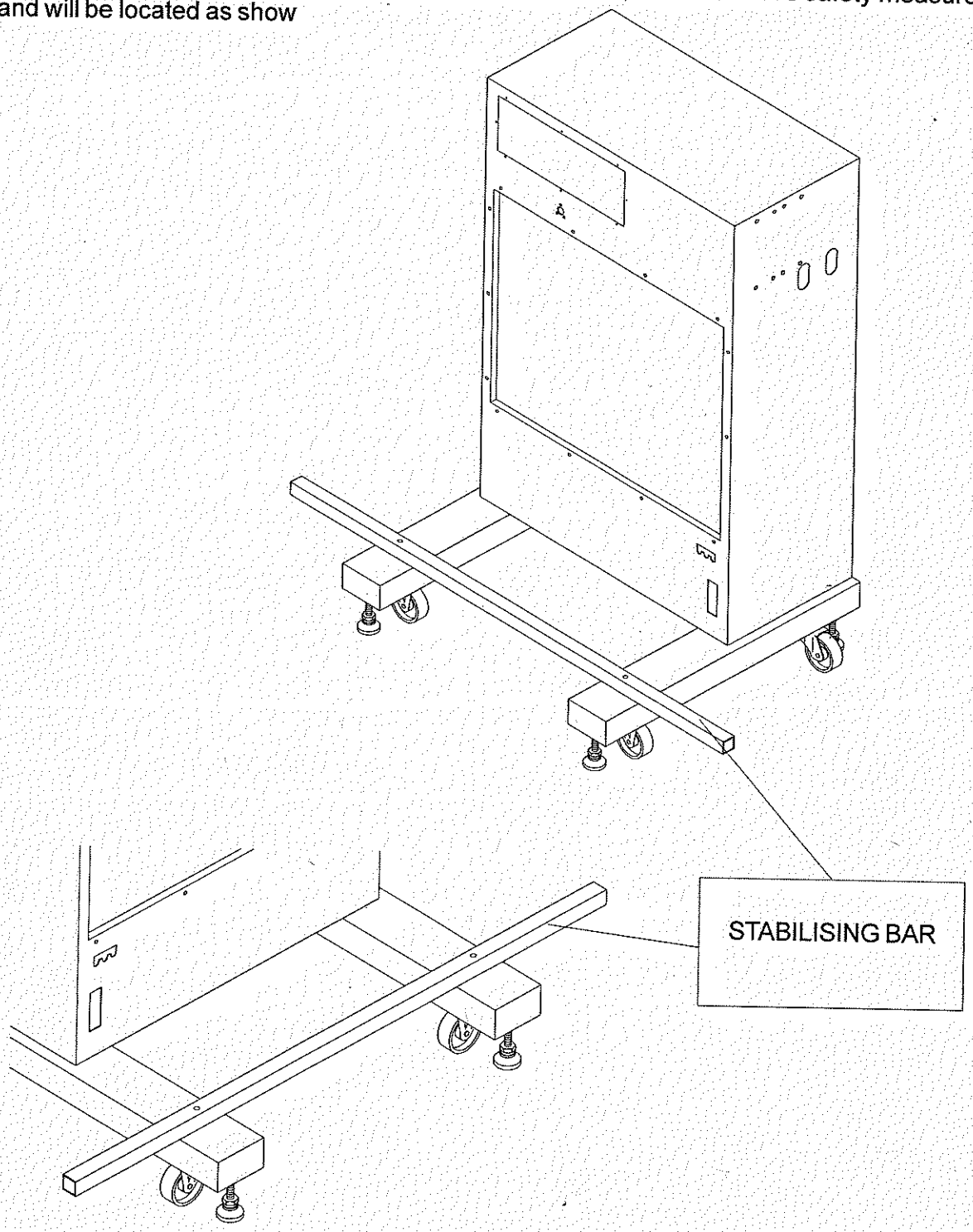


Florida machine's measurements and dimensions, standard version

2.3.-MACHINE TRANSPORTATION

2.3.1.-STABILISING BAR

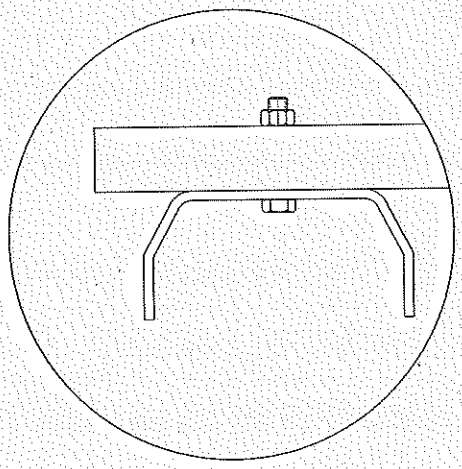
For safety reasons when raising the machine to transport it, due to the decompensation of its center of gravity, a bar has been used, tied over the legs of the frame to balance its center of gravity and avoiding unforseen movements; the bar is painted a color that is determined by standard RAL-1021, as a distinctive safety measure and will be located as show



2.3.2.-BAR TIE

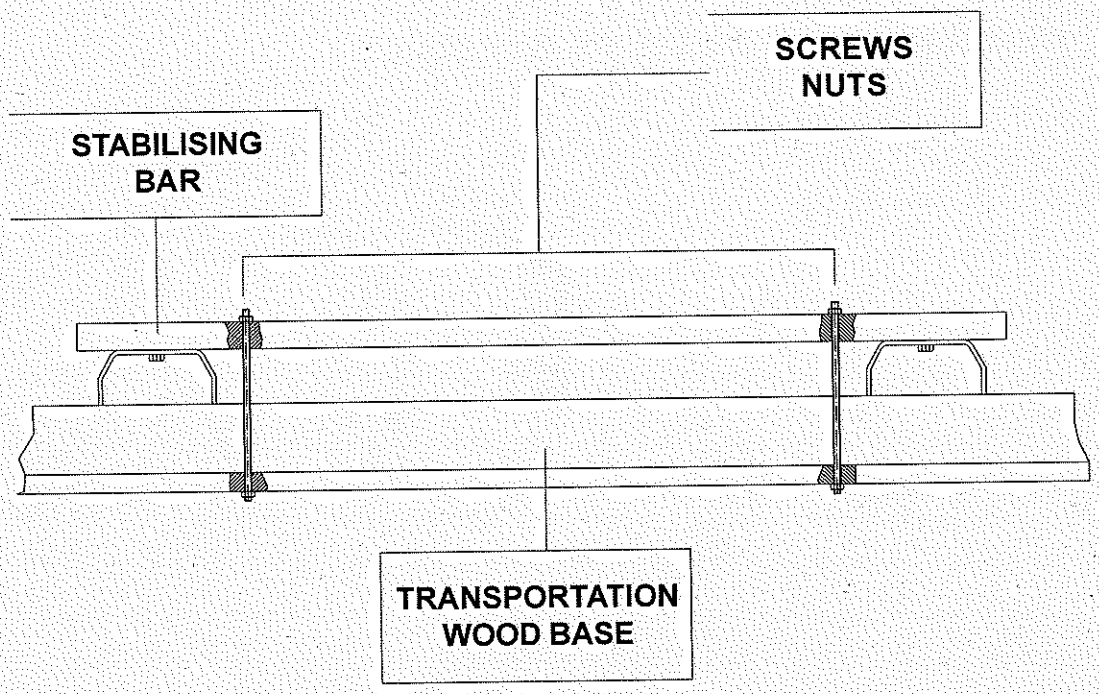
2.3.2.1.-TIE FROM BAR TO FRAME

The bar will be tied to the legs of the frame with the use of a screw-nut system, so that the screw is activated from the bottom of the legs and is moved upwards. A screw and nut on each leg, as shown below:



2.3.2.2.-BAR TIE FOR TRANSPORTATION

When packaging; and for the same reasons shown in point 1.3.1; two anchoring points are included from the same bars to the wooden base of the package; using studs, with nuts, they are tied over the bars and under the wooden base, as shown in the figure:



2.3.3.-SECURITY RECOMMENDATIONS

Continuously a series of recommendations dedicated to guarantee the security and the responsible users' integrity of carrying out the transport of the machine will be indicated.
In a same way the recommended methods of transport will be indicated.

2.3.3.1.-SECURITY MAIN RECOMMENDATIONS

1.-PREVIOUS CHECKS

1.1. Check that all the pneumatic hoses and electric connections are disconnected.

1.2. Check the doors and all covers of the transmissions of the frame are correctly closed.

1.3. Check the door of the electrical cabinet is correctly closed.

1.4. Check that there is not any loose element.

2. -FOLLOW THE RECOMMENDED METHODOLOGY TRANSPORTS EXPOSED IN THIS MANUAL

3. -KNOW THE NORMATIVE OF SECURITY OF ALL ELEMENTS AND MACHINERY USES IN THE TRANSPORT OF THE MACHINE

4. -INSTRUCT THE INVOLVED PERSONNEL APPROPRIATELY IN THE WORKS OF TRANSPORTS

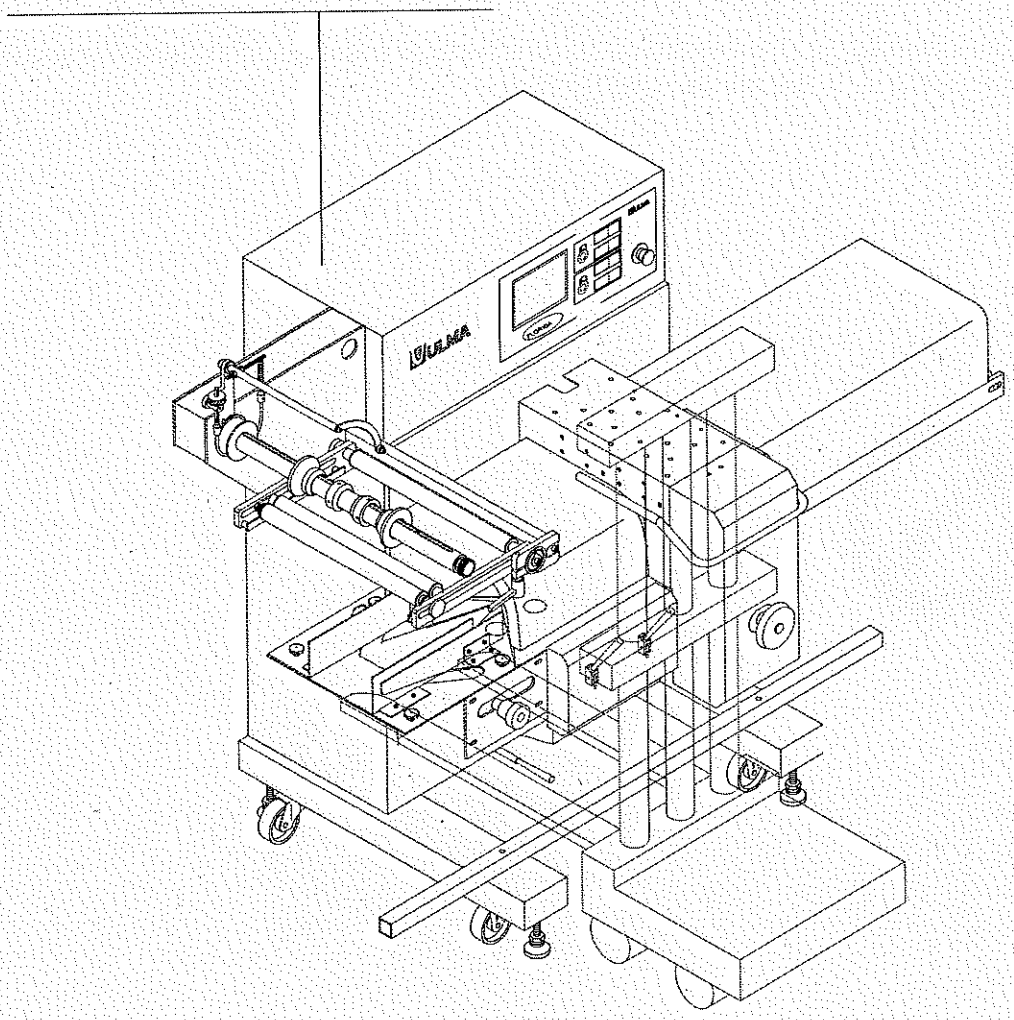
5. -USE ONLY HOMOLOGATED ELEMENTS

4. -DISASSEMBLE THE (ONLY IF IT'S NECESSARY)

2.3.4.-TRANSPORTATION PRECAUTIONS

The machine is equipped with the bar that is described in the previous section, so that when it is transported, the lift truck's frame and said bar will be supported; this way we avoid any unwanted swinging when lifting the machine.

TRANSPORTING THE FRAME



Mounting this bar will be **"MANDATORY"** to move the machine from one place to another.

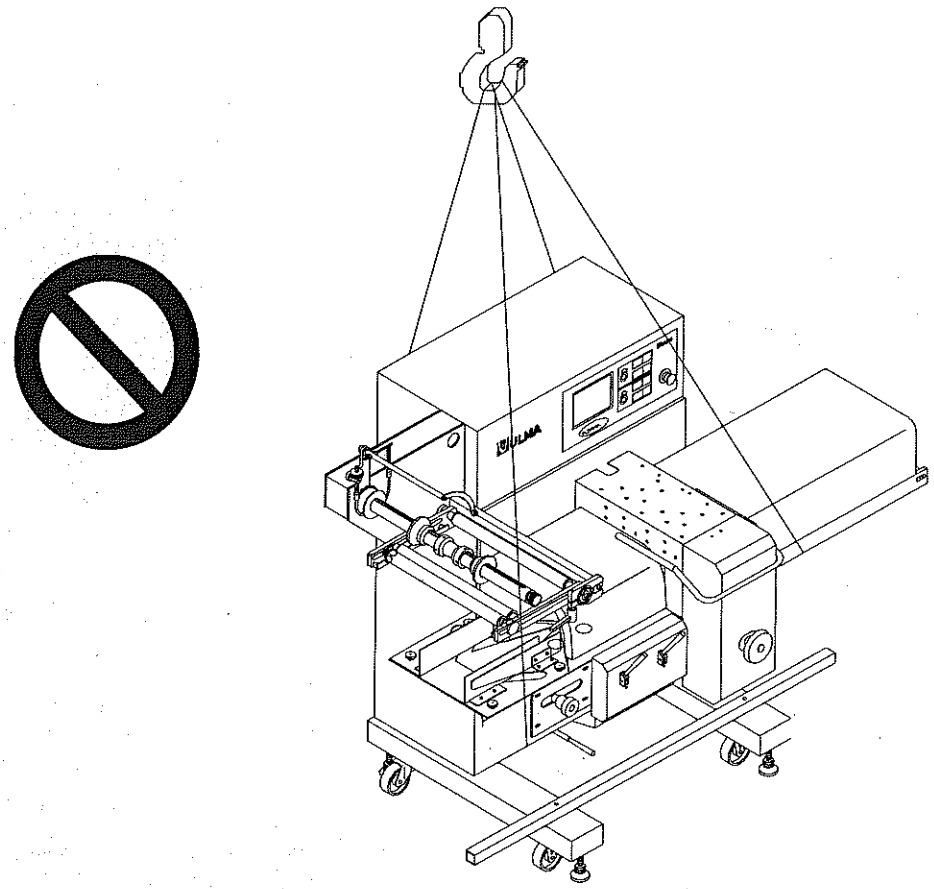
ULMA Packaging is not responsible for damages that may occur on the machine as a result of not using this bar when being moved.

2.3.5.-USING OTHER ELEMENTS TO TRANSPORT THE MACHINE

ULMA Packaging recommends not using any other elements than those described iin point 2.3.4, such as belts hooked onto a crane to transport the machine from one place to another or other means of transportation.

Relocating the machine with the use of belts can cause serious damages in the machine's structural elements, such as the guards, transmissions, axles, plates. Also, this type of transportation can unbalance the machine while being moved making it possible to drop the machine and cause serious damages to its structure or other machine elements and place the involved personnel in grave danger.

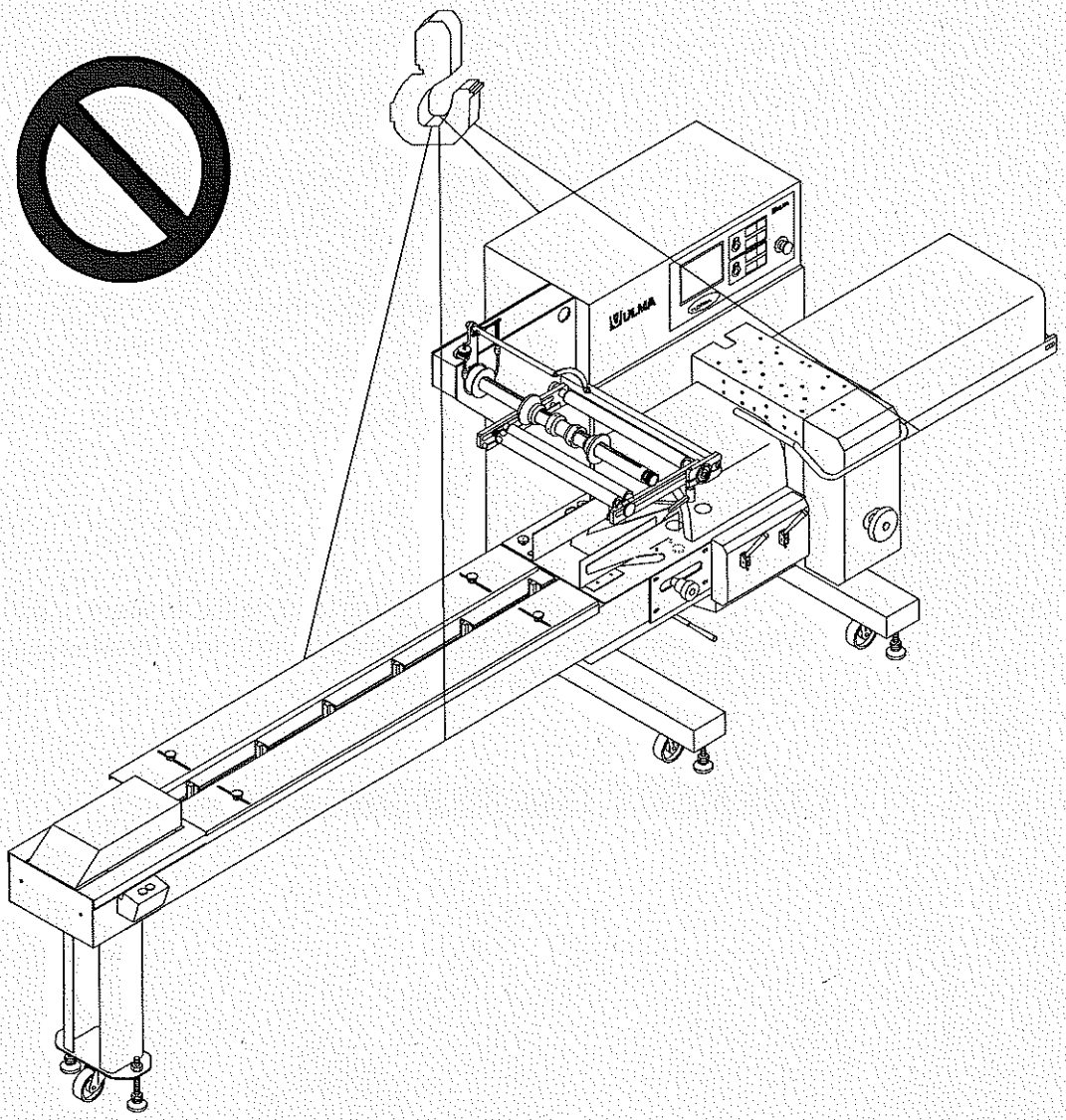
ULMA Packaging is not responsible for structural damages and personal injuries that may be caused due to inadequate transportation.



ATENCIÓN

ULMA PACKAGING RECOMMENDS DON'T TRANSPORT THE MACHINE LIKE SHOWS THE UPPER FIGURE
SERIOUS DAMAGES CAN TAKE PLACE IN THE STRUCTURE OF THE MACHINE

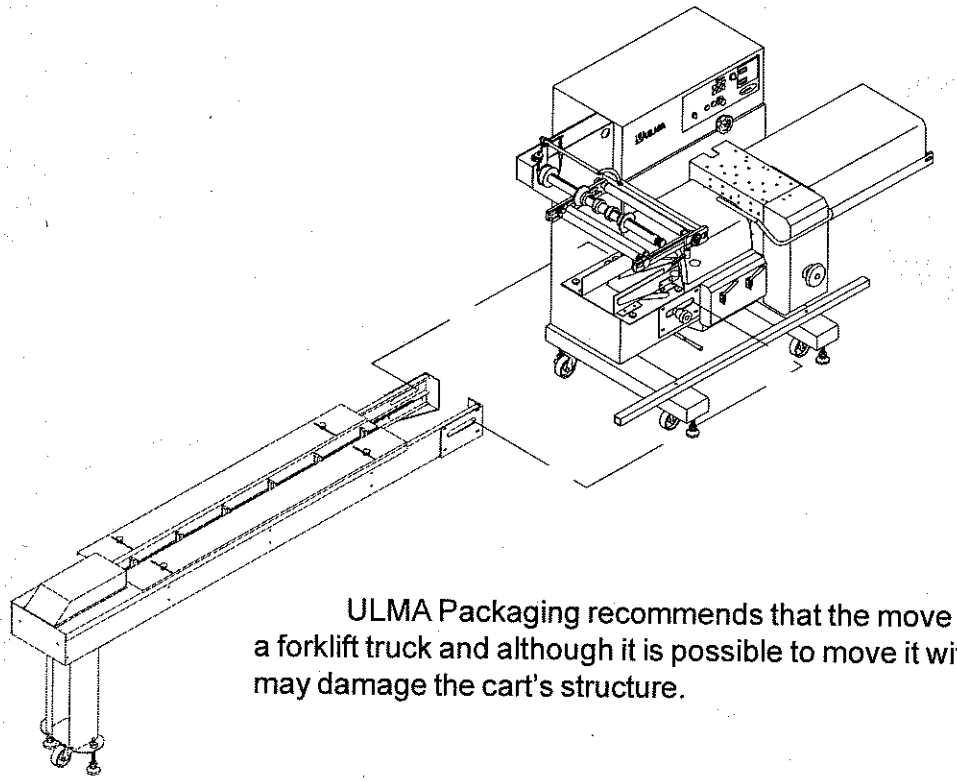
TRANSPORTATION NOT RECOMMENDED



	ATTENTION
	ULMA PACKAGING RECOMMENDS DON'T TRANSPORT THE MACHINE LIKE SHOWS THE UPPER FIGURE **SERIOUS DAMAGES CAN TAKE PLACE IN THE STRUCTURE OF THE MACHINE**

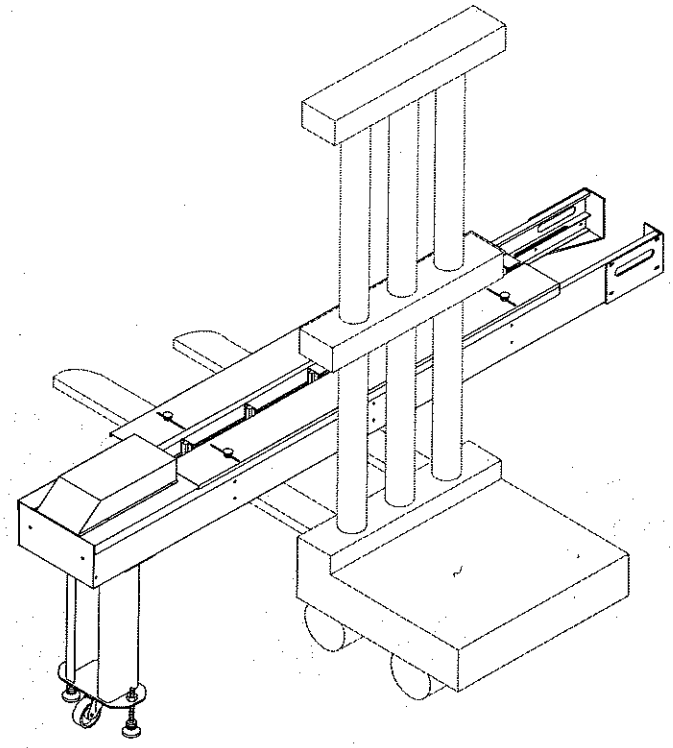
2.3.6.-TRANSPORTING THE FEED CART

The first step is to loosen the frame cart, since this way the feed cart can be transported more safely.



ULMA Packaging recommends that the move be made with a forklift truck and although it is possible to move it with a crane it may damage the cart's structure.

