

Rotating table with automatic cycle *Rotating arm with automatic cycle*

USE AND CYCLES

Revision 1



TRANSLATION OF THE ORIGINAL INSTRUCTIONS



INDEX

1 OPERATORS	3
2 CONTROL PANEL	3
3 DISPLAY	7
4 TURNING ON	8
5 LOADIG AND UNLOADING	9
6 ASCENT AND DESCENT CYCLE	10
7 ASCENT CYCLE	10
8 DESCENT CYCLE	11
9 TOP SHEET CYCLE	12
10 MANUAL OPERATION	13
11 REINFORCING	14
12 PAUSE	14
13 RESET	15
14 RESTARTING AFTER AN EMERGENCY STOP	15
15 DIAGNOSTIC	17
16 STANDARD FILM ROLL CARRIAGE	18
16.1 OPERATIONAL DEVICES	18
16.2 INSERTING A NEW FILM COIL IN STANDARD CARRIAGE	18
17 POWER PRE-STRETCH CARRIAGE	19
17.1 OPERATIONAL DEVICES	20
17.2 INSERTING A NEW FILM COIL IN PRE-STRETCH CARRIAGE	21