CORRECT TRANSPORTATION



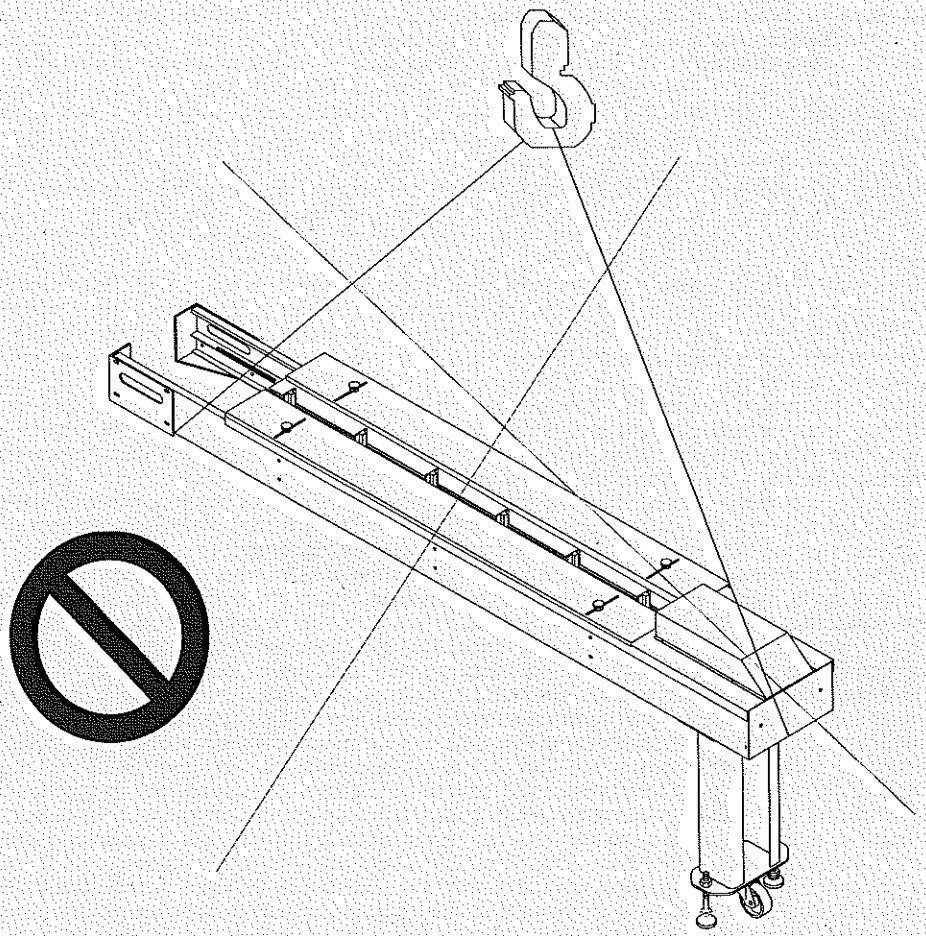
2.3.7.-USING OTHER ELEMENTS TO TRANSPORT THE MACHINE

ULMA Packaging recommends not using any other elements than those described iin point 2.3.6, such as belts hooked onto a crane to transport the machine from one place to another or other means of transportation.

Relocating the machine with the use of belts can cause serious damages in the machine's structural elements, such as the guards, transmissions, axles, plates. Also, this type of transportation can unbalance the machine while being moved making it possible to drop the machine and cause serious damages to its structure or other machine elements and place the involved personnel in grave danger.

ULMA Packaging is not responsible for structural damages and personal injuries that may be caused due to inadequate transportation.

TRANSPORTATION NOT RECOMMENDED



ATTENTION

ALWAYS FOLLOW THE ULMA Packaging GIVEN RECOMMENDATIONS OF SECURITY
CHECK THE SECURITY NORMATIVE OF THE USED ELEMENTS IN THE TRANSPORT OF THE MACHINE

2.4.-MACHINE SIGNAGE

In following all of the symbols that are found on the machine are detailed, in order for the machine operator to be able to familiarize himself with their meaning:

2.4.1.-BOARDS MARKED CE

On the board shown in Figure 1, the year of fabrication, model and number of the machine is listed, as well as general electrical information.

On the plate that is shown in figure 2, it makes reference to the compliance with the norm regarding ISO 9001 and ISO 140001 quality certificates.

The plates that are shown in Figure 6 are to identify the machine, and to facilitate consultations with Customer Service.

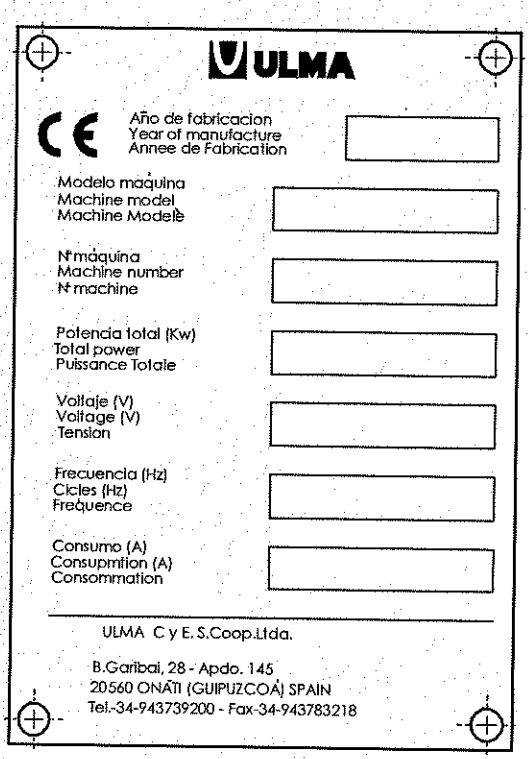


Image 1

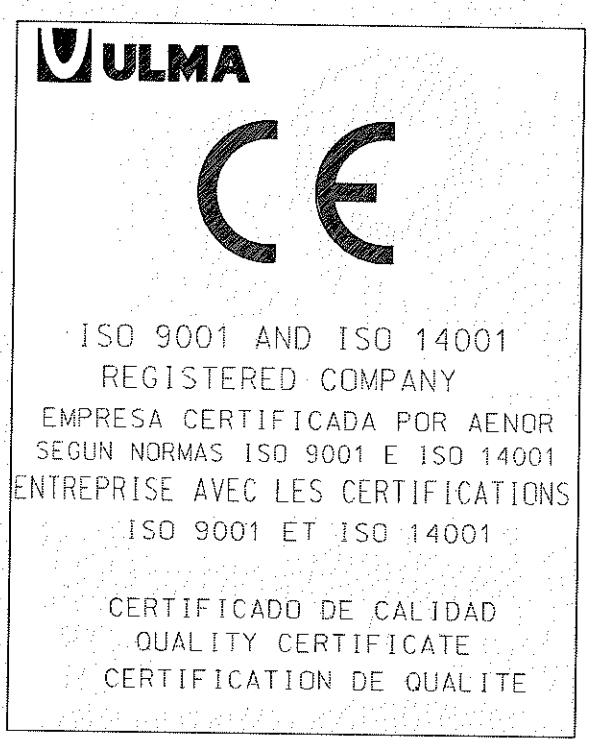


Image 2

2.5.-UNWINDER SPOOL STICKERS

Figure 3 and 4 shows the normal development of the film.

As optional features are added, the length travelled with vary. In order to carry out the correct unwinding of the film on the unwinder spools, the sticker located on the machine should be reviewed. This sticker will be placed on the reel support of the machine.

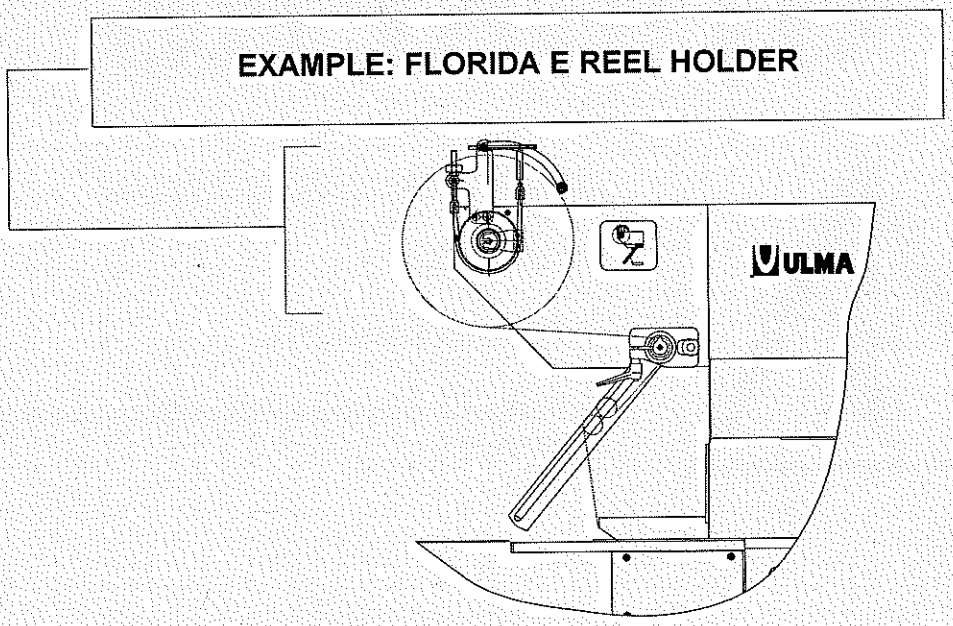


Image 3

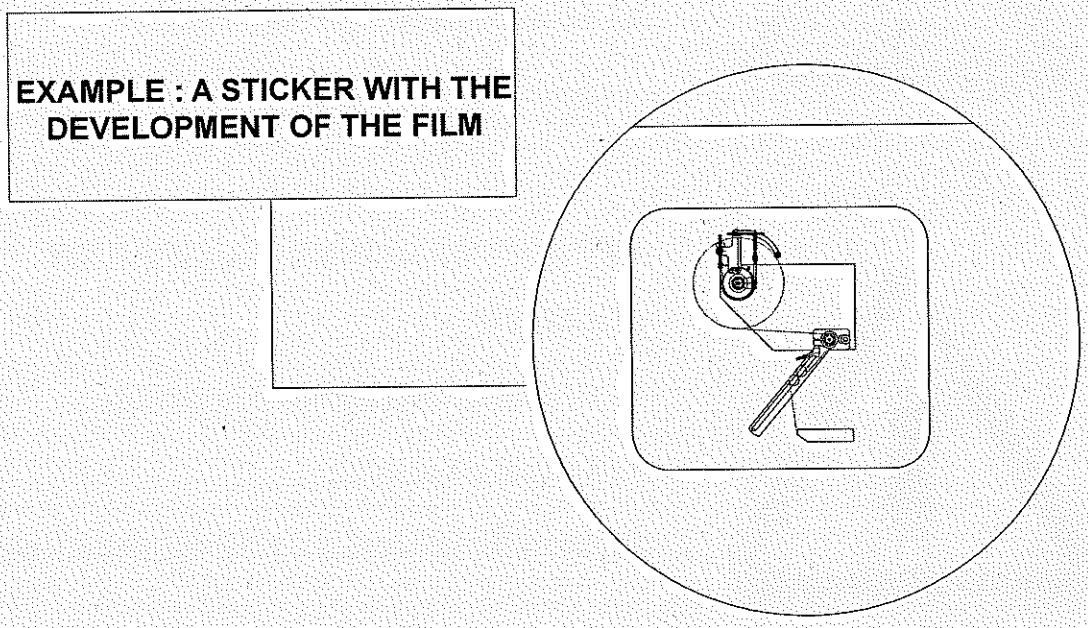
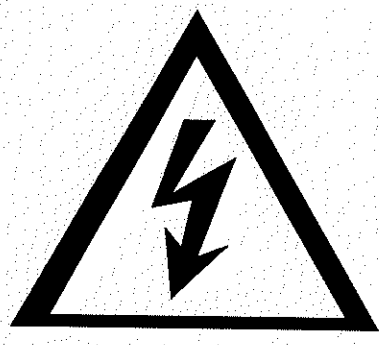


Image 4

2.6.-OTHER SIGNAGE

In following other kinds of signage that might be found on the machine will be indicated. Together with each sign, its possible location and meaning of said signage is also indicated.

STICKERS



DESCRIPTION: ELECTRICAL RISK

LOCATIONS:

1.- Electrical cabinet door.

2.- Areas with electrical parts with the risk of possible discharges

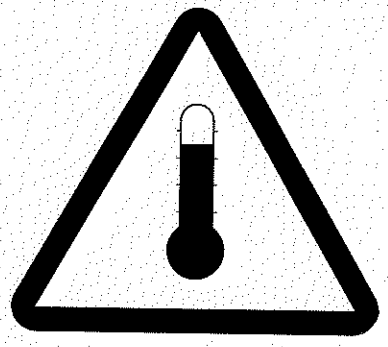
DESCRIPTION: WARNING DANGER

LOCATIONS:

1.- Exit belt area.

2.- Welding rollers group device area.

3.- Other areas of risk.



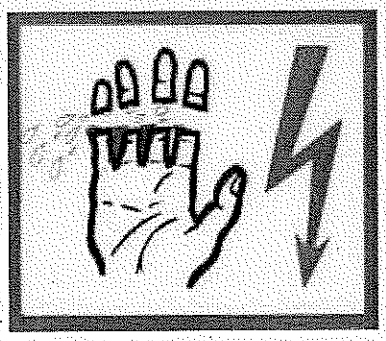
DESCRIPTION: DANGER TEMPERATURE

LOCATIONS:

1.- Transversal welding clamp device area.

2.- Sealing rollers subset

3.- In general hot areas and with high temperatures.



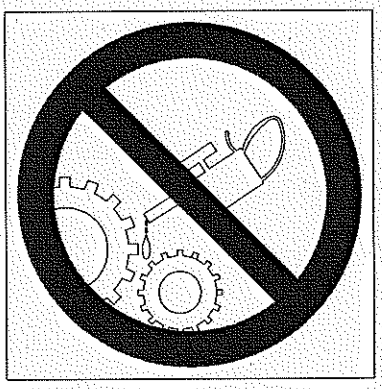
DESCRIPTION:

PERSONAL DAMAGES

LOCATIONS:

1.- Crimp Jaws subset.

2.- Sealing rollers subset.



DESCRIPTION:

GREASING OF MACHINE WHILE IN USE IS PROHIBITED

LOCATIONS:

1.- Transmissions frame door.

DESCRIPTION:

THE HANDLING OF PARTS BY UNAUTHORISED PERSONNEL IS STRICTLY PROHIBITED

LOCATIONS:

1.- Transmissions frame door.

3.-INSTALLATION AND CONNECTIONS PRIOR TO CONNECTING

Before beginning to work we recommend that you do some simple initial tests prior to connecting.

3.1.-MACHINE LOCATION

The machine should be located in a way that it offers easy access to all its parts.

At the front and back there must be a minimum space of 1 meter so as to allow access to the machine for maintenance. (Image 1)

For product output or for the eventual connection of an optional conveyor, a space of 1.5 meters is necessary. (Image 1)

The feed area of the machine must be free of obstacles, to facilitate product feed. (Image 1)

3.2.-BALANCING MACHINE

For the proper functioning of the machine, it will be placed over a properly-leveled surface, in order to reduce the vibrations to the minimum and avoid premature wearing of the parts.

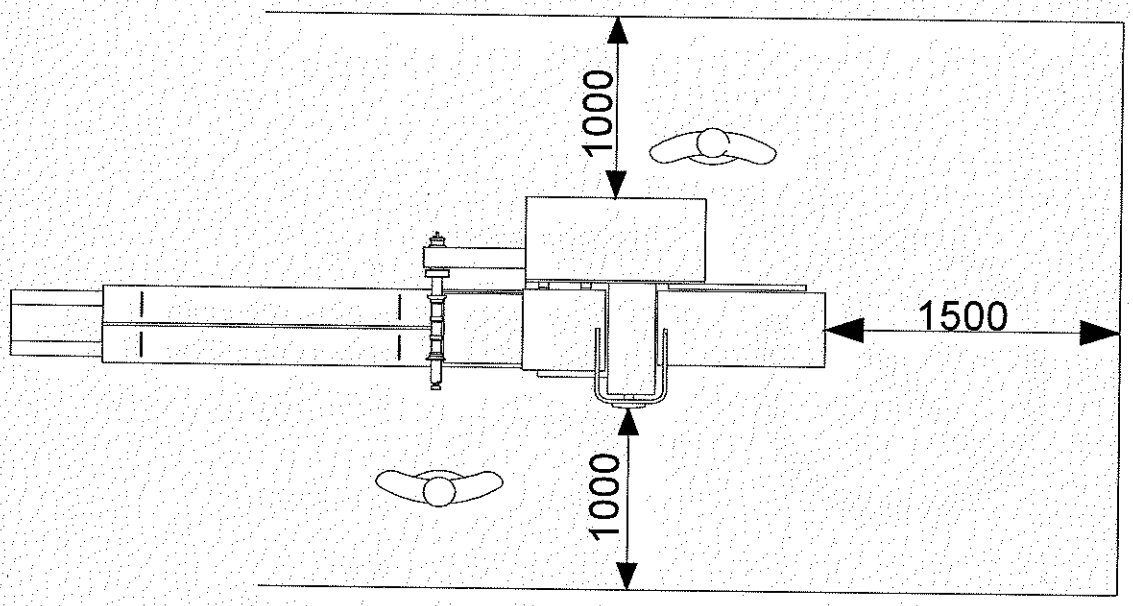


IMAGE 1

3.3.-ELECTRICAL SUPPLY (GRID)

It is convenient and recommended to do a simple test that the grid's voltage matches the technical specifications of the machine. These specifications are indicated on the machine's ID plate.

Likewise, if the machine is connected to a voltage of 380 V the existance of the NEUTRAL and GROUND connections will have to be tested in the supply power grid. If, on the contrary the connection is made with a voltage of 220 V, then NEUTRAL will not be used

3.4.-MACHINE'S POWER SUPPLY

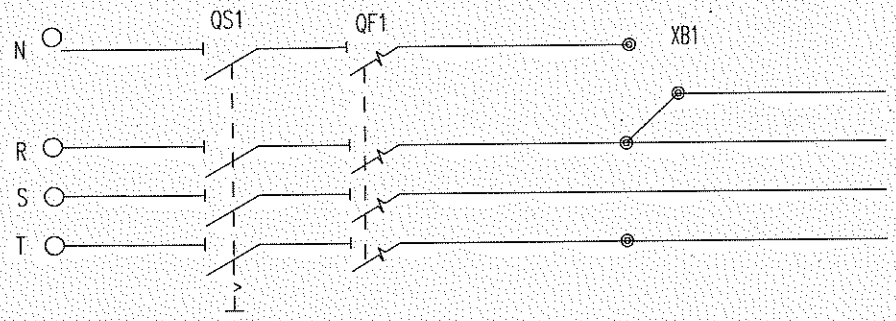
The machine is equipped with a 4 x 2.5 electrical hose plus grounding, for 220 V and 380 V voltages. The total power absorbed is approximately 2.5 Kw (according to the versions and options included in the machine).

For the different supply voltages (Three phase, 220 V or 380 V), the connection of the terminals will be made by following the indications stipulated in the electrical plans attached with this user manual. The plan we are referring to is the one named «MAIN ENGINE CONTROLAND SUPPLY».

As a general norm we must meet the following indications:

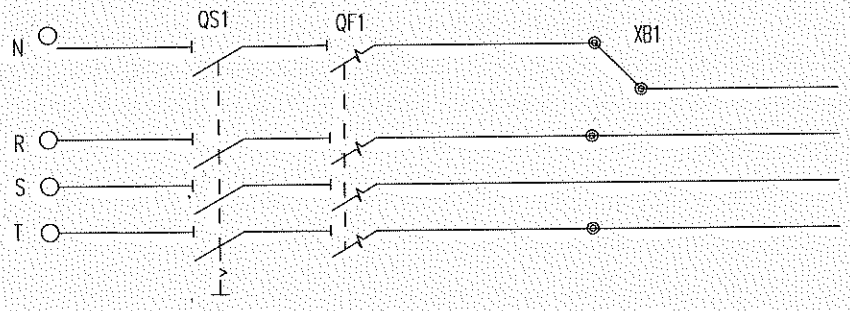
MACHINE ONE 220 V GRID.

The XB1 terminal must be connected to the (R) terminal



MACHINE ONE 380 V GRID.

The XB1 terminal must be connected to the (N) terminal

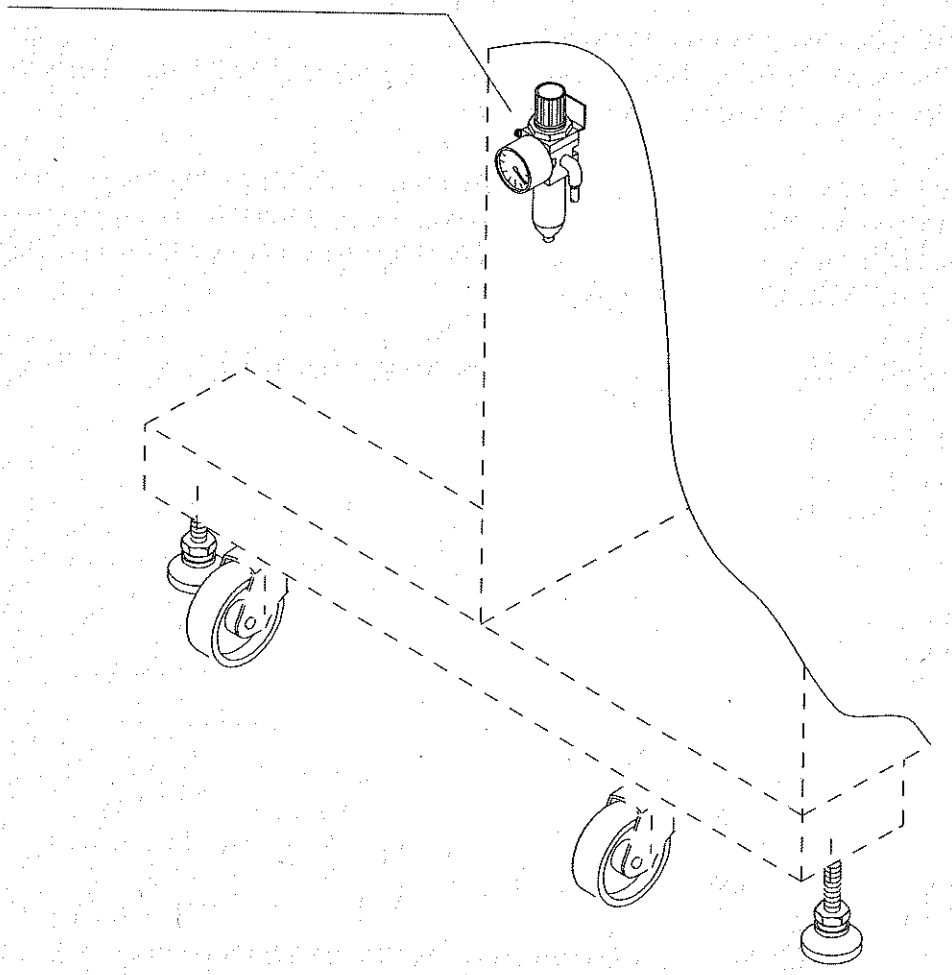


3.5.-PNEUMATIC AND GAS INSTALLATION

The machine has a series of pneumatic elements for which reason it shall have an air intake with a pressure with 6 bars.

The air input the machine uses is an RA030 - 1/4 (SMC) male pin and a "Y" KQU06-00 (SMC) pin

MALE PIN



In case there is a need for GAS due to the installation of some special device, the pertinent connections will be made by ULMA Packaging according to the device, as well as the technical specifications, type of gas and everything that relates to the specific needs that are deemed necessary.

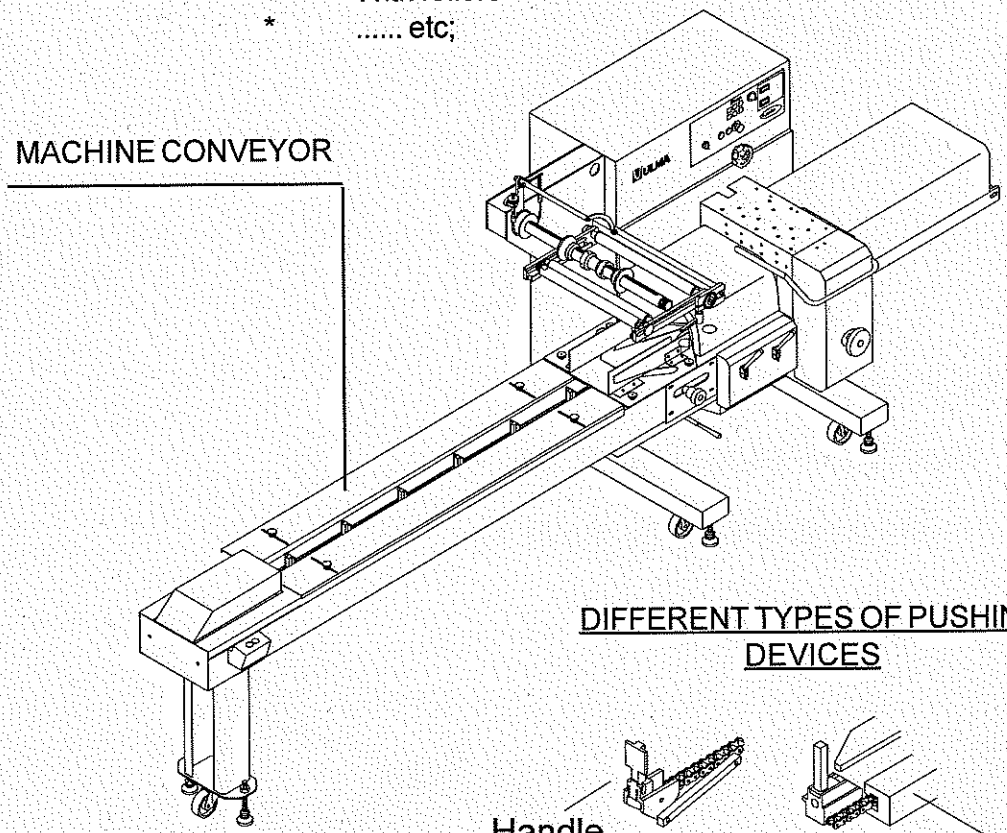
4.-MACHINE PARTS

4.1.-CART

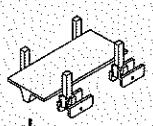
System used to insert the product in the film tube. ULMA Packaging has a wide range of carts with different thrust and measurement systems.

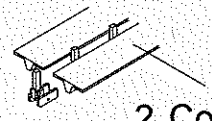
CART TYPES:

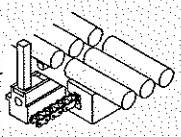
* With blades (In different lengths)
* With conveyor and blades (In different lengths)
* With blade and persian
* With rollers
* ..... etc;

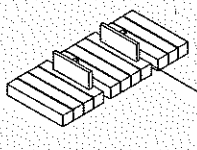


DIFFERENT TYPES OF PUSHING DEVICES



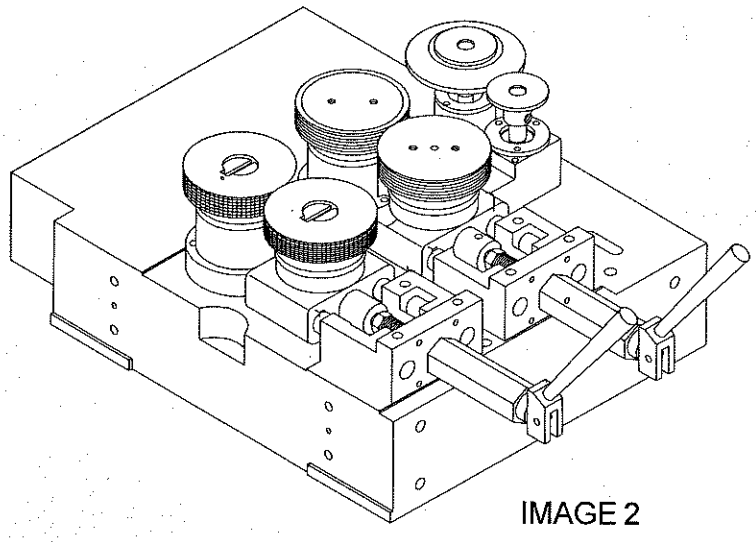






4.2.-GROUP OF ROLLERS

LONGITUDINAL sealing system with product and film feed or pull. The system used is the TOP REEL with which the seal is made below the product.



GROUP OF SEALING ROLLERS

IMAGE 2

TYPES OF OPENING

MANUAL OPENING (IMAGE 2)

PNEUMATIC OPENING (IMAGE 3)

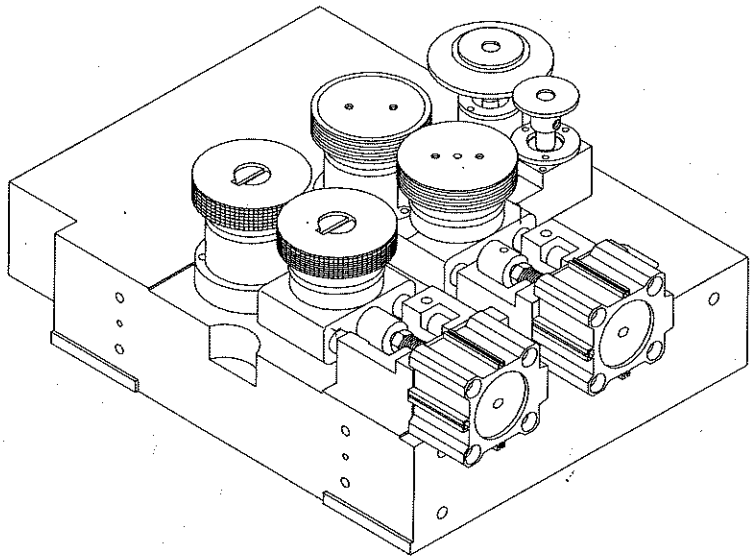


IMAGE 3

4.3.-CLAMPS

This is the sealing and CROSS-cutting system, with a CONTINUOUS AND ROTATIONAL system.

The functions it fulfillas are as follows:

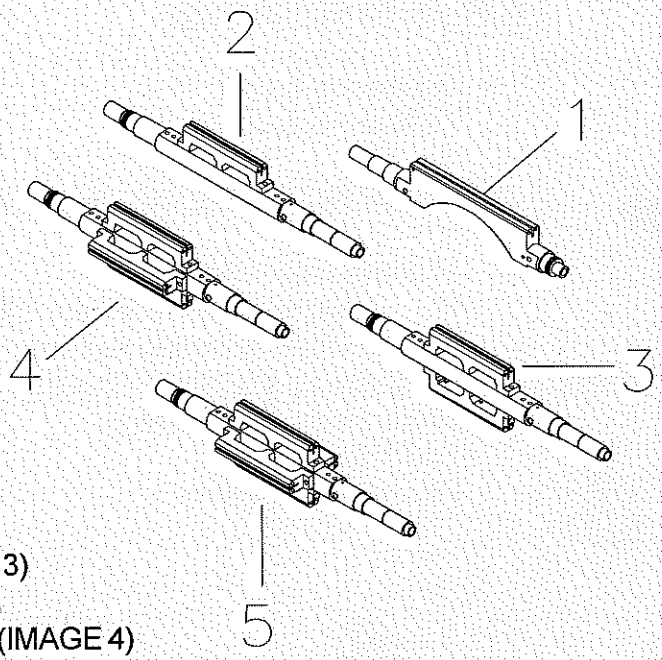
* SEALING FILM, AND
* FILM CUTTING

In this case, same as with the cart, there are different types and measurements of cutting and sealing clamps.

To see different options go to table 2.2 SPECIFICATIONS . According to each case, some of the elements from which the clamp is made up also change, such as blades, resistances...;

DIFFERENT TYPES OF CLAMPS

1.- Clamp with gap
2.- Clamp 1 per axle
3.- Clamp 2 per axle
4.- Clamp 3 per axle
5.- Clamp 4 per axle



TYPES OF CLAMP GROOVES

1.- CROSS GROOVES (IMAGE 3)

2.- LONGITUDINAL GROOVES (IMAGE 4)

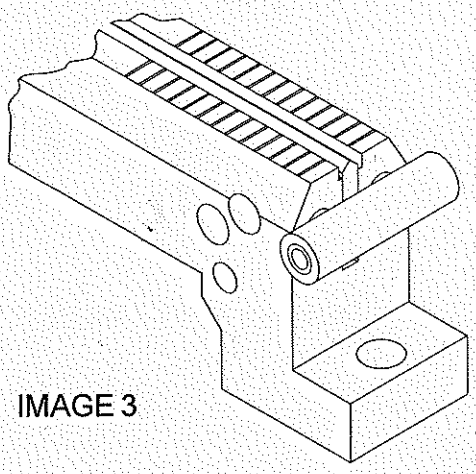


IMAGE 3

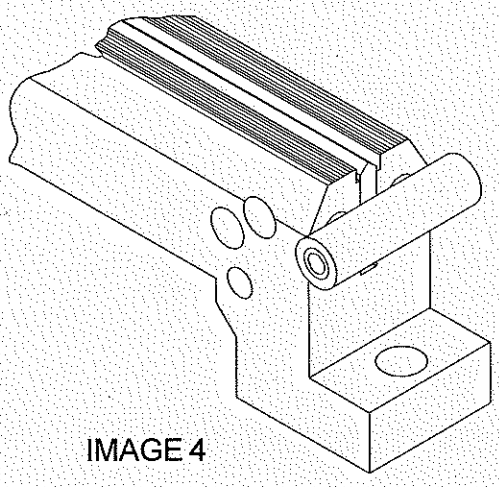


IMAGE 4

4.4.-REEL HOLDER

Devices located at the top of the machine.

The machine is equipped with a reel-holder axle, in such a way that it allows to work with different film widths, and can then cover a wide range of products to package.

To insert the film these three steps must be followed, among others

* Insert the film reel in the reel holder axle
* Wind film slightly
* Insert it using the unwinding rollers up to the mold, **diagramlocated on the machine.**

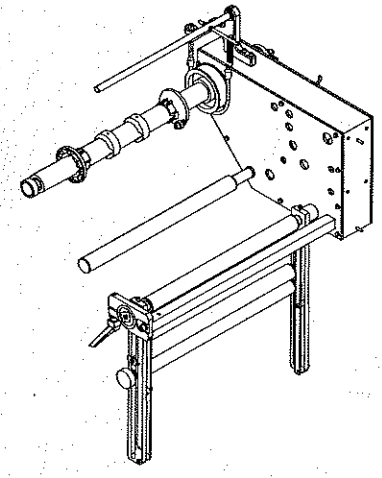
To see the correct instructions on how to insert the film into the mold see point 4.1.1.3 INSERTING AND CENTERING THE FILM REEL.

TYPES OF REEL HOLDERS

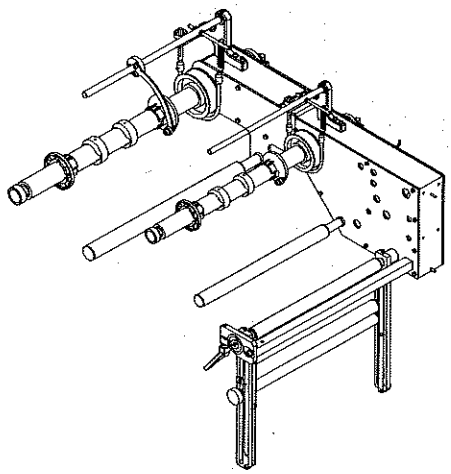
* Simple reel holder
* Double reel holder

COMMON OPTIONS FOR ANY OF THE ABOVE SYSTEMS

* Motorised reel holder:
  * Mechanically motorised: The motor will continuously unwind the film.
  * Motorised electronically (coupling / tension control): The motor will unwind the film according to the tension that was set with the potentiometer.
* Photocell image centering
* End of film
* Film punching system
* .....

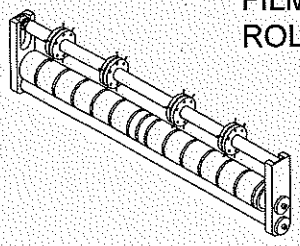


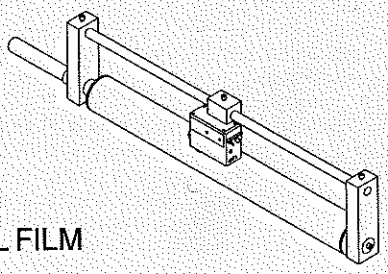
SIMPLE REEL HOLDER



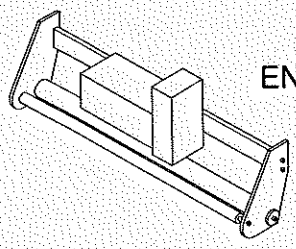
DOUBLE REEL HOLDER

FILM PUNCHER
ROLLER





PHOTOCELL FILM
CENTERING



ENCODER

4.5.-OUTPUT CONVEYOR

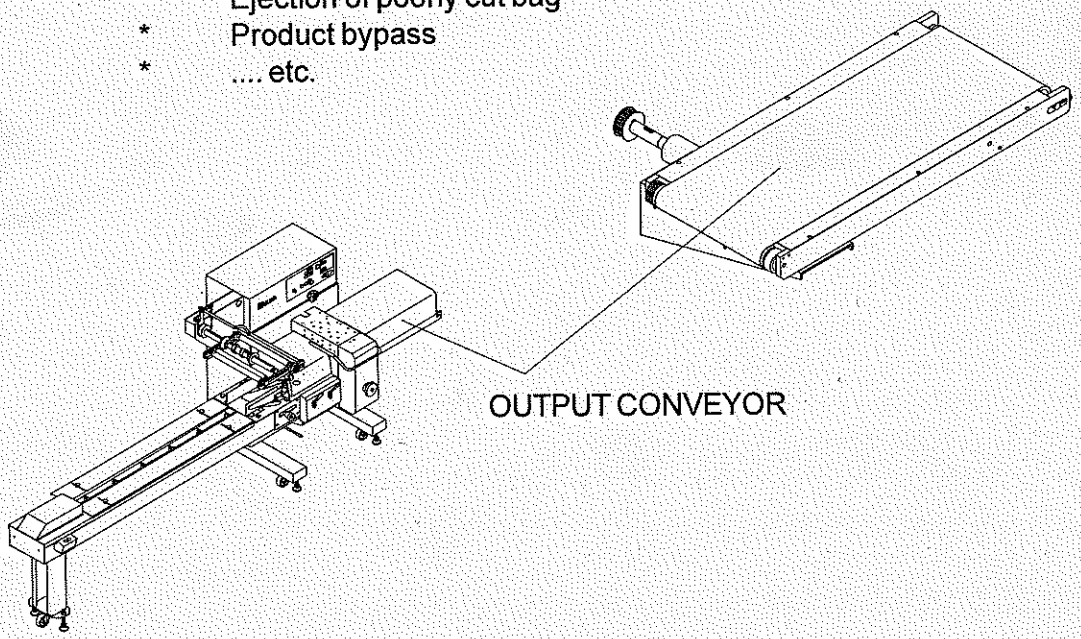
This is a device found at the product output area, made up of one conveyor with the function to output packaged products.

TYPES OF OUTPUT CONVEYORS

* Many output conveyor lengths can be mounted:
  1.- Standar measurement (800mm)
  2.- 1400 mm, 2000mm, 2500mm, conveyor
  3.- ...

OPTIONS THAT CAN BE ATTACHED

* Empty bag ejection
* Ejection of poorly cut bag
* Product bypass
* .... etc.



OUTPUT CONVEYOR

5.-USING THE TEMPERATURE CONTROLLER

Keys 3 and 4 (up and down): Use the keys to change the temperature default values shown on display number 6. Pressing the number 3 key increases the value of the default temperature and the number 4 key lowers said value.

Display Number 5 (red numbers) : Real temperature that measures the controller.

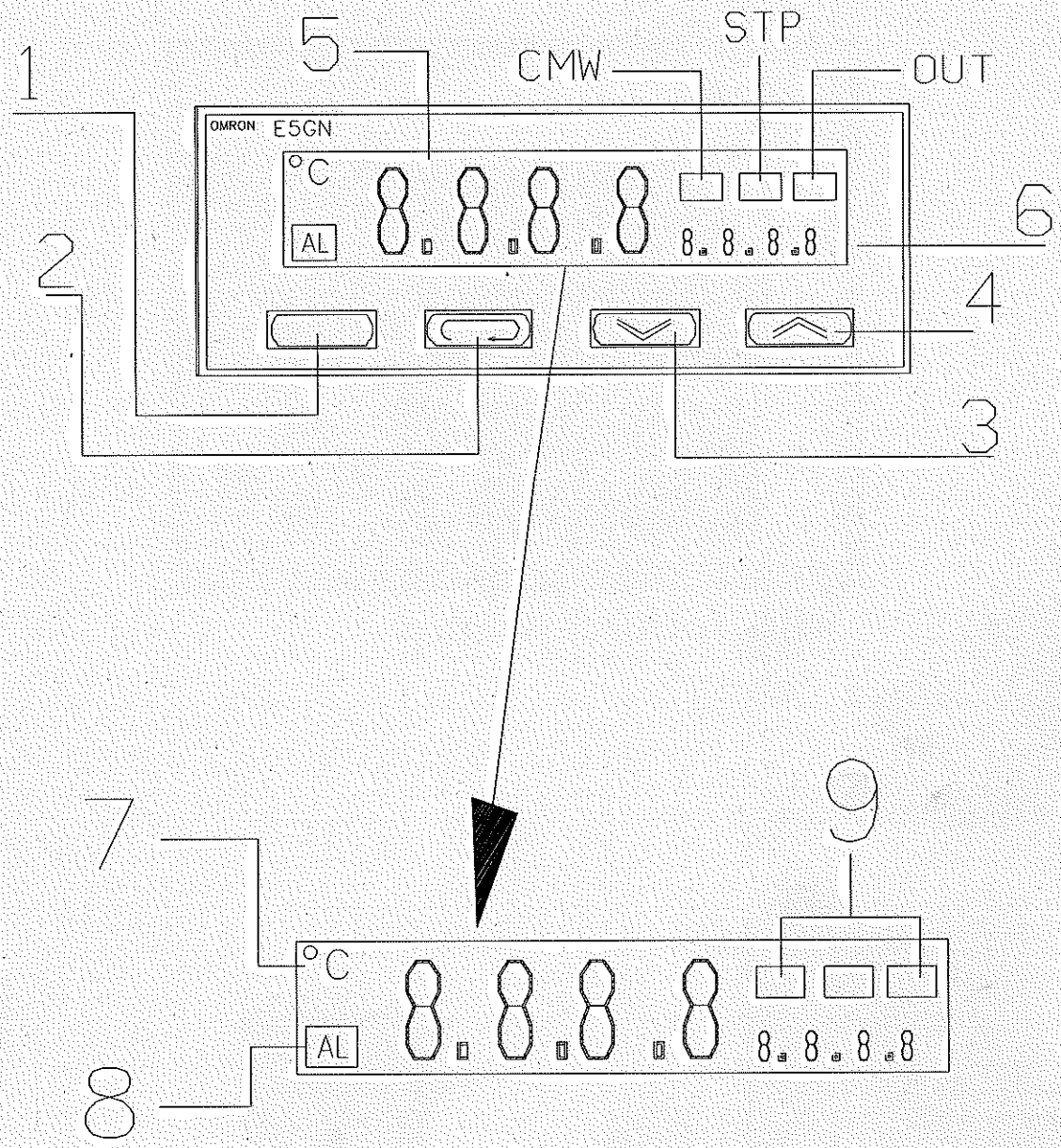
Display Number 6 (green numbers) : Default Temperature.

°C / °F Temperature Indicator: This is used to indicate that the value shown on screen refers to the temperature.
This is determined according to the «temperature unit» parameter chosen.
The temperature may be given in two different ways:
C = Degrees Celsius
F = Degrees Fahrenheit

8.- AL: Alarm.
This lights up while the alarm is on. This means that the real temperature is not the same as the default temperature, which is really lower or higher.
While the alarm is activated it is not recommended to work on the machine.

9.- Operating Indicators
CMW: Monitoring «writing» through communications.
Lights up when the «write» function is activated, and dims when said function is turned off.
STP: Lights up when the temperature controller is set to stop.

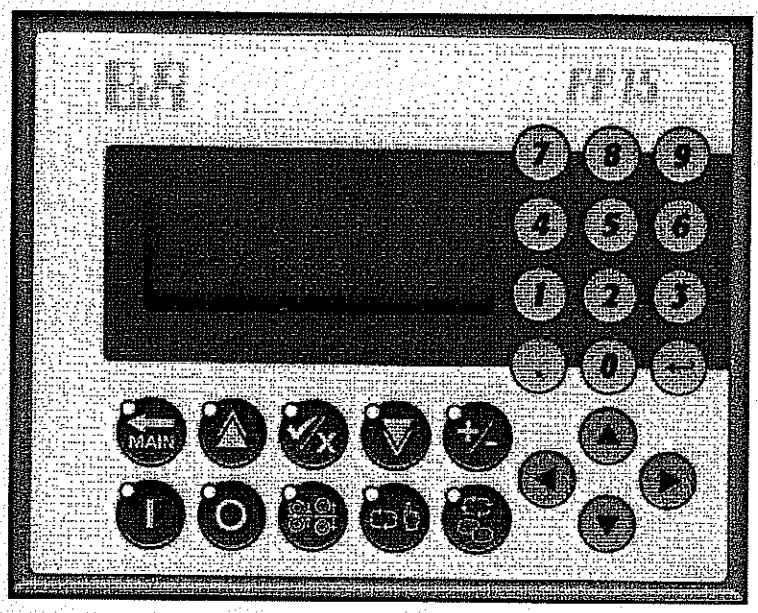
OUT: Lights up when the temperature controller signals to add tension to the resistances; shuts off when there is not need for tension.


1
5
CMW
STP
OUT
OMRON E5GN
°C
AL
8.8.8.8
8.8.8.8
6
2
4
3
7
9
°C
AL
8.8.8.8
8.8.8.8
8

6.-MACHINE ADJUST

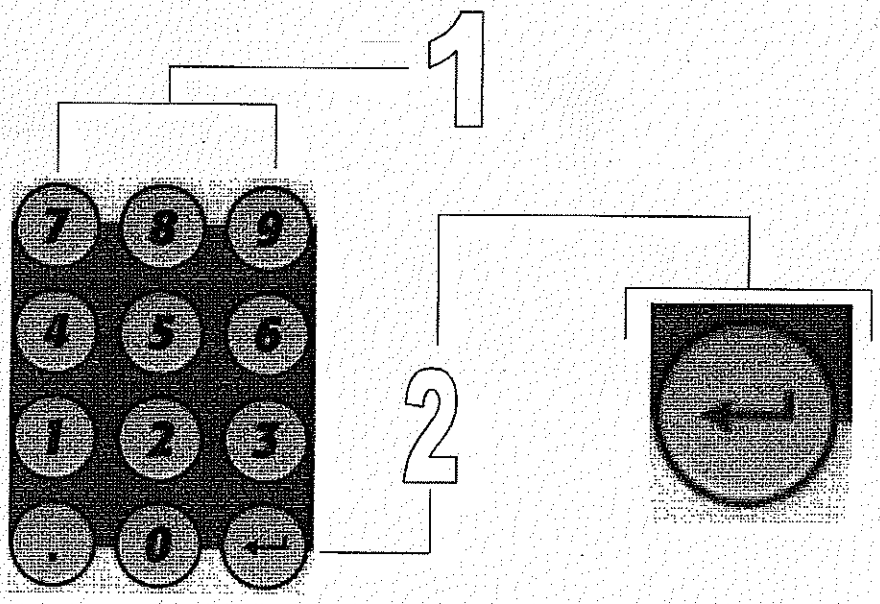
6.1.-MACHINE SCREEN USE AND PARAMETERS EXPLANATIONS

6.1.1.-PP15 SCREEN



6.1.1.1.-SCREEN COMPONENTS

1.-KEYPAD

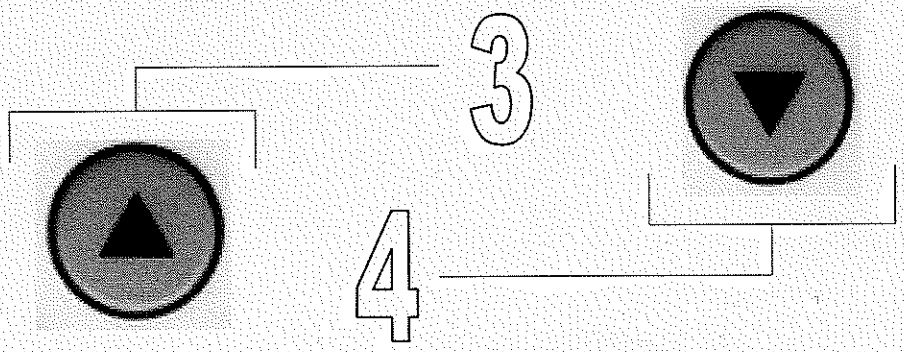


used to modify the value of numeric variables.

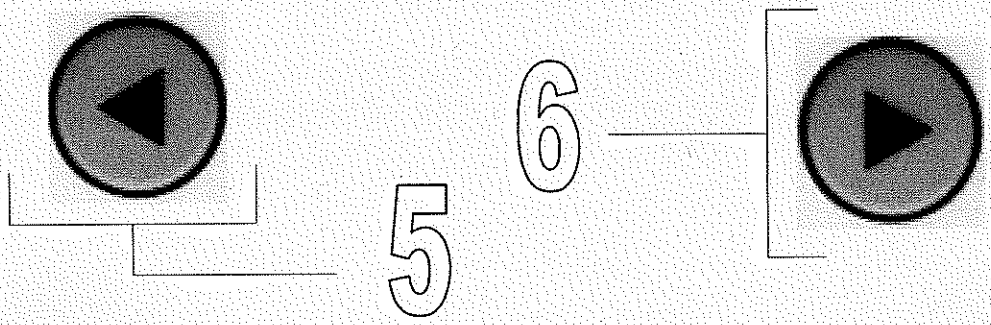
Once the desired value has been inserted, it, has to be validated by pressing the **ENTER key "2"**.

2.-BUTTONS FOR SCREEN CONTROL

Through the **"3"** and **"4"** buttons what variable will be modified is selected within a given screen. The editable screen flashes.



Through the **"5"** y **"6"** forward and back scrolling is accomplished within a group of parameters.



FOLLOWING ARE THE DIFFERENTS GROUPS

1.-CONVEYOR

- LUG PITCH
- NPNB
- AUX. OUTPUT

2.-ROLLERS

- COMPENSATIONS
- STAR DELAY

3.-JAWS

- **BAG LENGTH**
- CUT OFFSET
- JAW SECURITY
- GUSSETTING
- EJECTOR

4.-REEL HOLDER

- PRINTED FILM
- FILM CHANGE

5.-SPEEDS

- SPEEDS
- ACCELERATIONS

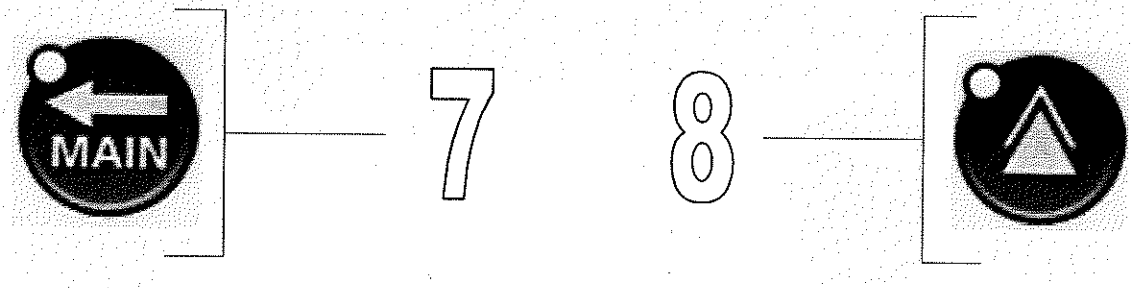
6.-PANEL

- LANGUAJE
- ACOPOS ALARMS
- COUNTERS

7.-PASSWORD

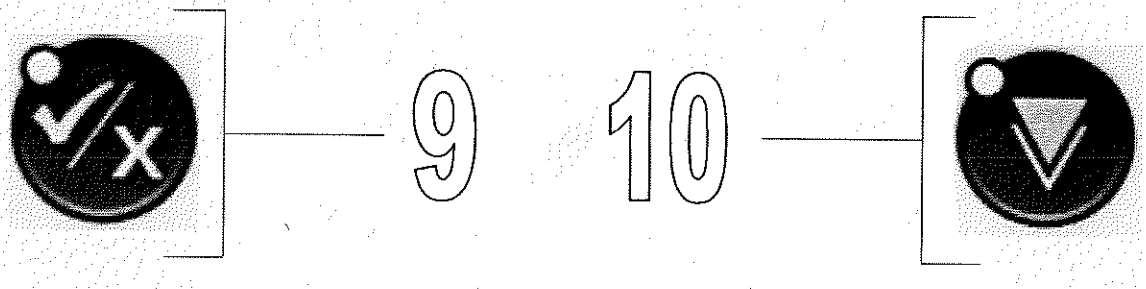
- USER LEVELS
- CONFIGURATIONS
- OPTIONALS

Through the **key "7"**, the main screen is accessed (screen that shows the machine's status) from any screen. In the case of being in the main screen, the previously seen screen is displayed



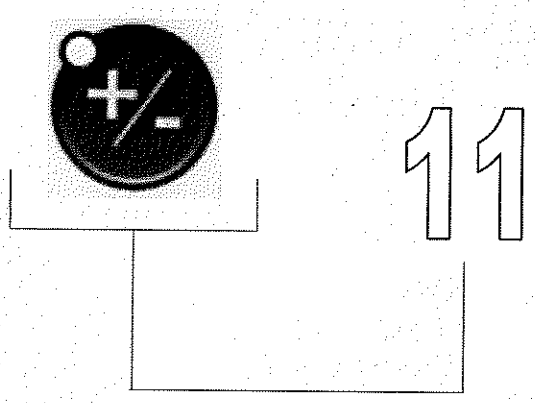
Throug the **key "8".** Increases the value of the variable, be it the menu or adjustments of product type; jaw offset, eye-mark, bag length...

Through the **key "9** . Options Activation / Deactivation. To activate them, one must be within the corresponding option screen. If the option is active, the LED will be on.



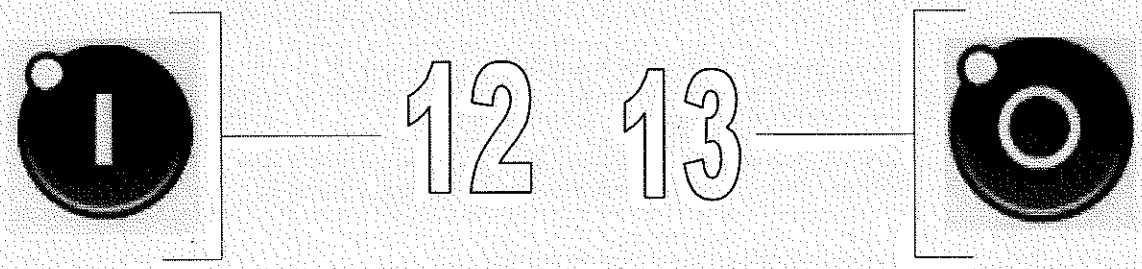
Throug the **key "10".** Decreases the value of the variable, be it the menu or adjustments of product type; jaw offset, eye-mark, bag length...

Throug the **key "11".** Button to modify variables with sign.



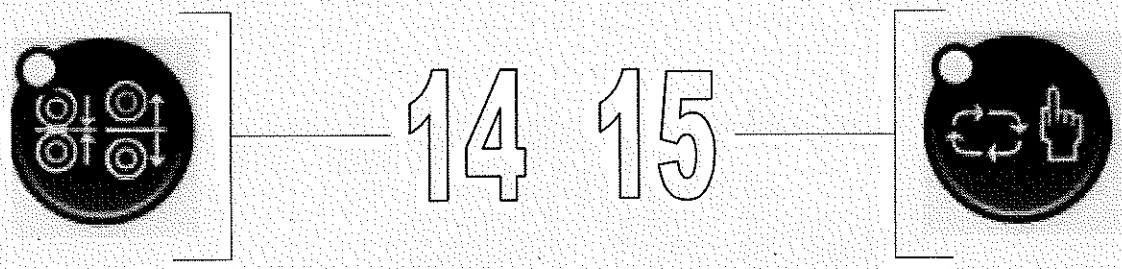
INTEGRATED BUTTON PANEL FOR MACHINE CONTROL

START Button **"12"**



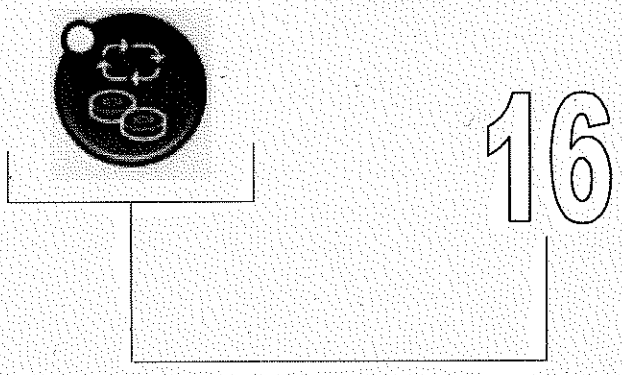
STOP Button **"13"**

ROLLERS OPENING / CLOSE Button **"14"** : In the case that these are pneumatic. With the LED on, the rollers are closed.



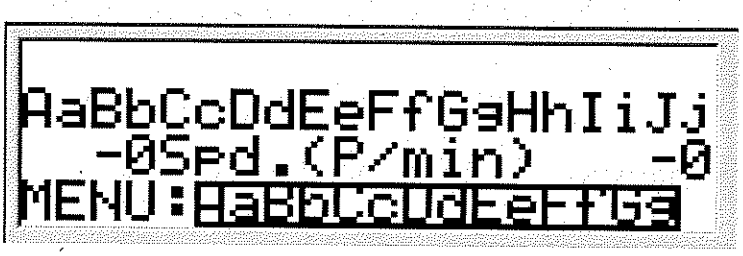
AUTOMATIC / MANUAL Button **"15"**: Machine in automatic or manual mode. With the LED on, the machine is in automatic mode.

AUTOMATIC / ROLLERS ONLY Button **"16"**: Machine in automatic mode or rollers only to facilitate the insertion of film. With the LED on, the machine is in rollers only.



6.1.2.-MACHINE PARAMETERS

MAIN MENU:



- The alarms are shown on the first line.
- The second line indicates actual speed (left) and automatic mode (right, variable).
- **MENU:** Allows you to choose screen subgroups: Carriage, clamp, reel holder, panel, speeds, feeder, *password.* They are changed using the buttons:

- On the main menu by clicking the left/right arrows, you enter the change of product screen.

- **PRODUCT Nr**: the product number with which we are working.
- **MENU:** Allows us to **save data** or **copy products**. They are changed with the buttons:

- **COPY PRODUCT:** *Which* product is to be copied.
- **TO PRODUCT:** *To which* product.
- **ARE YOU SURE?**: Yes/No, with the buttons. By clicking on the left / right arrows you can exit to the previous screen and then with the same arrows or the *main* button, exit to the main screen.

- Warning of no more available memory to save data. The user can do nothing more than consult with technical assistance.

CONVEYOR PARAMETERS:

- **ONLY INFEE**: ON/OFF, activation / deactivation of the *single carriage* option. Are changed with the buttons:

If it does not change with this button, it is because we don't have the appropriate *password* level. To change the *password,* in configurations, activate the *remember password level.*

- **LUG PITCH**: The distance between blades in **inches.**
- **STOP POSITION**: Machine's stop position with regard to the carriage. This parameter is only needed and may be benchmarked when there is a feeder that needs the machine to always stop on one exact point.

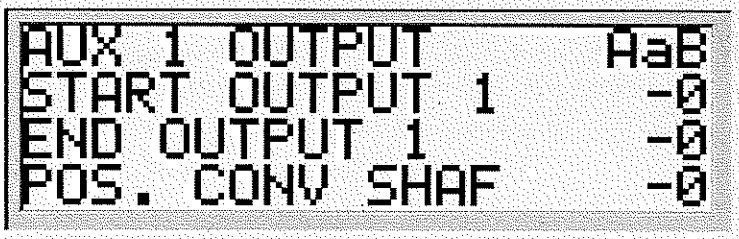
- **NPNB:** ON/OFF, activation / deactivation of the *npnb* option. Is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. [The following parameters can be changed only if the option has been activated.]

- **PROD DELAY.**: Distance in whole products from the photocell to the blade drop.
- **SEL. TRAJECTORY**: Distance from the blade fall to where you want the leave the product. Where it is left is important so that the clamp doesn't remain sealing. It is changed with the buttons:

It is changed every 10 between 10 and 90. For low numbers, break abruptly and slowly start up and vice versa.

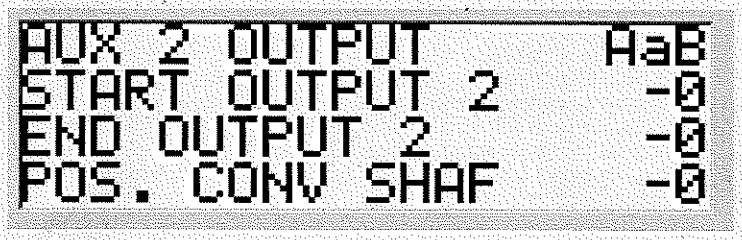
- **PROD.:** The number of products before and after the hole that functions at maximum speed.



- **AUX 1 OUTPUT** signal to use, for example, a codifier. ON/OFF activation/deactivation of the *AUXILIAR EXIT 1* option. It is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

- **START OUTPUT 1** and **END OUTPUT 1** are used to adjust the start and end of operating of said exit.
- **POS. CONV SHAF:** Information parameter serves to see in which position the two previous parameters have to be fixed. Put the machine in manual and position the packet where you want the auxiliary exit 1 to work, be sure to put this information in START EXIT 1. The same for END EXIT 1.

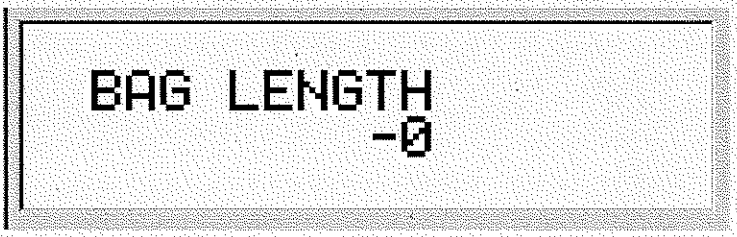


- **AUX 2 OUTPUT:** signal to use, for example, robots, gravity feeders, ... ON/OFF activation/deactivation of the AUXILIAR EXIT 2 option. It is changed with the button:

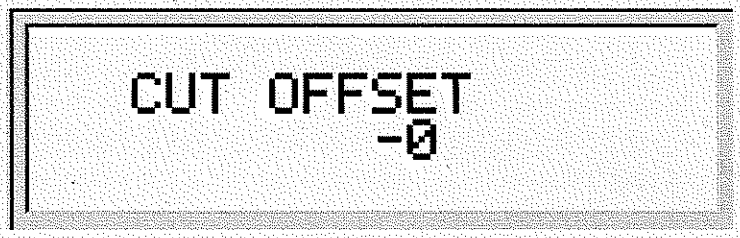
If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

- **START OUTPUT 2** and **END OUTPUT 2** are used to adjust the start and end of operating of said exit.
- **POS. CONV SHAF**: Information parameter serves to see in which position the two previous parameters have to be fixed. Put the machine in manual and position the packet where you want the auxiliary exit 2 to work, be sure to put this information in START EXIT 2. The same for END EXIT 2.

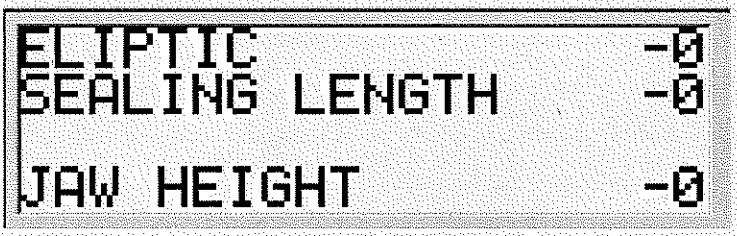
JAW PARAMETERS:



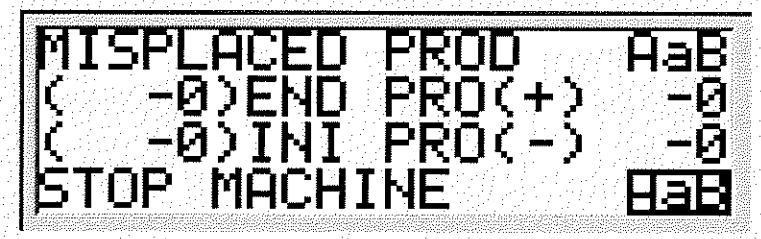
- **BAG LENGTH (mm)**: The measurement that **the bag** has to have.



- **CUT OFFFSET** (cutting adjustment): The *offset* that the clamp has to be given so that it cuts on the necessary point. It is changed with the buttons:



- **ELIPTIC:** The speed of the clamp at the moment of sealing, given in % of the normal machine speed. Once it has finished with sealing, the machine will return to operating at regular speed.
- **SEALING LENGTH:** Clamp width for regular clamps, for long measure ones, the distance covered by the clamp upon completing the sealing should be measured.
- **JAW LENGTH:** Clamp position when motorized. Unit less, they are coif stock pulses.



- **MISPLACED PROD.**: ON/OFF activation/deactivation of the AUXILIAR EXIT 1 option. It is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

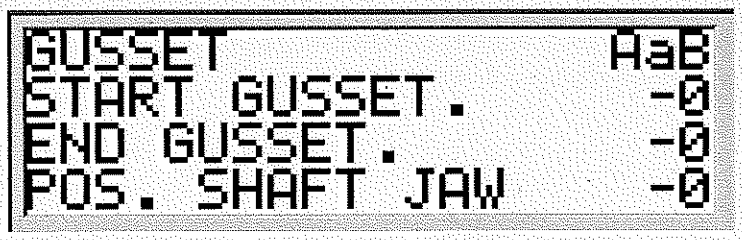
- **END PRO (+):** On the left of this indicator, the detection of the end of each product is shown and to the right, the safety margin (normally 100 units are put on).
- **INI PRO (-):** On the left of this indicator, the detection of the end of each product is shown and to the right of the safety margin (normally 100 units are put on).
- **STOP MACHINE:** ON/OFF. Machine stoppage activation/deactivation selector for when a poorly positioned product is detected. It is changed using the buttons (only if the above option has been activated).

- **MISPLACED PROD:** ON/OFF. *Incorrectly positioned product* activation/deactivation selector. Is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

- **PROD. DELAY**: The number of cycles between detection and clamps when safety should be carried out.

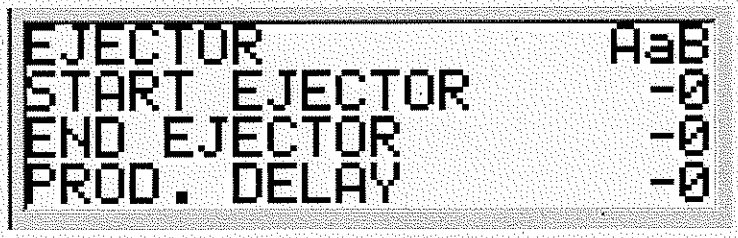
- **SEL. TRAJECTORY**: % of clamp opening in order for the product to pass through without touching the clamps. It is changed using the buttons:



- **GUUSSET**: ON/OFF. *English fold* activation / deactivation selector. Is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

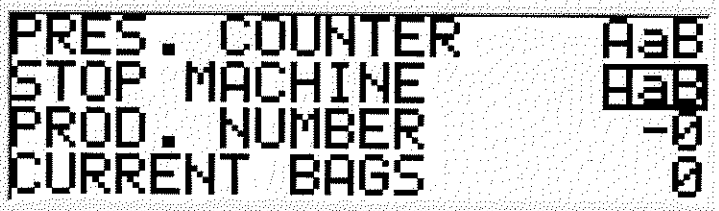
- **START GUSSET.** and **END GUSSET.**: are used to adjust the start and end of the English fold operating.
- **POS. SHAFT JAW**: Information parameter serves to see in which position the two previous parameters have to be fixed.



- **EJECTOR:** ON/OFF. Selector activation / deactivation *ejector*. Is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

- **START EJECTOR** and **END EJECTOR**: are used to adjust the start and end of the ejector operation.
- **PROD. DELAY:** Number of cycles between detection and blower.

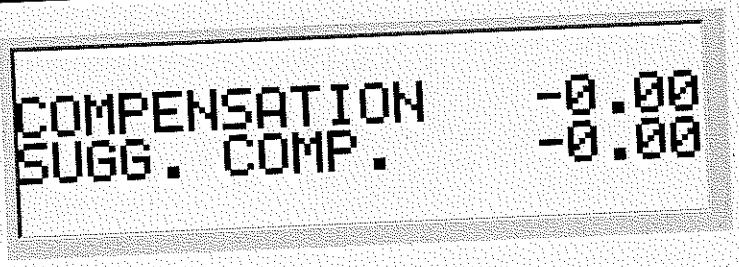


- **PRES. COUNTER.**: ON/OFF. Switch for *pre-selection counter*. It can be changed using the button:

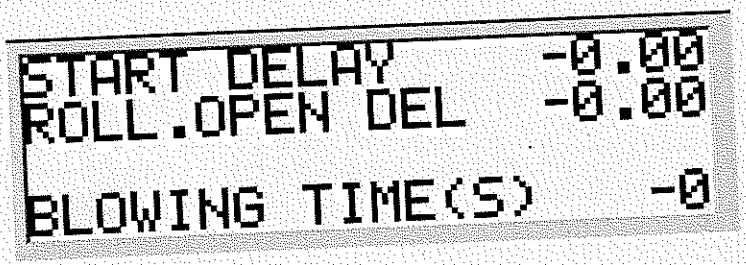
If it does not change using this button, it is because the optional feature is not enabled or we do not have the appropriate *password* level. In order to change the *password*, on the configuration screen enable *save passport level*. The following parameters may be changed only if the optional feature has been enabled.

- **STOP MACHINE:** Activating this screen makes the machine stop as soon as the pre-selected number of packets has finished. If the machine does not stop, the counter will go to 0 and will start counting again.
- **PROD. NUMBER.** is the pre-selected number of products.
- **CURRENT BAGS** indicates the number of products packaged from when it started counting.

ROLLER PARAMETERS:

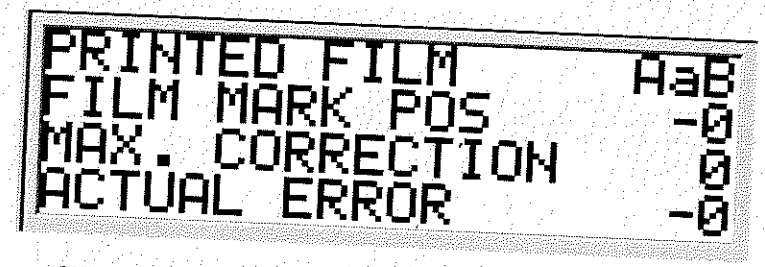


- **COMPENSATION:** Slippage correction, increment in % of the length of the package (entrance parameter).
- **SUGG. COMP.:** This parameter serves to correct the errors produced by possible yanking or skidding of the paper on the rollers of the spindle (exit parameter). The error in the eye-mark position is looked at, if it comes before or after it should come.



- **START DELAY:** Time with rollers closed before the machine starts up. It is necessary to wait for all of the rollers to close before beginning operation, otherwise an unsealed area will remain.
- **ROLL.OPEN DEL:** Time that the rollers are kept closed after telling it to stop. If it is immediately told again to start operating, it would not be worth opening them.
- Both parameters are used in gas machines, second skin, …
- **BLOWING TIME (S):** The time in seconds used for blowing once SP machines are started-up.

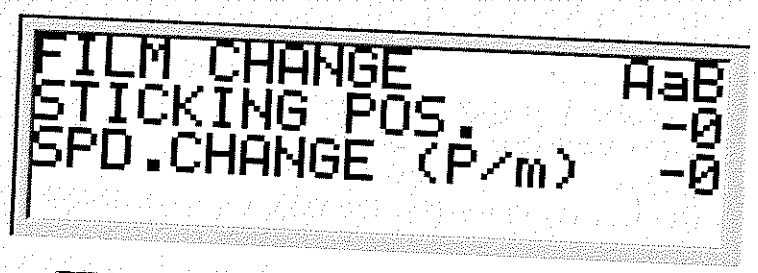
REEL HOLDER PARAMETERS:



- **PRINTED FILM:** ON/OFF. Selector activation / deactivation *printed film.*. Is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

- **FILM MARK POS:** Centred of the image (0-999).
- **MAX. CORRECTIÓN:** The maximum error is adjusted per product that can be corrected in each cycle. In the case of long packages the corrective power may be greater.
- **ACTUAL ERROR:** The error that is currently being given.



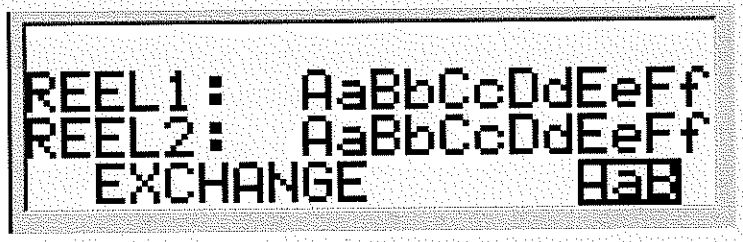
- **FILM CHANGE:** ON/OFF. Selector activation / deactivation *reel change.*. Is changed with the button:

If it does not change with this button, it is because the option is not enabled or we don't have the appropriate *password* level. To change the *password*, in configurations, activate the remember *password* level. The following parameters can be changed only if the option has been activated.

- **STICKING POS.:** Eye-mark to eye-mark A test with this value to zero is carried out and the distance between eye-marks is measured, so as to obtain the error and with this, the sealing position.

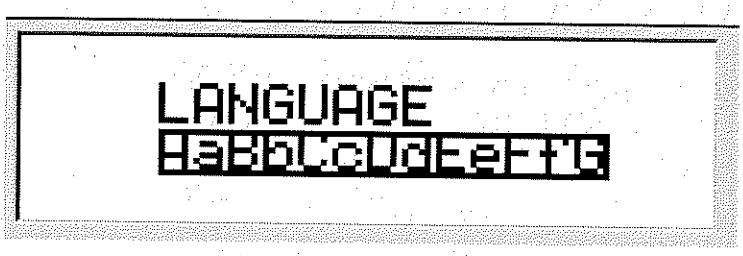
POS. sealing = (1000 x error)/bag length

- **SPD.CHANGE (P/m):** The speed in packets at the moment that the change of film is carried out.

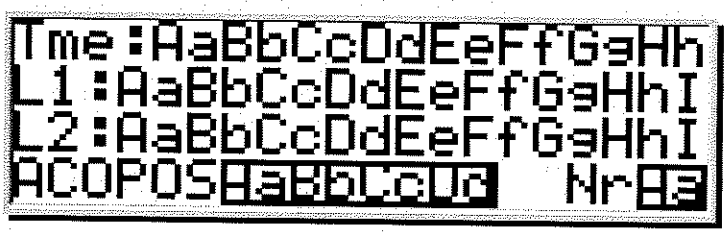


- **REEL1** and **REEL2:** reel indicator that is currently working and the reel waiting for change (exit parameter).
- **EXCHANGE:** ON/OFF. Selector activation / deactivation begin *reel change*. When a film has not yet been finished and you want to change to another one. It is changed using the buttons, but previously activating using the button.

PANEL PARAMETERS:

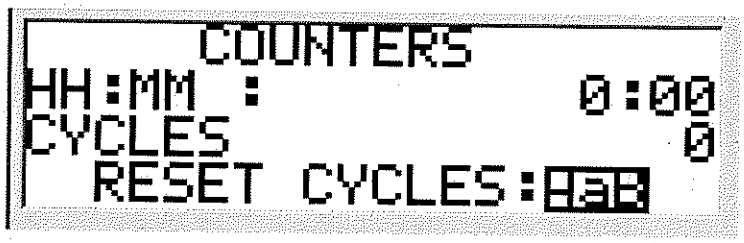


- **LANGUAGE:** The language that is indicated on the screens is shown. It is changed using the buttons:



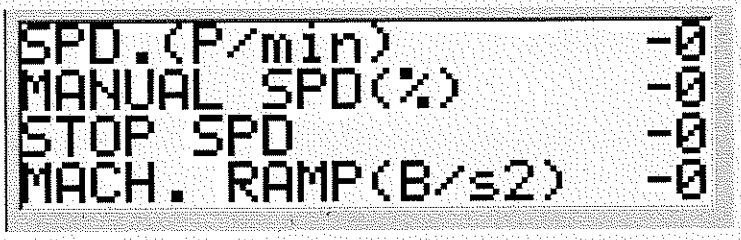
- **Time:** The time in which the error was given in ACOPOS.
- **L1:** the first line of the error text.
- **[L2:** the second line of the error text.
- **ACOPOS:** The *acopos* name from which we want to see the errors. It is changed using the buttons:

- **Nr:** The *acopos* error number.] This is also changed using the above buttons.

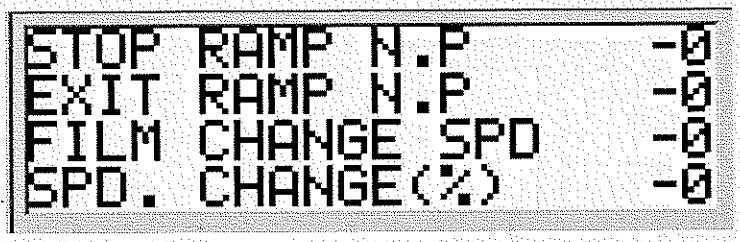


- **HH:MM:** The time that the machine has been operating until the current time.
- **CYCLES:** Cycles worked by the machine.
- **RESET CYCLES:** YES/NO, reset the machine cycles. It is changed using the buttons:

SPEED



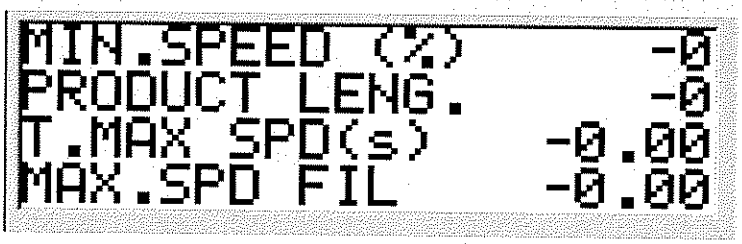
- **SPD. (P/min)**: The machine speed in packets/minute in automatic mode.
- **MANUAL SPD (%)**: The speed in manual mode is the however much per cent of the automatic speed indicated in this parameter.
- **STOP SPD:** The speed to which the machine slows down, before stopping.
- **MACH. RAMP (B/s2)**: acceleration control in machine start ups and braking.



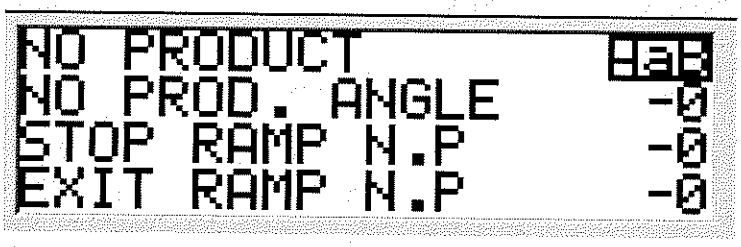
- **STOP RAMP N.P**: Deceleration in the case of product shortage.
- **EXIT RAMP N.P**: Acceleration in the case of product shortage.
- **FILM CHANGE BOB.**: If this parameter is at 0, speed is not reduced for reel change. Otherwise, this parameter indicates at what speed the **SPD. CHANGE (%)**: With an external signal speed will vary in a %. For example, if the accumulation photocell detects a lot of products in this parameter, it can be said that speed rises by 110%.

FEEDER PARAMETERS:

DAKOTA: In options choose ALIM. = *EXTERNAL FEEDER* and in configuration *CTRL. PRODUCT = DAKOTA.*



- **MIN.SPEED (%)**: The minimum speed at which it works when the entering production is minimum (% of machine speed 1st screen). The speed will oscillate between the maximum speed and minimum speed depending on production.
- **PRODUCT LENG. (mm)**: Actual product length.
- **T.MAX SPD (s)**: The time that the accumulation photocell has to see the product so that the speed passes to be the machine speed 1st screen.
- **MAX.SPD FIL:** Time that the accumulation photocell has to be without seeing the product in order for speed to be reduced.



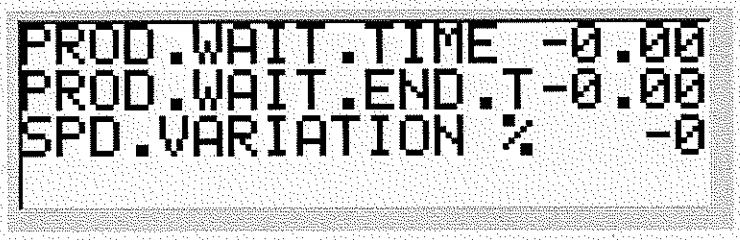
- **NO PRODUCT**: ON/OFF, activation / deactivation of production control. Is changed with the button:

If it doesn't change with this button, as it is an option to be inactive, or if we don't have the appropriate *password* level. In order to change the password, in configuration activate the *remember password level* option. The following parameters can be changed alone if the option has been activated.

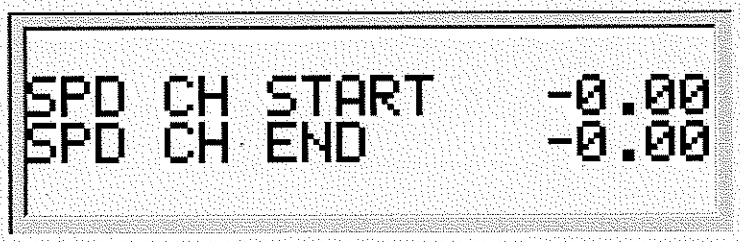
- **NO PROD ANGLE. (º)**: The angle with which the clamp stops so as not to burn the film.
- **STOP RAMP N.P (P/s^2)**: Deceleration in the case of product shortage.

- **EXIT RAMP N.P (P/s^2)**: acceleration when exiting product shortage.

GRAVITY FEEDER:

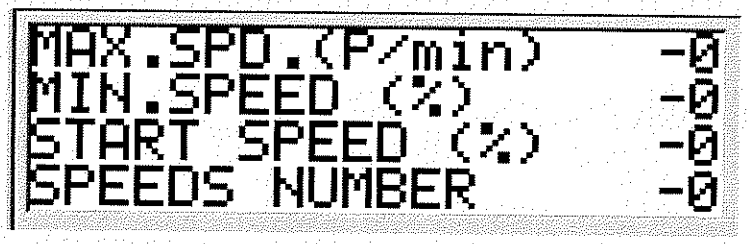


- **PROD.WAIT.TIME**: The time that the photocell 1 has to be without seeing the product, so that the machine may enter into product shortage (ms).
- **PROD.WAIT.END.T**: The time that the photocell 1 has to be without seeing the product, so that the machine may enter into product shortage (ms).
- **SPD.VARIATION.%**: The product speed varies with this percentage when the programmed signal is given in the two following parameters (START SPEED CHANGE, END SPEED CHANGE).

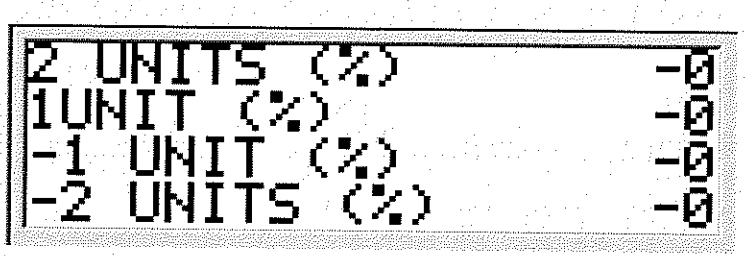


- **SPD CH START**: The time that the accumulation photocell has to be seeing the product so that the machine varies the speed indicated in the parameter (SPEED VARIATION) and can evacuate the accumulated product.
- **SPD CH END**: The time that the photocell 1 has to be without seeing the product, so that the machine may work at its normal speed.

MULTI-TAPES: In options choose *ALIM. = EXTERNAL FEEDING:*



- **MAX.SPD. (P/min)**: The maximum operational speed having multitapes installed (same as that of 1st screen).
- **MIN.SPEED (%)**: Lower production limit of the machine in percentage relative to maximum speed. The speed will oscillate between the maximum speed and minimum speed depending upon production that arrives at the multitapes.
- **START SPEED (%)**: The production speed following start-up or product shortage. Depending upon how the production arrives a higher or lower start-up speed will be concurred.
- **SPEEDS NUMBER:** The number of speeds between maximum and minimum speed at which the machine can operate.



- **2 UNITS (%)**: The percentage of products between blades that has to enter into the feeder so that the speed is increased in two "**increase increments**".

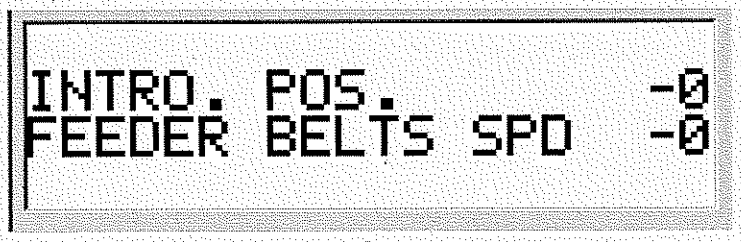
  Unit of increase = (maximum speed – minimum speed) / No. of speeds

- **1UNIT (%)**: The percentage of products between blades that has to enter into the feeder so that the speed is increased in one "**increase increments**".
- **-1 UNIT (%)**: The percentage of products between blades that has to enter into the feeder so that the speed is decreased by one "**increase increments**".
- **-2 UNITS (%)**: The percentage of products between blades that has to enter into the feeder so that the speed is decreased by two "**increase increments**".

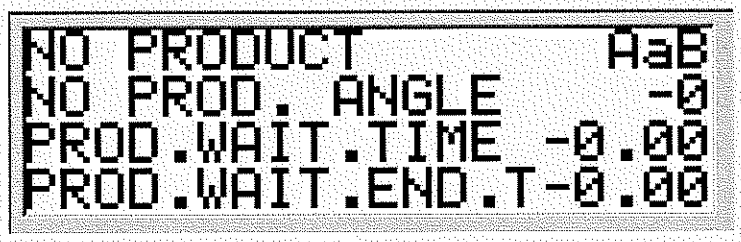
  For example, if our product takes up 80% of the space between blades, if the photocell sees 100% that goes up two units, if it is at

90% that the unit goes up, if it is 70% that the unit goes down and if it is 60% that it decreases two units.

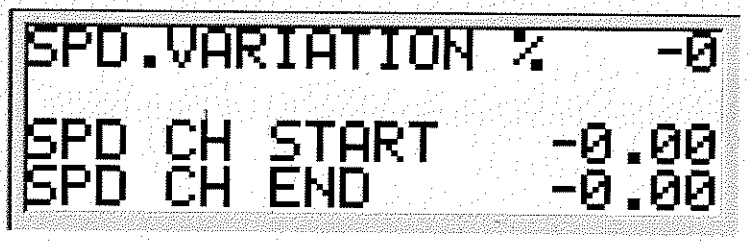
RETENTION FEEDER: In options choose *ALIM. = INTERMITTANT FEEDING.*



- **INTRO. POS.**: The position from 0 to 999 in which the product has to be inserted that arrives from the feeder between two blades.
- **FEEDER BELTS SPD**: The speed of two retention feeder belts.



- **NO PRODUCT** ON/OFF indicates if the option is activated (unique reading parameter).
- **NO PRODUCT ANGLE (°)**: The angle with which the clamp stops so as not to burn the film.
- **PROD.WAIT.TIME.:**: The time that the photocell 1 has to be without seeing the product, so that the machine may enter into product shortage.
- **PROD.WAIT.END.T**: The time that the photocell 1 has to be without seeing the product, so that the machine may enter into product shortage.



- **SPD.VARIATION %.**: The product speed varies with this percentage when the programmed signal is given in the two following parameters (START SPEED CHANGE, END SPEED CHANGE).
- **SPD CH START**: The time that the accumulation photocell has to be seeing the product so that the machine varies the speed indicated in the parameter (SPEED VARIATION) and can evacuate the accumulated product.
- **SPD CH END**: The time that the photocell 1 has to be without seeing the product, so that the machine may work at its normal speed.

6.2.-ALARMS AND MESSAGES EXPLANATION

6.2.1.-ALARMS

INTERN. ERROR

Cause:
Internal failure of the machine.
Solution:
Turn the machine off and on again. If the error persists, consult with SAT.

INVERTED PHASES

Cause:
The machine feeding phases are not in the correct order.
Solution:
Turn the machine off, change two of the machine's feeding phases, and turn the machine back on again.

STOP «EMERGENCY STOP»

Cause:
One of the emergency arrows on the machine is blinking.
Solution:
Take out the emergency arrow and press run.

SAFETY GUARD

Cause:
One of the machine guards is open.
One of the safety micros is not correctly detecting or is flawed.
Solution:
Close the guard and press start.
Adjust the safety micro or substitute it in the case of it being flawed.

JAW HOME SEN ERR.

Cause:
The clamp sensor does not detect the phase stoppage lever.
The sensor signal doesn't reach the ACOPOS trigger (E8).
Solution:
Check that the sensor detects the lever.
If the lever is detected, check that the signal reaches ACOPOS.

MARK DET. ERR.

Cause:
The eye-mark sensor doesn't detect the eye-mark.
The sensor signal doesn't reach ACOPOS (E9).
Solution:
Program the eye-mark sensor so that it distinguishes the eye-mark with regards to the background.
In the case of an eye-mark being detected, check that the signal reaches ACOPOS.

LUG DET. ERROR

Cause:
The blade sensor does not detect the blade.
The sensor signal does not reach the ACOPOS trigger (E10).
Solution:
Program the sensitivity of the blade sensor in order to detect the blade.
In the case of the blade being detected, verify that the signal reaches ACOPOS.

LUG OUT OF PLACE

Cause:
There's a blade out of its place.
The blade sensor has detected an object instead of a blade.
Solution:
Check that the blades are inserted into their corresponding place, corresponding to the blade pass configured by screen.
Check there is no dirt in the carriage and that the blade sensor only detects blades, and no other objects such as product remains, blade carriers, chain, etc.

WRONG PLACED FILM

Cause:
The eye-mark detector has not detected an eye-mark for a period of time.
The eye-mark detector has detected eye-marks in erroneous positions.
Solution:
Check that the film has not been flattened.
Check that the sensor is correctly detecting, and reprogram it if necessary.
Check that the paper does not contain false eye-marks.

JAW MOTOR STALLED

Cause:
The clamp is blocked.
Solution:
Release the clamp in the case of clogging. The clog can be produced in any one of the transmissions of this axle.

ROLLER M.STALLED

Cause:
The roller is blocked.
The roller encoder is not reading correctly.
Solution:
Release the rollers in the case of clogging. The clog can be produced in any one of the trasnmissions of this axle.
Check that the encoder is correctly tightened. Should the encoder be defective, replace it.

INFEED STALLED

Cause:
The carriage is blocked.
The carriage encoder doesn't read correctly.
Solution:
Release the carriage in the case of clogging. The clog can be produced in any one of the trasnmissions of this axle.
Check that the encoder is correctly tightened. Should the encoder be defective, replace it.

JAW DRIVER ERROR

Cause:
The ACOPOS of the Clamp (E8) is found to be in error.
Solution:
Check the error on the ACOPOS screen and resolve the failure.

ROLLERS DRIVER ERROR

Cause:
The ACOPOS of the roller (E9) is found to be in error.
Solution:
Check the error on the ACOPOS screen and resolve the failure.

INFEED DRIVER ERROR

Cause:
The ACOPOS of the carriage (E10) is found to be in error.
Solution:
Check the error on the ACOPOS screen and resolve the failure.

DRIVERS ERROR

Cause:
An error in one of the secondary variators or machine protections.
For example, the independent spindle, excess border collector, cold plate...
Solution:
Check which device is causing the error and fix it.

CONTROL T. ALARM

Cause:
One of the temperature regulators is armed and does not allow start up.
Solution:
Wait for the temperature to be at the programmed range, and press start.

FILM BROKEN

Cause:
The excess border collector breakage sensor is giving out no signal or the same does not arrive at automation.
Solution:
Should the excess border collector be broken, rejoin it and press start.
Check that the operation of the sensor is correct at that the signal reaches auto mation.

LIMITER ALARM

Cause:
Effort limiter of the active carriage.
Solution:
Release the carriage from possible clogging and locate the effort limiter.

CODIFIER ALARM

Cause:
Codifier error.
Solution:
The codifier or the connected auxiliary device is found to be on alarm.

LOWER JAW T.ALARM

Cause:
The temperature of this point is found to be outside of the chosen range.
Defective thermocouple.
Solution:
Wait for the temperature to be within the programmed range.
Check the thermocouple connection.
Replace thermocouple if necessary.

UPPER JAW T.ALARM

Cause:
The temperature of this point is found to be outside of the chosen range.
Defective thermocouple.
Solution:
Wait for the temperature to be within the programmed range.
Check the thermocouple connection.
Replace thermocouple if necessary.

MISPLACED PRODUCT

Cause:
The parameters of the incorrectly positioned optional product are not correct.
The sensor is not properly adjusted.
The sensor has detected an incorrectly positioned product.
Solution:
Configure the incorectly positioned product parameters.
Adjust the sensitivity of the sensor.
Analyze the cause by which the product has moved.

ROLLER 1 T.ALARM

Cause:
The temperature of this point is found to be outside of the chosen range.
Defective thermocouple.
Solution:
Wait for the temperature to be within the programmed range.
Check the thermocouple connection.
Replace thermocouple if necessary.

ROLLER 2 T.ALARM

Cause:
The temperature of this point is found to be outside of the chosen range.
Defective thermocouple.
Solution:
Wait for the temperature to be within the programmed range.
Check the thermocouple connection.
Replace thermocouple if necessary.

ROLLER 3 T.ALARM

Cause:
The temperature of this point is found to be outside of the chosen range.
Defective thermocouple.
Solution:
Wait for the temperature to be within the programmed range.
Check the thermocouple connection.
Replace thermocouple if necessary.

ROLLERS OPENED

Cause:
The rollers are open.
Solution:
Close the rollers with the roller opening/closing selector.

LONG WAITING

Cause:
The machine has waited too long for products.
Solution:
Press start again in order to start up the machine.

FEEDER STOPPED

Cause:
The external feeder is not prepared.
Solution:
Check the state of the feeder on the feeder screen, eliminate the possible failure and start the feeder.

LOW BATERRY LEVEL

Cause:
The CPU battery is below level. If the battery is not changed in time, product information will be lost.
Solution:
Change the battery for a new one.

KEB ERROR »

Cause:
It is not possible to establish connection with any KEB variator.
Solution:
Check that the connectors are correctly inserted.

NO FILM

Cause:
There's no film.
The end of film sensor is not working properly.
Solution:
Insert the film reel.
Adjust the sensor or change it should it be flawed.

ONLY ROLLERS

Cause:
The single rollers selector is active, useful option for film insertion.
Solution:
Once the film has been introducted, put the single roller selector on automatic mode and press start.

JAW HOME SEN. ERROR

Cause:
There is a problem with the jaw sensor.
Solution:
Check that there is no problem with the jaw sensor and that it is sending the proper signal.

PRODUCT MISSED

Cause:
The machine needs product.
Solution:
Feed the machine so it continues to operate.

END COUNTER PRESEL.

Cause:
The presetcounter has ended.
Solution:
Restart the machine if you wish for it to continue working. If you do not wish for the machine to stop once the preset count has finished, disable the stop option for the counter.

PREPARING DRIVERS

Cause:

The machine is preparing its drivers before starting

STARTING

Cause:

The machine has just turned on. Wait a few seconds until the following message appears.

6.2.2.-MESSAGES

MANUAL RUN

Cause:
The manual operating mode has been chosen. The machine moves only if the start button is pressed.
Solution:
If working in continuous mode is desired, choose the automatic mode.

RUNNING

Cause:
Normal operation.

SYNCHRONIZED

Cause:
Starting the machine. All of the machine axles are being positioned before beginning the normal mode.
Solution:
Wait until the machine has finished synchronization.

MACHINE START

Cause:
The machine is starting up.

MACHINE STOP.

Cause:
The machine is found stopped.

SYNCHRONIZED STOP

Cause:
The stop button was pressed when the machine was in operation and, therefore, the machine has correctly stopped and is found in conditions for start-up by pressing the start button.

MACHINE STOP.

Cause:
The machine is decellerating in order to keep itself with the clamp open.
Solution:
Wait until the machine stops.

RE-POSITIONING

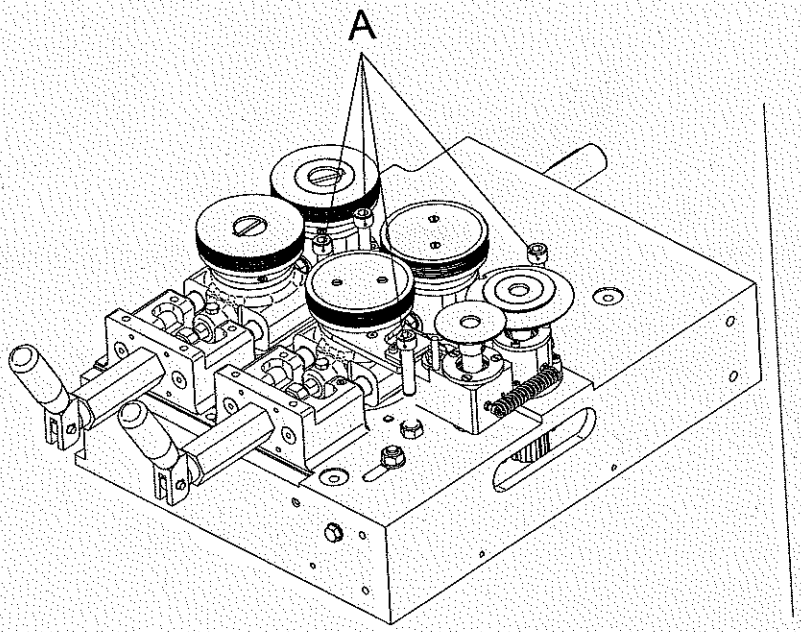
Cause:
The machine is positioning all its axles before beginning operation in normal mode.
Solution:
Wait until the machine completes respositioning.

6.3.-MECHANICAL SETTINGS

6.3.1.-REGULATING FEED AND LONGITUDINAL SEALING ROLLERS

ATTENTION

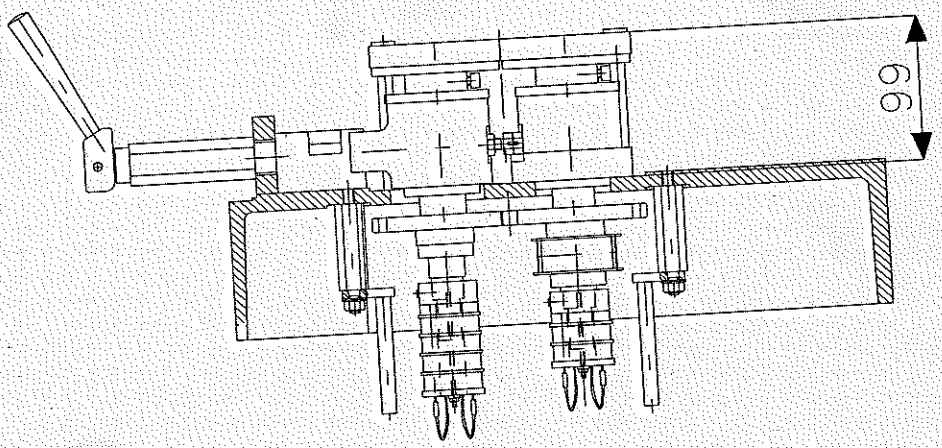
THE OPERATIONS DESCRIBED IN THE MECHANICAL ADJUSTMENTS MUST ONLY BE MADE BY DULY QUALIFIED PERSONNEL

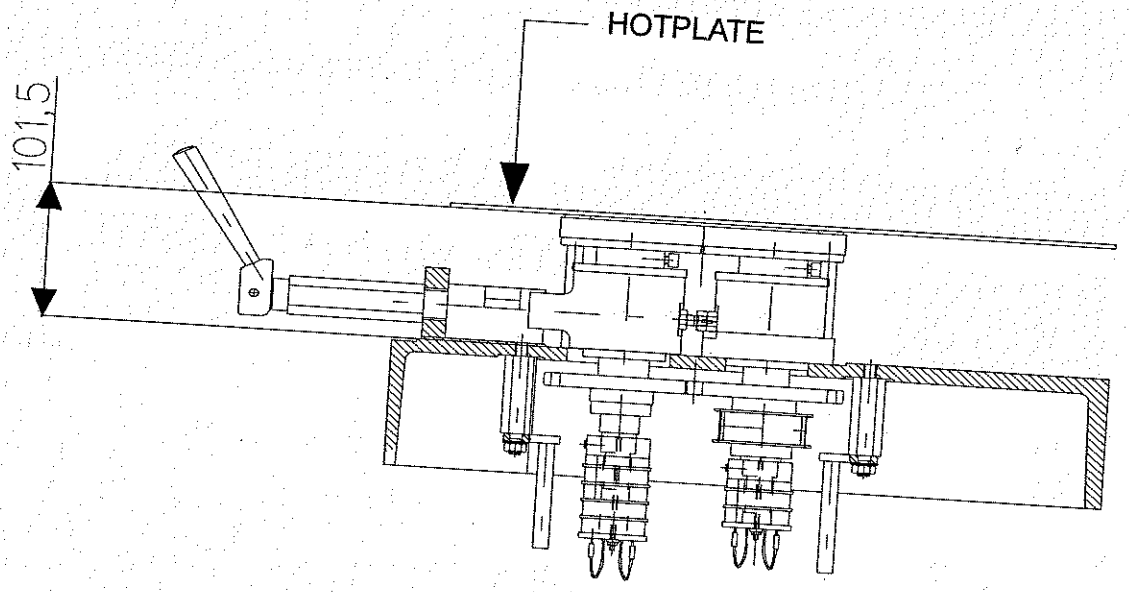


To adjust the most common rollers:

1) Set the fixed rollers to a height of 99 mm.

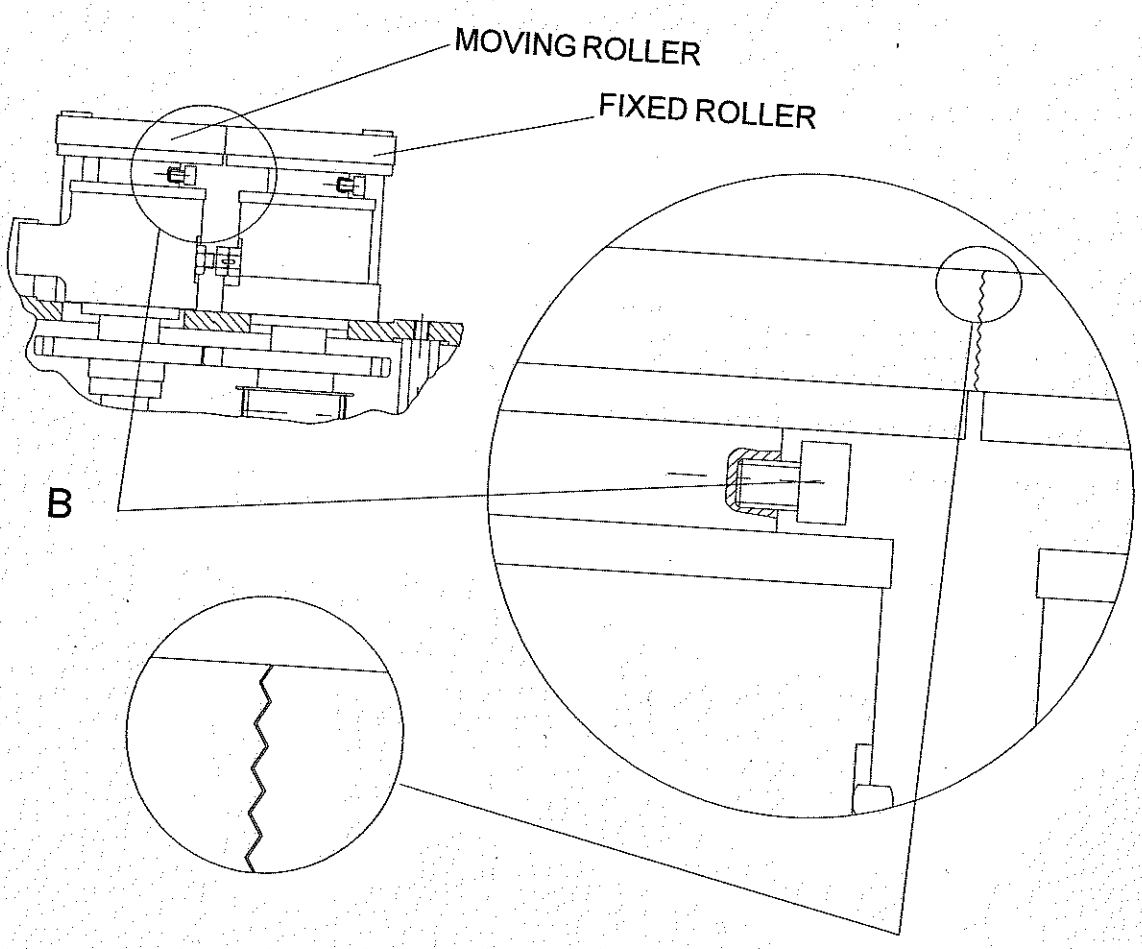
2) The four screws (A) that serve as support for the hotplate, must be set to approximately 101.5 mm; a little higher than the rollers, so that the plate does not hit against them.





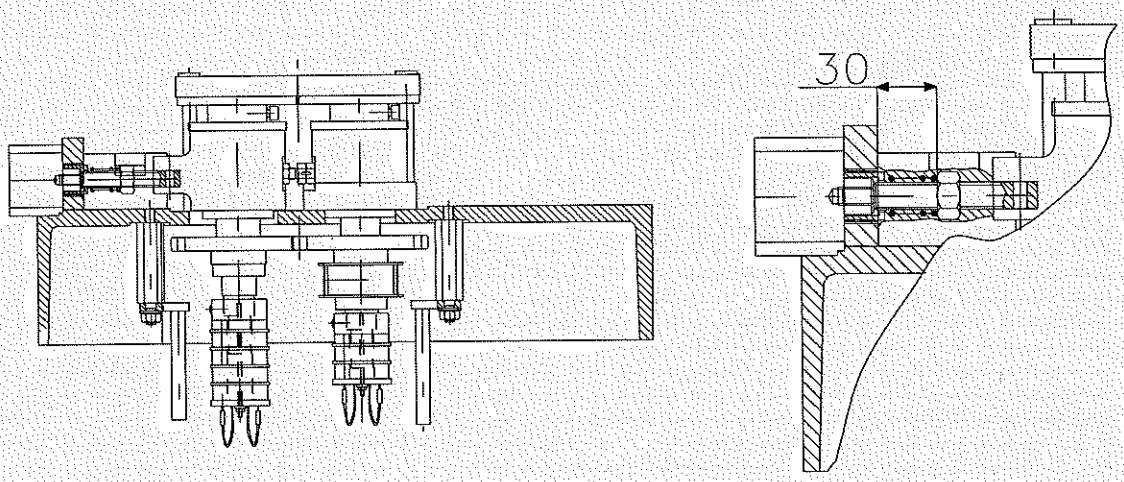
3) Then set the mobile rollers so that they match notch by notch with those that are fixed.

For this, looses the screw (B) and lift or lower the mobile roller until they fit notch by notch as indicated in the drawing.



ROLLER GROUP WITH PNEUMATIC OPENING

4) To set the pressure made by the rollers, set the spring (initially the spring is set to 30 mm, whether feed rollers or sealing rollers).

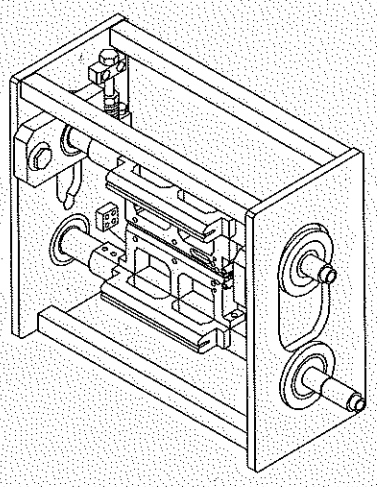


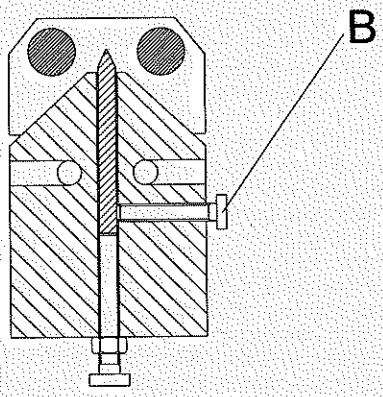
6.3.2.-SETTING CROSS-SEALING (GROUP OF CLAMPS)

When the sealing is not correct and after **checking that the controller temperature** is correct, it may be because the clamp is not adjusted notch by notch and you will have to proceed as follows:

1.- Remove the cutting blade by loosening the grooved rods (B) to be able to see through the grooves on the notches.

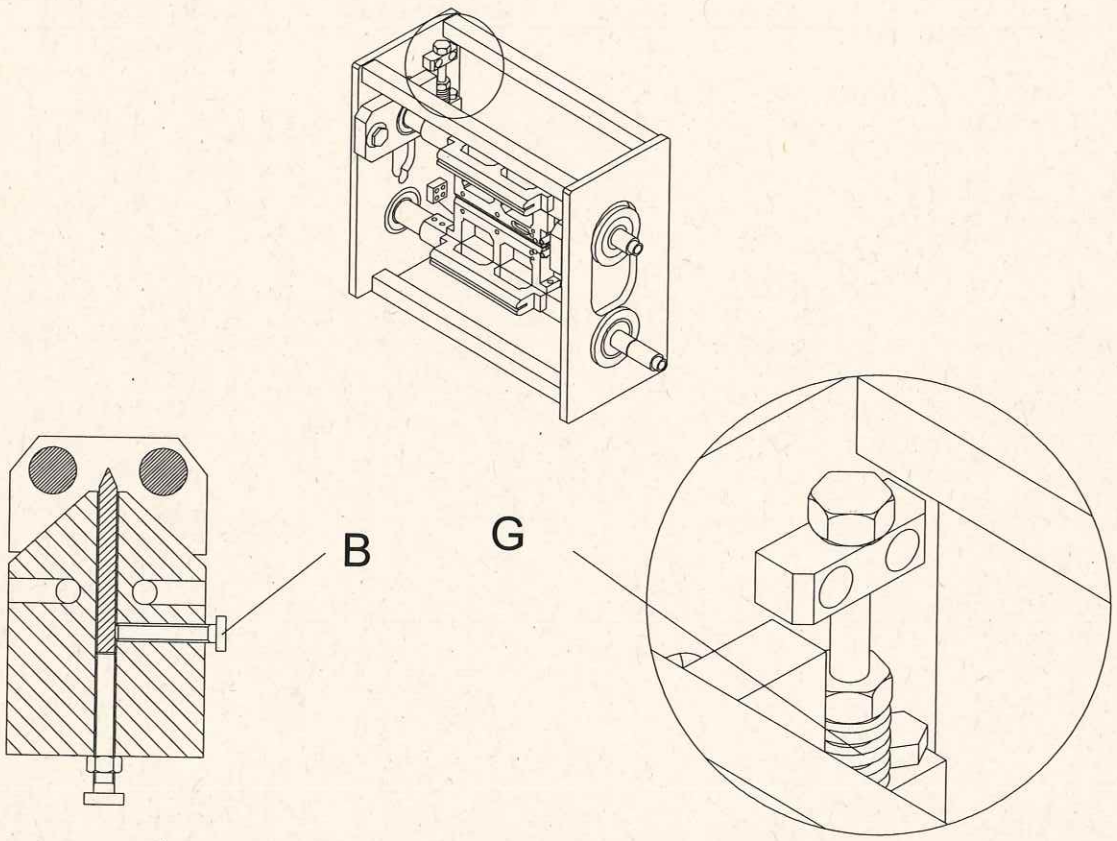
2.- Centre the clamp notch by notch. Proceed differently according to the type of clamp:





4.- Re-insert the blade in the previous position and tighten the grooved rods (B).
If the blade cuts and does not knock around, it remains adjusted.
If the blade does not cut and/or knock around, proceed to adjust it (more information in the following point).

IMPORTANT NOTE: the spring (G) will be set to a measurement from the factory and later its position will not be modified.



6.3.3.-SETTING CROSS-CUTTING BLADES

Located in the cross-cutting clamps, these blades have the mission of separating the packages into untis.

When the cut is not correct and after **checking that the controller temperature** is adequate, you can adjust the *cross-cutting blade* (this setting is very meticulous, you have to get the blade to cut the film but without any type of knocking around).

Before anything, check if the clamp is properly adjusted (notch by notch and its pressure). If it is alright, proceed to set the blade in the following manner.

SETTING CUTTING BLADE

1.- Loosen the grooved rods (B) a little in such a way that they hold the blade without tightening too much (so the blade does not fall).

2.- Loosen the locknut (C) and remove the screws (D) (counter-clockwise direction) a little.

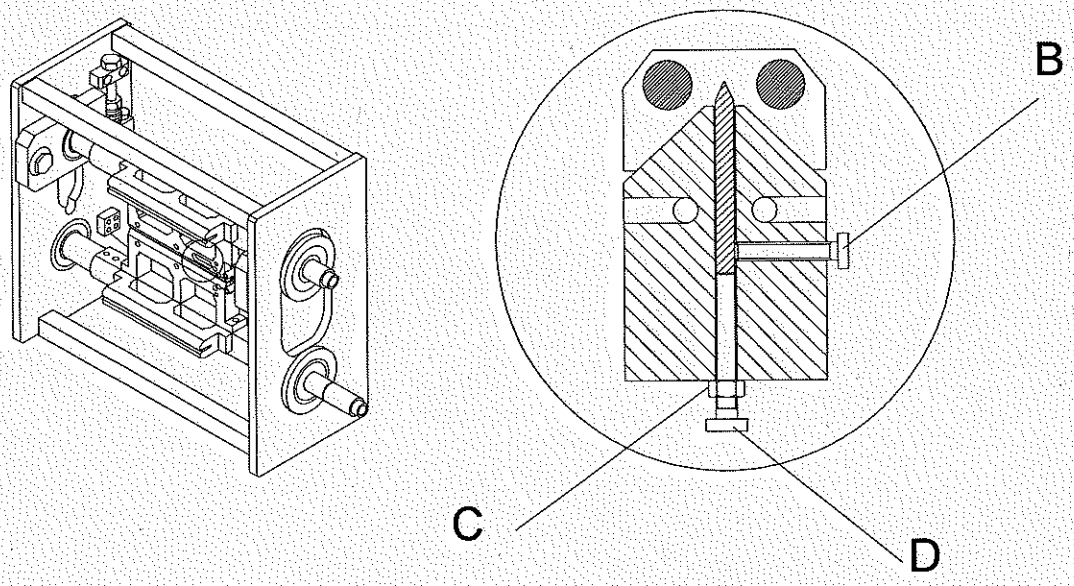
3.- Tighten the screws (D) one by one until they hit the counter-blade and then remove them. With this, you can bring the blade close to the counter-blade.

4.- Tighten screws (D) one by one until noticing that they tough the blade and tighten another 1/8 of a turn (clockwise).

5.- If it cuts on one side and not the other, and if it does not bang around, continue to tighten the screws 1/8 of a turn more on the part that does not cut.

6.- Once you obtain a uniform cut and without banging around, tighten the locknut (C) by tightening the screw (D).

7.- Check again if the cut is correct, tighten the grooved rods (B).



ATTENTION

THESE OPERATIONS MUST BE CARRIED OUT BY DULY QUALIFIED PERSONNEL

7.-MAINTENANCE

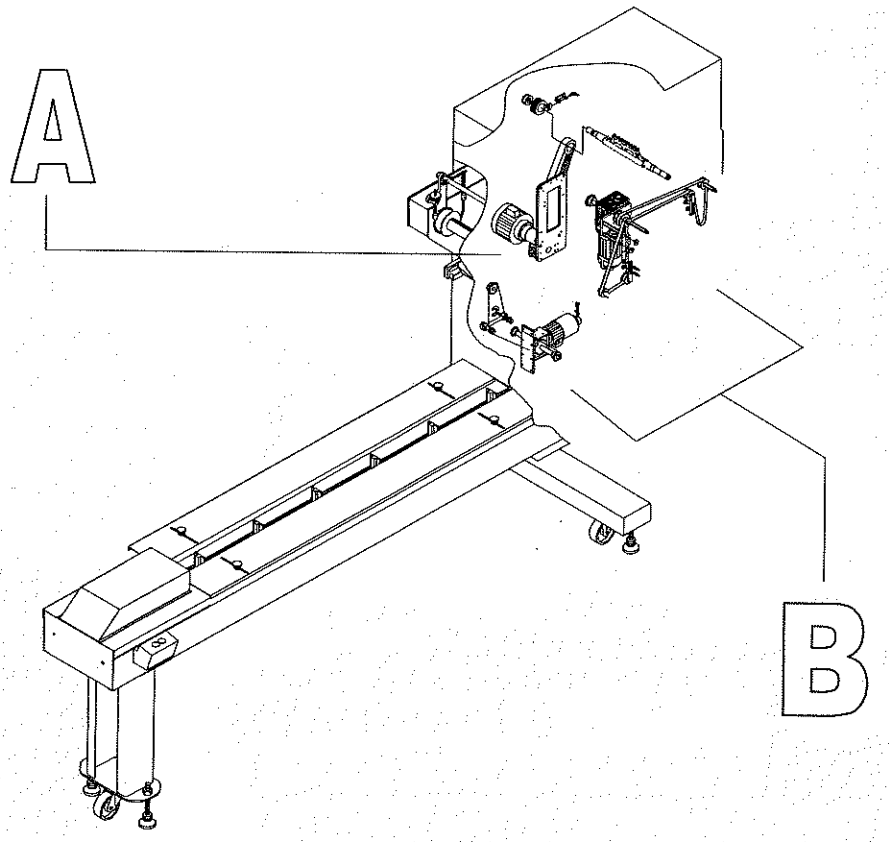
7.1.-PREVENTATIVE MAINTENANCE

7.1.1.-LUBRICATION

Lubricate (grease) all the greasing areas of the machine on a weekly basis. For proper greasing use KRAFT COMPLEX 200 grease or equivalent.

The following drawings indicate the greasing points on the machine. Aside from these points, grease all of the gears on the machine with KLUBER LUBRICATION UH1 14 - 222 (Klübersynth ®) grease or equivalent.

POINTS OF LUBRICATION		GREASING METHOD	LUBRICANT	
			CHARACTERISTICS	RECOMMENDATION
A	DRIVE CHAINS	- Oil Lubrication	Oil	KLUBER STRUCTOUIS BHD
B	MOVEMENT GEARS	- Checking all machine gears - Greasing	GREASE	KLUBER STRUCTOUIS BHD KLUBER LUBRICATION UH1 14 - 222 (Klübersynth ®)



7.1.2.-MECHANICAL MAINTENANCE

POINTS OF ADJUSTMENT	FREQUENCY
Feed Chain	Tighten when they become loose
Drive Chains	Tighten when they become loose
Cutting Blade	Replace when worn or ripped
Safety Microns	Check correct reading of microns

7.1.3.-ELECTRICAL MAINTENANCE

COMPONENTS	LOCATION	OPERATION
COLLECTORS	- Feed rollers - Cross-cutting clamp	Polish periodically and clean the contact part with alcohol using charcoal.
RESISTANCES	- Sealing clamp - Sealing rollers	Check the terminals and tighten screws at the terminal connection.
TEMPERATURE CONTROLLERS	- Control Panel	Check for correct operation.
PHOTOCELLS (OPTIONAL)	- Reel holder - Feed cart - etc.	Periodically, clean the lens, for correct mark reading (eye-mark).

7.1.4.-CLEANING MACHINE

CLEANING POINTS	FREQUENCY	OPERATION
Feed Conveyor (Optional)	Daily	Clean top plate and the feed conveyors.
Cutting blades and cross-sealing	Daily	Eliminate left-over film or product that may have been left in the clamp.
Longitudinal sealing rollers	Daily	Collect the excess film or product that may have fallen into rollers.

7.1.4.1.-CLAMP CLEANING (CROSS-CUTTING SEALING) «NON TEFLON CLAMPS»

The clamps can accumulate left-over film, if at any time product is caught there may be left-over product both in the clamps and the blade. For clamp cleaning strictly follow the following safety recommendations.

SAFETY REQUIREMENTS

ATTENTION

1.- Disconnect the machine (if necessary)

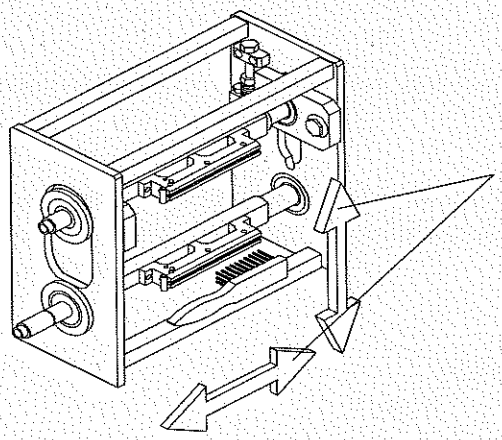
2.- Wait a certain time until the sealing rollers have cooled sufficiently.

4.- USE PROTECTIVE GLOVES TO AVOID BURNS OR OTHER INJURIES.

5.- Handle all elements with care, being very careful with electrical elements and cables that may be around the handling area.

PRECAUTION

BE VERY CAREFUL WHEN DISCONNECTING THE MACHINE SINCE THIS OPERATION WILL DISCONNECT THE PNEUMATIC SYSTEM, THEREFORE THE RESULTING PRECAUTIONS WILL HAVE TO BE TAKEN WITH THE MOVING COMPONENTS THAT ARE PNEUMATICALLY CONTROLLED TO AVOID PERSONAL INJURIES. THE SIGNALLING STANDARDS INDICATED IN THE FIRST PART OF THIS MANUAL MUST BE FOLLOWED.



ATENCIÓN

THE NOTCHES OF THE CLASPS MAY BE DISTRIBUTED LENGTHWAYS, TRANSVERSALLY OR OBLIQUELY, AND THEREFORE, AS WE HAVE MENTIONED ABOVE, BOTH THE UPPER AND LOWER CLASPS SHOULD BE CLEANED IN THE DIRECTION OF THE NOTCHES.

7.1.4.2.-CLEANING THE SEALING ROLLERS (LONGITUDINAL SEALING)

SAFETY REQUIREMENTS

ATENCIÓN

1.- Position the clasps as open as possible as indicated in the figure above.

2.- Disconnect the resistances of the clasps by means of the electric activation / deactivation switches of the transversal welding resistances or else it is recommended to completely disconnect the machine.

3.- Wait a sensible time until the clasps have sufficiently cooled

4.- USE PROTECTIVE GLOVES TO AVOID CUTS OR OTHER INJURIES AND TAKE SPECIAL CARE WHEN YOU CLEAN THE CLASP WHERE THE CUTTING BLADE IS LOCATED AS SERIOUS CUTS AND INJURIES MAY BE SUFFERED.

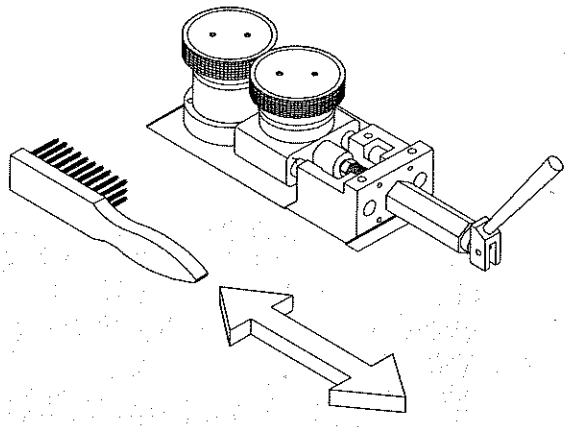
5.- Handle with care all the elements, taking special care with the electrical elements and cables there may be around the clasps.

PRECAUTION

BE VERY CAREFUL WHEN DISCONNECTING THE MACHINE SINCE THIS OPERATION WILL DISCONNECT THE PNEUMATIC SYSTEM, THEREFORE THE RESULTING PRECAUTIONS WILL HAVE TO BE TAKEN WITH THE MOVING COMPONENTS THAT ARE PNEUMATICALLY CONTROLLED TO AVOID PERSONAL INJURIES. THE SIGNALLING STANDARDS INDICATED IN THE FIRST PART OF THIS MANUAL MUST BE FOLLOWED.

The clamps must be cleaned when the product or film adheres to them., Said cleaning should be done as follows:

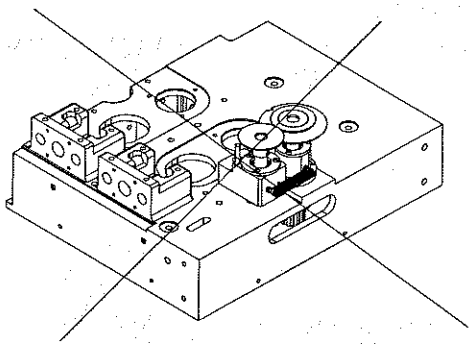
Remove the hotplates that cover the sealing rollers, leaving these exposed and with the metal brush, lightly brush its surface following the direction of the rollers' grooves, trying not to damage them.



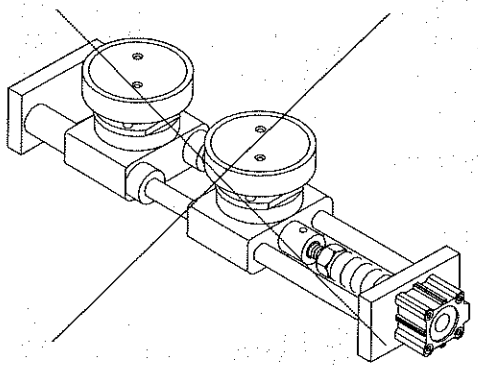
IMPORTANT

When dealing with cutting rollers or gummed rollers never use a metal brush to clean film or product excess stuck to these, since there is a risk of dulling the first and damaging the rubber of the latter. In these cases we recommend using a damp cloth or rag. Be very careful when cleaning the cutting roller's circular blade as serious injuries may occur while handling, we recommend waiting a certain time until the group of rollers have cooled sufficiently to be handled and cleaned.

CUTTING ROLLERS



RUBERED ROLLERS



ATTENTION

NEVER USE METAL BRUSH

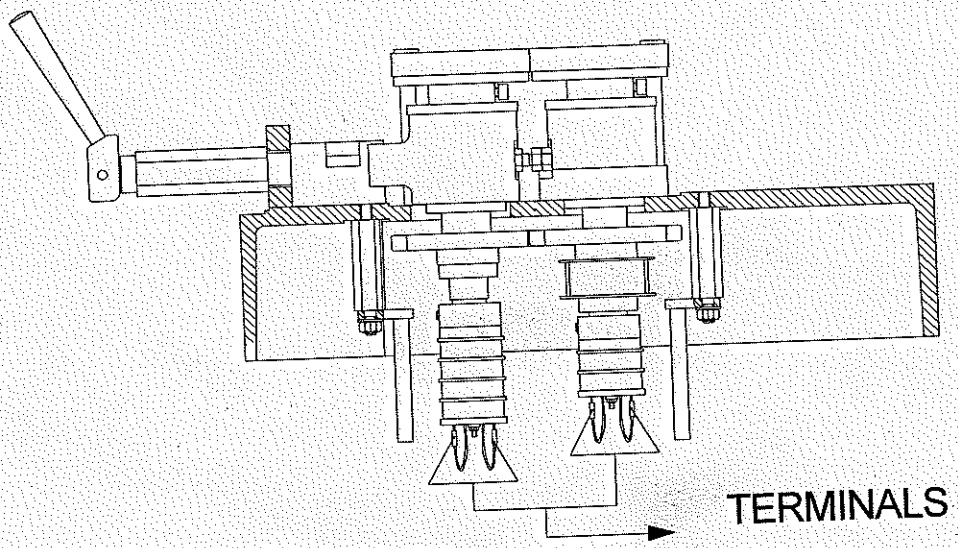
7.2.-CORRECTIVE MAINTENANCE

7.2.1.- REPLACING LONGITUDINAL SEALING RESISTANCES AND THERMO-COUPLE (GROUP OF SEALING ROLLERS)

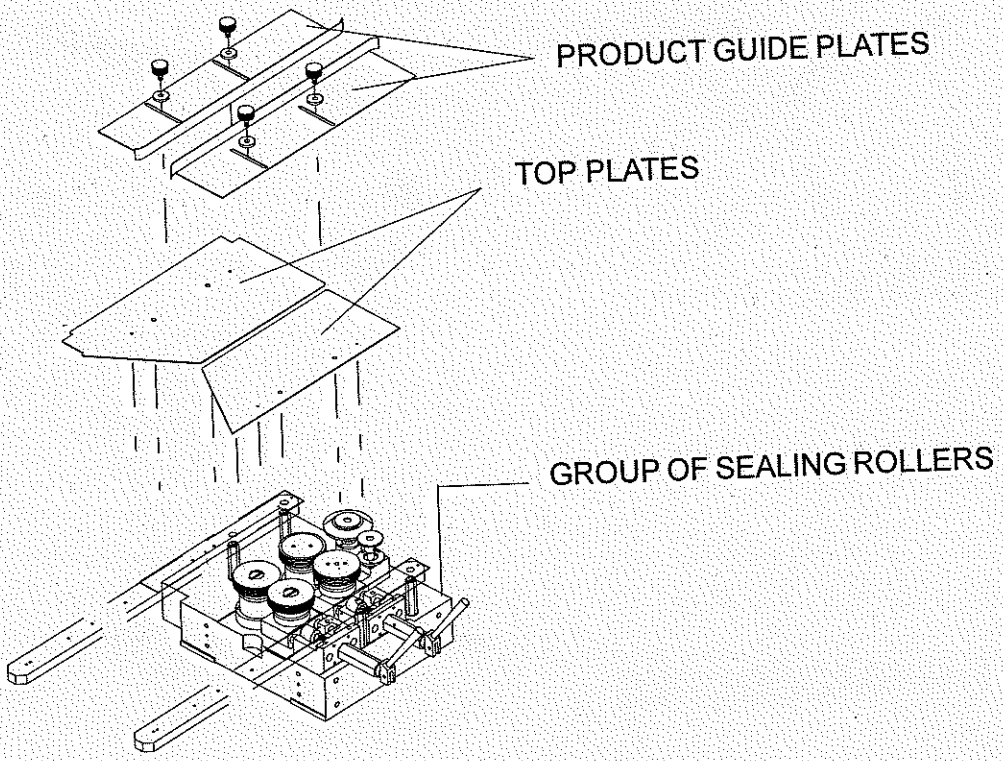
To replace these resistances follow these steps:

1.- Disconnecting the machine is mandatory

2.- Loosen the terminals located below the sealing rollers for the connection terminals.



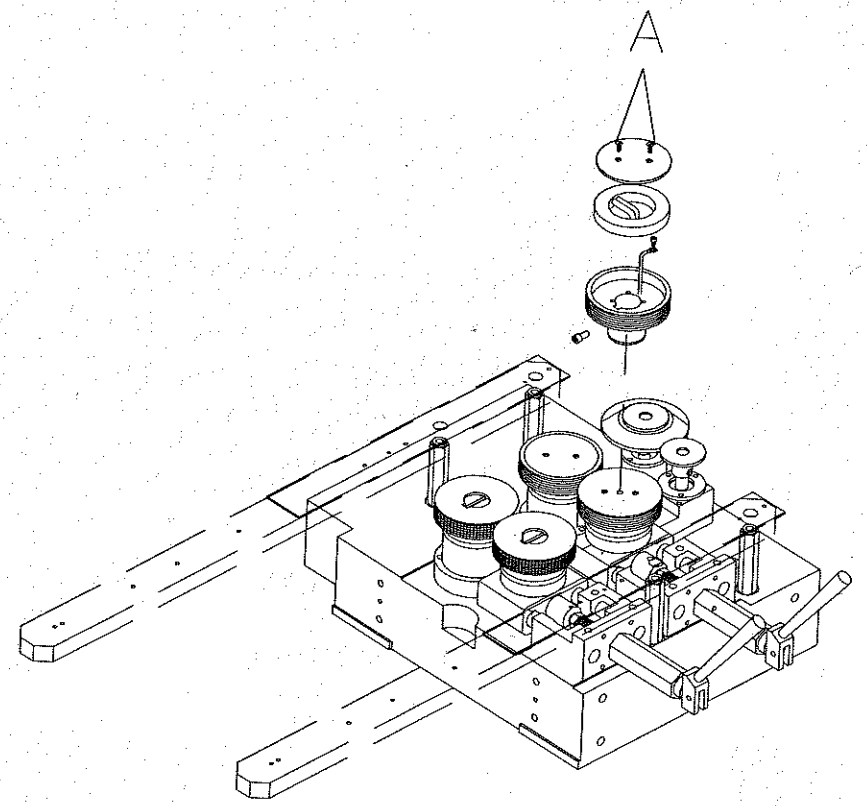
3.- Remove the top plates that covers the sealing rollers.

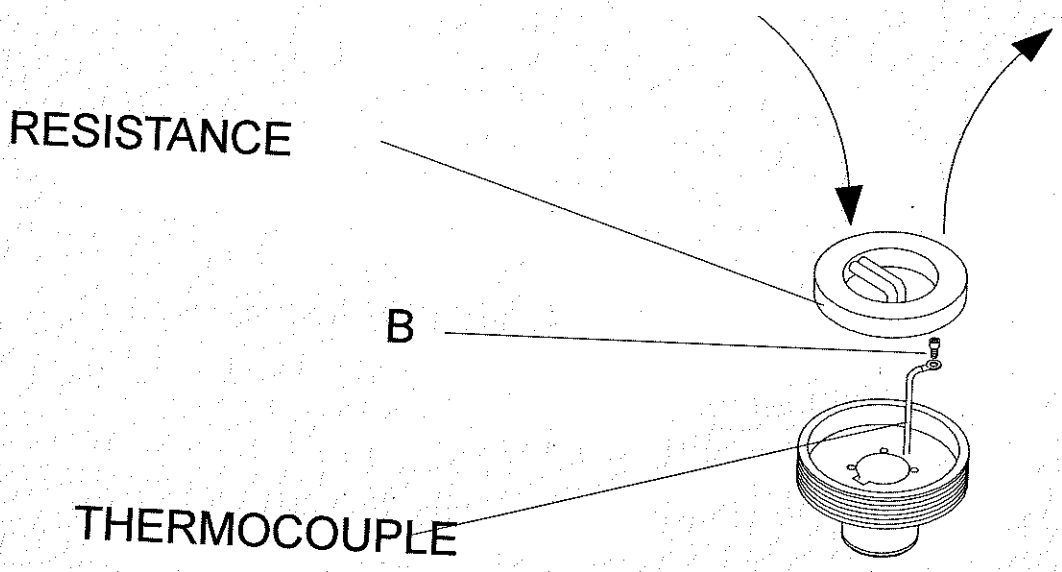


4.- Loosen screws (A) and remove the cover

5.- Then remove the resistance and replace it with a new one. To change the thermo-couple loosen screw B, remove the thermo-couple and replace it with a new one.

6.- To assemble proceed in reverse order.





7.2.2.-REPLACING CROSS-SEALING RESISTANCES AND THERMO-COUPLE (GROUP OF CLAMPS)

To replace these resistances follow these steps:

1.- Disconnecting the machine is **mandatory**.

2.- Wait some time until the group of clamps has cooled down enough to

2.- Loosen the terminals of the connection terminals (A).

3.- Loosen the insulator (B)

4.- Remove the resistances by pulling on them

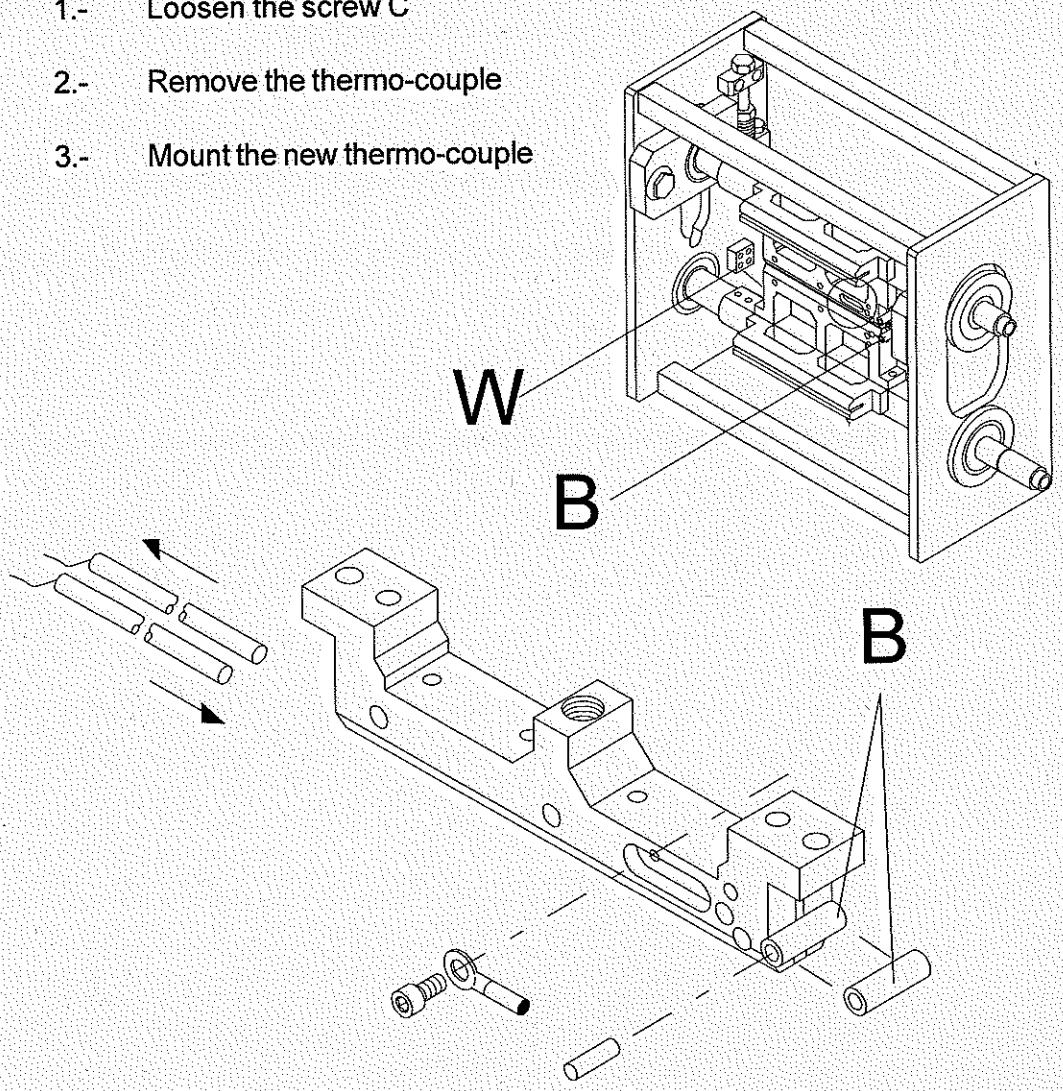
5.- To mount the new resistance, proceed in reverse order.

REPLACING THE THERMO-COUPLE.

1.- Loosen the screw C

2.- Remove the thermo-couple

3.- Mount the new thermo-couple



8.-SAFETIES

8.1.-SAFETIES AND PROTECTIONS

- DIFFERENTIAL:

This is protection from possible derivations to the grounding of the machine (QF1).

- THERMAL PROTECTION:

This is used to protect the main motor from surges. This protection is offered by the frequency changer, that supplies the motor.

- PROTECTIONS:

Thermal-magnetic QF2: Protects the power supply of the main motor.

Thermal-magnetic QF3: Protects the circuit of the cutting clamps and cross-sealing resistances and the circuit of the longitudinal sealing resistances.

- EMERGENCY STOP:

This button keeps the machine stopped in the position it finds itself when activated.

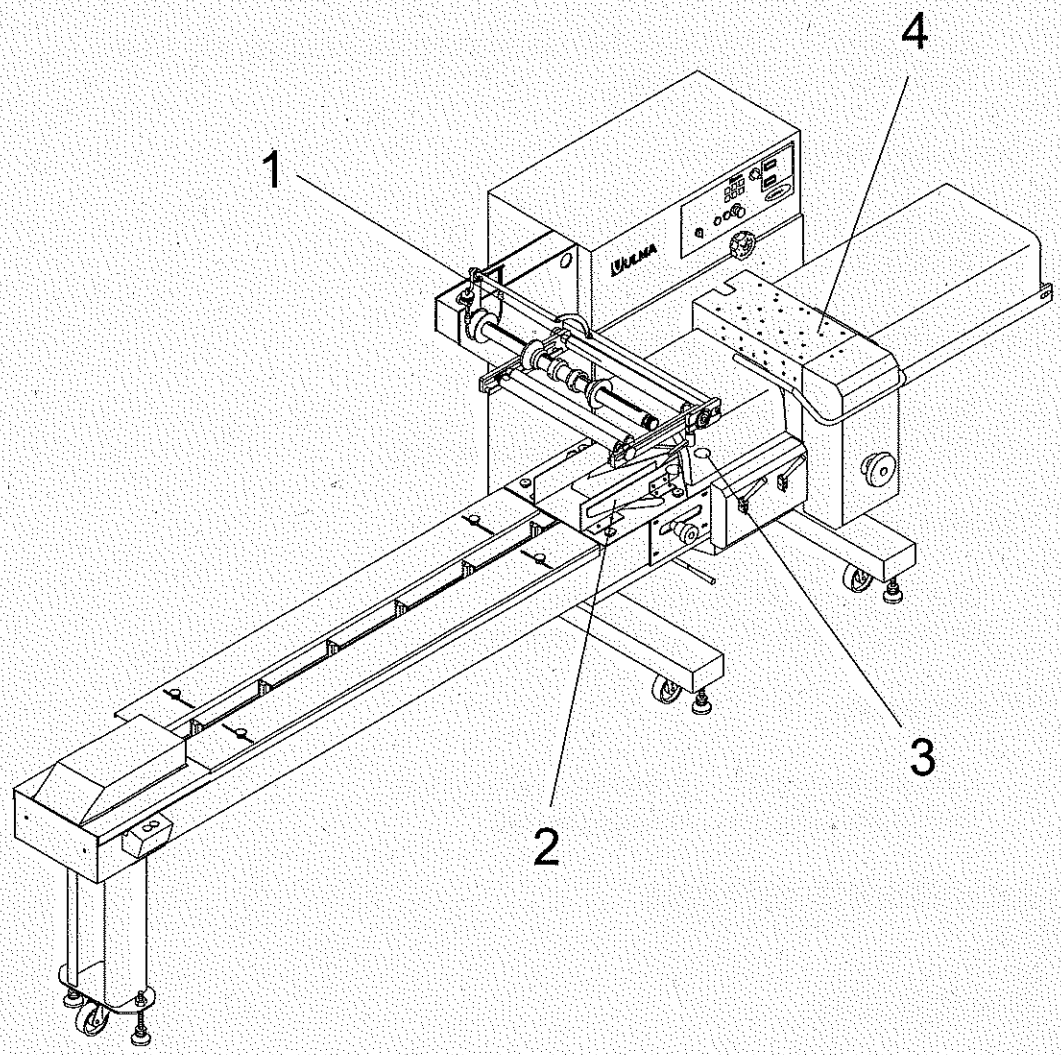
Disconnect the voltage of the temperature controllers for the longitudinal and cross-sealing.

- PROTECTION GUARDS:

These protections activate microswitches when the guards are raised, turning off the cycle of the machine.

9.-FACTORS THAT INFLUENCE THE PROCESS

* Below we will describe the most important factors that influence in the process to obtain proper sealing.



1.- UNWINDING ROLLERS (REEL HOLDER)

* It is very important to set a good speed for the unwinding rollers to therefore obtain the proper tension for the film in the mould. (not too tight and not too lose).

2.- MOLD

* It is important to have the proper setting for the mold to achieve a good film tube and a correct film tension in the head of the sealing rollers.

3- LONGITUDINAL SEALING (GROUP OF SEALING ROLLERS)

These are the parameters to control in the head of the longitudinal sealing.

* Temperature of sealing rollers:

Too High→	It will burn the seal or there will be holes in the seal.
Too low→	Weak seal

* Pressure of sealing rollers:

Too High→	Holes in the seal
Too low→	Weak seal

* Temperature of cutting roller: (optional)

Too High→	Left-over burnt film
Too low→	There will be no excess film

* Sealing disc

Cleaning the roller→	Good seal
Rollers are dirty→	Will seal incorrectly

* Cutting blade

Sufficiently sharp→	Will make a proper cut
Dull or damaged→	Inconsistent cut

4.- CROSS-SEALING HEAD

* Cutting position

It is important to achieve the seal in the middle of the clamps, between products. Never enough close from one of the products, in this case there will be too much tension in the seal.

*Sealing time

Too High→ Seal damaged (Ripped or has holes)
Too low→ Weak seal

* Clamp temperature

Too High→ Seal damaged (Ripped or has holes)
Too low→ Weak seal

* Sealing speed

Too High→ Tension in the seal
Too low→ Clamp catches product

* Cutting time

Too low→ Poor bag cut

* Clamp

Clean clamp→ Good seal
Clamp dirty→ Poor seal

* Blade

Sharp→ Will make a proper cut
Dull or damaged→I nconsistent cut
Blade dirty→ Inconsistent cut

10.-F.A.Q

PROBLEM	CAUSE	SOLUTION
The machine does not start when connecting the general interruptor (QS1)	1.- Erroneous electrical feed 2.- Deactivated QF1 differential	1.- Check power supply (380v three phase + neutral) (220v without neutral) 2.- Activate the differential
The machine turns on but does not move when pushing the start button	1.- The machine is in alarm 2.- Active stop button signal (NO) 3.- Deactivated start button signal (NO) 4.- Damaged feeding source (Verify voltage output. It has to be more or less 24v). 6.- PLC in Error, red light	1.- Fix alarm problem 2.- Check the stoppage line in the PLC entrances with the help of the electrical diagrams 3.- Check the movement line in the PLC entrances with the help of the electrical diagrams 4.- Change power supply 6.- Check power supply in the PLC (if necessary, change the PLC)
Bad temperature adjustment or the resistances do not heat up	**REGULATORS NOT INTEGRATED** 1.- Wrongly programmed regulator 2.- Damaged regulator 3.- Damaged resistances 4.- Damaged thermopar (does not properly capture temperature) 5.- Blown fuse 6.- Damage solid state relay 7.- Disconnected interruptors 8.- Dirty brush contacts	 1.1- Reprogram the regulator 1.2.- Autotuning or autodial 2.- Change the regulator 3.- Change resistances 4.- Change thermopar 5.- Change fuse 6.- Change relay 7.- Activate interruptors 8.- Clean carbon brush
Burnt weld	1.- Weld temperature too high	1.- Disminuir la temperatura de soldadura seleccionada en el regulador de temperatura correspondiente.

PROBLEM	CAUSE	SOLUTION
Bad temperature adjustment or resistances are not heating up	**INTEGRATTED RAGULATORS** 1.- Does not read thermopar	1.- Check the terminal connections and the CAN communication cable between modules E2 and E16.
"Eye-mark Correction" does not correct adequately (optional)	1.- Deactivated printed film	1.- Activate PRINTED FILM option (Screen nº 27)
	2.- "Format Package" parameter is wrongly adjusted	2.- Adjust the correct "Fortmat Package" parameter
	3.- Photocell in the reel stand does not read properly	3.1.- Program it 3.2.- Position it correctly 3.3.- Check cables
	4.- Photocell reads properly but no voltage (24v) reaches the PLC	3.4.- Change photocell 4.- Verify cables
	5.- Motorised reel stand roller maladjusted or open	5.- Adjust speed and/or close
	6.- Main motor encoder (M3) does not read properly	6.1.- Adjust the encoder's main motor 6.2.- If broken or damaged, change the encoder
	7.- Roller motor encoder (M2) does not read correctly	7.1.- Adjust the rollers motor encoder 7.2.- If broken or damaged, change the encoder
	8.- Actual format and bag length too different	8.- Equal the length parameter of the bag to the actual value between the eye-mark and correct possible movements with the parameter "MOVEMENT CORRECTION" (Screen nº 10)
	Error not gathered in this point and is not any of the prior causes	Call technical service assistance

PROBLEM	CAUSE	SOLUTION
Jaw does not weld properly	1.- Dirty jaw 2.- Loose jaw 3.- Worn jaw teeth or deteriorated 4.- Inadequate temperature in the jaw 5.- Eliptic stop not adjusted 6.- Eliptic mechanical point wrongly adjusted 7.- Paper quality	1.- Clean jaw 2.- Adjust the jaw teeth wit teeth 3.- Chance the jaw 4.- Adjust the jaw termperature 5.- Adjust the stop so the cut point Speed cut (Vrollers) = Jaw Speed (Vjaw) 6.- Adjust so that the slowest machine speed will be when welding. Procedure: when jaws in cut, horizontal elipical slot and pin facing the carriage 7.- Try with another film or with another coil of the same quality as the film
Jaw does not cut correctly	1.- Loose blade 2.- Worn or damaged blade 3.- Dirty jaw and blade 4.- Inadequate jaw temperature 5.- Eliptic stop not adjusted 6.- Eliptical mechanical point not adjusted 7.- Paper quality	1.- Adjust the blade 2.1.- Sharpen the blade 2.2.- Change the blade 3.- Clean the jaw and the blade 4.- Adjust the jaw's temperature 5.- Adjust the stop so the cut point Speed cut (Vrollers) = Jaw Speed (Vjaw) 6.- Adjust so that the slowest machine speed will be when welding. Procedure: when jaws in cut, horizontal elipical slot and pin facing the carriage 7.- Try with another film or with another coil of the same quality as the film

PROBLEM	CAUSE	SOLUTION
Rollers do not weld correctly	1.- Dirty rollers 2.- Loose rollers 3.- Worn or deteriorated rollers' teeth 4.- Inadequate rollers temperature 5.- Paper quality	1.- Clean rollers 2.1.- Adjust the jaw teeth wit teeth 2.2.- Adjust pressure between rollers 2.3.- Adjust rollers' height 3.- Change rollers 4.- Adjust temperature 5.- Try with another film coil
Rollers brake the paper papel	1.- Dirty rollers 2.- Loose rollers 3.- Worn or deteriorated rollers' teeth 4.- Inadequate rollers temperature 5.- Paper quality	1.- Clean rollers 2.1.- Adjust the jaw teeth wit teeth 2.2.- Adjust pressure between rollers 2.3.- Adjust rollers height 3.- Change rollers 4.- Ajustar temperatura 5.- Probar con otra bobina de film
Rodillos queman el papel	1.- Rodillos sucios 2.- Rodillos desajustados 3.- Dientes de los rodillos gastados o deteriorados 4.- Temperatura inadecuada de los rodillos 5.- Calidad del papel	1.- Limpiar rodillos 2.1.- Ajustar rodillos diente con diente 2.2.- Ajustar presión entre los rodillos 2.3.- Ajustar altura rodillos 3.- Cambiar rodillos 4.- Adjust temperature 5.- Probar con otra bobina de film

PROBLEM	CAUSE	SOLUTION
Rollers do not move	1.- " Package format " adjusted to 0 2.- Motor cables and variator	1..- Adjust the "Package Format" parameter 2.- Check the cables
Rollers move forcefully	1.- Rollers motor encoder does not read correctly .- Motor cables and variator	1.1.- Adjust the rollers motor encoder 1.2.- Change the rollers motor encoder 2.- Check the cables
Variable package format	1.- Rollers motor encoder does not read correctly 2.- Incorrect film gear	1.1.- Adjust the rollers motor encoder 1.2.- Change the rollers motor encoder 2.- Verify the film unwinder rollers status.
No se visualiza nada	1.-There isn't 24 V in the display 2.- If there is 24 V but nothing is seen (broken or damaged viewer)	1.- Verify the communication connection cables 2.- Change display
No se activa algún detector	1.- Verify if it activates in automata 2.- Check cables 3.- Error in the feeding tray 4.- Error automata entrance	1.- Check cables 2.- Fix cables 3.- Change power supply 4.- Change autómata

PROBLEM	CAUSE	SOLUTION
Electro valve does not activate	1.- Verify if the automata exit activates 2.- Check cables 3.- Error in power supply 4.- Error automata exit	1.- Check cables 2.- Fix cables 3.- Change power supply 4.- Change autómata
Products move in the rollers	1.- Maladjusted mould 2.- Maladjusted entry arm 3.- Wrong worktop 4.- Open motorised roller	1.- Correctly adjust the mould 2.- Correctly adjust the entry arm 3.- Replace worktop 4.- Close motorised roller
Film goes out of the mould or brakes	1.- Film coil not centered 2.- Film entry arm positioned in incorrect position. 3.- Incorrectly positioned mould 4.- Incorrect worktop 5.- Inadequate reel stand brake tension 6.- Wrongly adjusted motorised reel stand roller 7.- Open motorised roller	1.- Center film coil 2.- Adjust entry arm position 3.- Adjust mould position 4.- Replace worktop 5.- Adjust the reel stand brake tension 6.- Correctly adjust the motorised roller speed 7.- Closed motorised roller
In automatic, the machine does not stop	1.- Defective stop button 2.- Defective start button	1.- Check the stop button cables 2.- Check the start button cables

ULMA

ENVASE Y EMBALAJE
PACKAGING SYSTEMS
SYSTEMESD'EMBALLAGE

VERSIÓN :02 FECHA: 17 – 05 – 2007
AUTOR :M.A.HERRANZ

FICHA DE REGLAJES
ADJUSTEMENTS DATA
FICHE REGLAGES

FLORIDA PP15

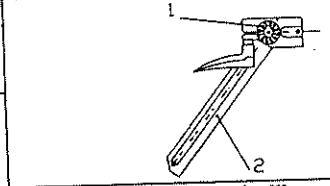
DERECHA X DERECHA INOXIDABLE____
(MARCAR CON UNA "X" EL TIPO DEL QUE SE TRATA)

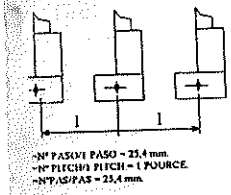
CLIENTE/CUSTOMER/CLIENT	PAIS/COUNTRY/ PAYS	CONTRATO Nº/CONTRACT Nº/ CONTRAT Nº
LILIA PACKAGING PTY	AUSTRALIA	565526
Nº MÁQUINA MACHINE NUMBER NÚMERO MACHINE	141038	ENTREGA/DELIVERY/ LIVRAISON

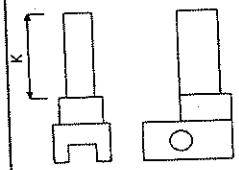
CONSUMO (A)	POTENCIA TOTAL (KW)	TENSIÓN	Hz.	FASES	MONTADOR/MOUNTED BY MONTE PAR
7	4,6	415	50	3	226

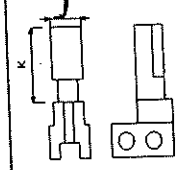
PRODUCTOS ITEMS PRODUITS	PRODUCTO: DENOMINACIÓN Y MEDIDAS ITEM: DESCRIPTION AND SIZE PRODUIT: DENOMINATION ET DIMENTIONS	TIPO DE MOLDE FOLDING BOX CONFORMATEUR	Nº
Nº 1	TRAY 1 180X160X50=80	Extensible	
Nº 2		DOBLE	
Nº 3			
Nº 4			
Nº 5			

PRODUCTOS ITEMS PRODUITS	PRODUCTO: DENOMINACIÓN Y MEDIDAS ITEM: DESCRIPTION AND SIZE PRODUIT: DENOMINATION ET DIMENTIONS	TIPO DE MOLDE FOLDING BOX CONFORMATEUR	Nº
Nº 6			
Nº 7			
Nº 8			
Nº 9			
Nº 10			

REGLAJES PRODUCTOS. ADJUSMENTS ITEM/ REGLAGES PRODUITS.				
			24/a	
Inclinación brazo. Arm position. Inclinacion du bras.		1	26	23
Posición rodillo. Roller position. Position rouleau.		2	260	285
Tipo de pala Pusher type Pelles type	Metálica / Metallic / Métallique			
	Plástico / Plastic / Plastique		X	
	Pitón / Narrow pusher / étroit pelles			
	Pitón cabeza redondeada / Rounded pusher / Arrondi pelle			



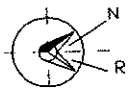




I	12	
J	25	
K	39	

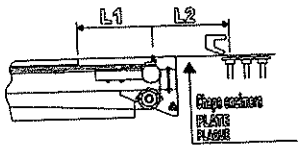
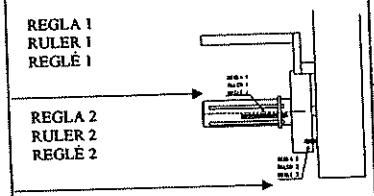
Posición potenciómetro motor motorizado *(tensor de film)*
Position of the potentiometor of the motori. *(film tensor)*
La place du potenti. du moteur de celui a motorise *(film du tenseur)*

RELOJ VARIADOR DEVANADOR
VARIATOR OF THE DEVANATOR
VARIATEUR DEVANATEUR



N	15	5
R	8	14

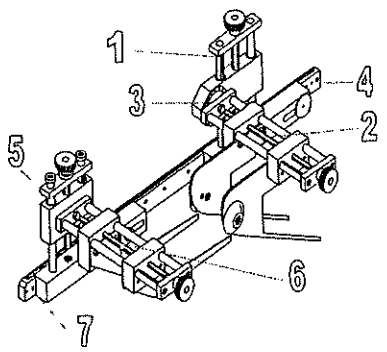
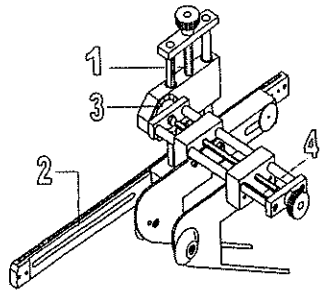
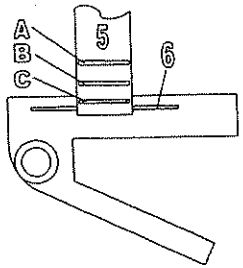
Reglajes orientativos por no disponer de Bandejas reales

AJUSTES PRODUCTOS. **ADJUSMENTS ITEM** **REGLAGES PRODUITS.**			
ANCHO DE BOBINA **FILM WIDTH** **LARGEUR DU FILM**			470
Nº DE CHAPA MOLDE **NUMBER OF THE FOLDING BOX** **NUMERO DE CONFORMATEUR**			
	CAIDA DE LA PALA EN EL MOLDE FALL OF THE SHOVEL IN THE MOLD CHUTE DE LA PELLE DANS LA MOISISSURE	**L1**	340
	DIST. DE LA PALA AL PRIMER RODILLO DISTANCE OF THE SHOVEL TO THE FRIST ROLLER DISTANCE DE LA PELLE AU ROULEAU	**L2**	207
Posición reglas 1 y 2 **Rules 1 & 2 position** **Position Des Règles 1 & 2**		**REGLA 1** **Ruler 1** **Regle 1**	
		REGLA 2 **Ruler 2** **Regle 2**	

REGULACIÓN TEMPERATURA CON REGULADORES NO INTEGRADOS / Tª CONTROL WITH NOT INTEGRATED REGULATORS / REGULATEUR TEMPERATURE NON INTEGRÉS	
Temperaturas Grupo Mordazas / Crimp Jaws Device Temperatures / Températures Des Mâchoires	
Tª Mordaza Superior / Upper Jaw Temp. / Temperature De La Machoire Superieure	150°
Tª Mordaza Inferior / Lower Jaw Temp. / Temperature De La Machoire Inférieure	150°
Temperaturas Grupo Rodillos de Soldadura / Sealing Rollers Device Temperature / Température des Rouleaux	
Tª Primer par de rodillos / First Pair of Rollers Temp. / Première Paire de Rouleaux Temp.	
Tª Segundo par de rodillos / Second Pair of Rollers Temp. / Deuxième Paire de Rouleaux Temp.	125°
Tª Tercer par de rodillos / Third Pair of Rollers Temp. / Troisième Paire de Rouleaux Temp.	
DATOS DEL ANTIVUELCO / SETTINGS OF THE UPPER ACCOMPANIMENT / REGLAJE ACCOMPAGNEMENT SUPERIEUR	
POSICIÓN ALTURA ANTIVUELCO / HEIGHT OF THE UPPER ACCOMPANIMENT / HAUTEUR DE L'ACCOMPAGNEMENT SUPERIEUR	

REGLAJES MOLDE
SETTINGS OF THE FOLDING BOX
LES RÉGLAGES DE LA MOISISSURE

14/4/18

REGLAJES PRODUCTOS./ADJUSMENTS ITEM/REGLAGES PRODUITS.			1	2	3	4	5	6	7	8	9	10	11	12	13	14
Molde Extensible Doble Adjustable Double folding box Réglages De La Moisissure Reglable Double		Pos. 1	Altura molde1 / Fol. Box height 1	90	114												105
		Pos. 2	Anchura molde 1 / Fol. Box width 1	58	64												102
		Pos. 3	Angulo 1 molde / Fol. Box angle 1	8	9												9
		Pos. 4	Posición molde 1 / Folding box pos. 1	210	253												300
		Pos. 5	Altura molde2 / Fol. Box height 2	83	114												130
		Pos. 6	Anchura molde 2 / Fol. Box width 2	30	45												75
		Pos. 7	Posición molde 2 / Folding box pos. 2	590	626												630
Molde Extensible Adjustable folding box Réglages De La Moisissure Reglable		Pos. 1	Altura molde1 / Fol. Box height 1														
		Pos. 2	Posición molde 1 / Folding box pos. 1														
		Pos. 3	Angulo 1 molde / Fol. Box angle 1														
		Pos. 4	Posición molde 1 / Folding box pos. 1														
Ide Extensible Adjustable folding box Réglages De La Moisissure Reglable		POSICIÓN N° 5 POSITION N° 5 PLACE N° 5														
		POSICIÓN N° 6 POSITION N° PLACE N° 6														

ULMA

ENVASE Y EMBALAJE
PACKAGING SYSTEMS
SYSTEMES D'EMBALLAGE

VERSIÓN : 02 FECHA :17 – 05 – 2007 AUTOR :M.A.HERRANZ

CLIENTE/CUSTOMER/CLIENT					TIPO MÁQUINA/MACH.TYPE/MACHINE	FLORIDA B&R PP15 DCH	
Nº MÁQUINA/MACHINE Nº/MACHINE Nº					Nº DE CONTRATO/CONTRACT/CONTRAT		
CONSUMO (A)	POTENCIA TOTAL (KW)	TENSION	Hz	FASES	MONTADOR/MOUNTED BY MONTE PAR		

POSOTION PRODUIT / ADJUSTMENT PRODUCT / REGLAJES PRODUCTOS

REGLAJES PANTALLA MÁQUINA MACHINE PARAMETERS		CHARACTERISTIC PRODUCT/CARACTÉRISTIQUE PRODUIT / CARACTERÍSTICAS PRODUCTOS							
		1	2	3	4	5	6	7	8
CARRO / INFEED									
SOLO CARRO / ONLY INFEED (**ON / OFF**)		OFF							
PASO PALA / LUG PITCH		12							
POSICIÓN PARADA / STOP POSITION		500							
NPNB / NPNB (**ON / OFF**)		OFF							
RETARDO PROD. / PROD. DELAY									
SEL. TRAYECTORIA / SEL. TRAJECTORY									
VEL. / SPEED	MAX. / MAX.								
	PROD. PORD								
SALIDA AUX 1 / AUX. 1 OUTPUT (**ON / OFF**)		ON							
INICIO SALIDA 1 / START OUTPUT 1									
FIN SALIDA 1 / END AOUTPUT 1									
POS. EJE CARRO / POS. CONV. SHAFT									
SALIDA AUX 2 / AUX. 2 OUTPUT (**ON / OFF**)		OFF							
INICIO SALIDA 2 / START OUTPUT 2									
FIN SALIDA 2 / END AOUTPUT 2									
POS. EJE CARRO / POS. CONV. SHAFT									
F.P EN CARRO (**ON / OFF**)									
INICIO F.P									
FIN F.P									
POS. EJE CARRO / POS. CONV. SHAFT									

0499 015 453.

PRODUCTO / PRODUCT		1	2	3	4	5	6	7	8
MORDAZA / JAW									
LONGITUD PAQUETE / BAG LENGTH		265							
AJUSTE CORTE / CUT OFFSET		520							
ELIPTICO / ELIPTIC		95							
LONG. SOLDADURA / SEALING LENGTH		30							
ALTURA MORDAZA / JAW HEIGHT		0							
PROD. MAL. POS. / MISPLACED PROD. (**ON / OFF**)		OFF							
FIN PROD. / END PRO.	(- #)								
	(+#)								
INI. PROD. / INI. PRO.	(- #)								
	(- #)								
PARAR NAQUINA / STOP MACHINE (**ON / OFF**)		OFF							
PROD. MAL. POS / MISPLACED PROD. (**ON / OFF**)		OFF							
RETARDO PRODUCTO / PROD. DELAY									
SEL. TRAYECTORIA / SEL. TRAJECTORY									
PLIEGUE INGLÉS / GUSSET. (**ON / OFF**)		OFF							
INICIO PLIEGUE / START GUSSET									
FIN PLIEGUE / END GUSSET									
POS. EJE MORD. / POS SHAFT JAW									
EXPULSOR / EJECTOR (**ON / OFF**)		OFF							
INICIO EXPULSOR / START EJECTOR									
FIN EXPULSOR / END EJECTOR									
RET. PRODUCTOS / PROD. DELAY									

RODUCTO / PRODUCT	1	2	3	4	5	6	7	8
RODILLO / ROLLER								
DESLIZAMIENTO / COMPENSATION	3.00							
DES. SUGERIDO / SUGG. COMP.	0.00							
RET. ARRANQUE / START DELAY	0							
RET. APER. ROD / ROLL. OPEN DEL.	0							
PORTA BOBINAS / REEL HOLDER								
FILM IMPRESO / PRINTED FILM (**ON / OFF**)	ON							
AJUSTE MACULA / FILM MARK. POS.								
MAX. CORRECCIÓN / NAX. CORRECTION								
ERROR ACTUAL / ACTUAL ERROR								
CAMBIO BOBINA / FILM CHANGE (**ON / OFF**)	OFF							
POSICIÓN PEGADO / STICKING POS.								
VEL. CAMBIO (P/ m) / Spd. CHANGE								
VELOCIDADES / SPEEDS								
VEL. (P / MIN) / SPD. (P / MIN)	60							
VEL. MANUAL (%) / MANUAL SPD (%)	50							
VEL. PARADA (P/MIN) / STOP SPD	6							
RAMPA MAQ. (P / S^2) / MACH. RAMP (B / S^2)	2							
RAMPA PARDA F.P. / STOP RAMP F.P	3							
RAMPA SALIDA F.P / EXIT RAMP F.P	3							
VEL CAMBIO BOB. / FILM CHANG. SPD.	0							
CAMBIO VEL. (%) / SPD. CHANGE (%)	110							

PRODUCTO / PRODUCT	1	2	3	4	5	6	7	8
ALIMENTADOR CINTA CON RETENCIÓN / RET_FEEDER								
POS. INTRODUCCIÓN / INTRO. POS								
VEL.CINT.ALIM / FEEDER BELTS Spd.								
FALTA PRODUCTO / NO PRODUCT (**ON / OFF**)								
ANGULO NO PROD. / NO PROD. ANGLE								
Tpo. FALTA PROD. / PROD. WAIT TIME								
Tpo. SALI. F. PORD. / PROD. WAIT END T.								
VARIACIÓN VEL (%) / Spd. VARIATION (%)								
INI. CAMBIO VEL. / Spd. CH. START								
FIN CAMBIO VEL. / Spd. CH. END								
DAKOTA / DAKOTA								
VEL. MINIMA (%) / MIN.SPEED (%)								
LONG.PRODUCTO / PRODUCT LENG.								
Tpo Vmax (s) / T.MAX SPD(s)								
FILTRO Vmax / MAX.SPD FIL								
FALTA DE PROD. / NO PRODUCT								
ANGULO NO PROD. / NO PROD. ANGLE								
RAMPA PARADA F.P / STOP RAMP N.P								
RAMPA SALIDA F.P / EXIT RAMP N.P								

PRODUCTO / PRODUCT	1	2	3	4	5	6	7	8
MULTICINTAS / MULTIBELT								
VEL.MAX.(P/min) / MAX.SPD.(P/min)								
VEL.MINIMA (%) / MIN.SPEED (%)								
VEL.ARRANQUE (%) / START SPEED (%)								
N.VELOCIDADES / SPEEDS NUMBER								
+2 UNIDADES (%) / 2 UNITS (%)								
+1 UNIDAD (%) / 1UNIT (%)								
-1 UNIDAD (%) / -1 UNIT (%)								
-2 UNIDADES (%) / -2 UNITS (%)								
ALIMENTADOR POR GRAVEDAD / GRAVITY FEEDER								
Tpo FALTA PROD. / PROD.WAIT.TIME								
Tpo SAL F.PROD. / PROD.WAIT.END.T								
VARIACION VEL.% / SPD.VARIATION %								
INI CAMBIO VEL / SPD CH START								
FIN CAMBIO VEL / SPD CH END								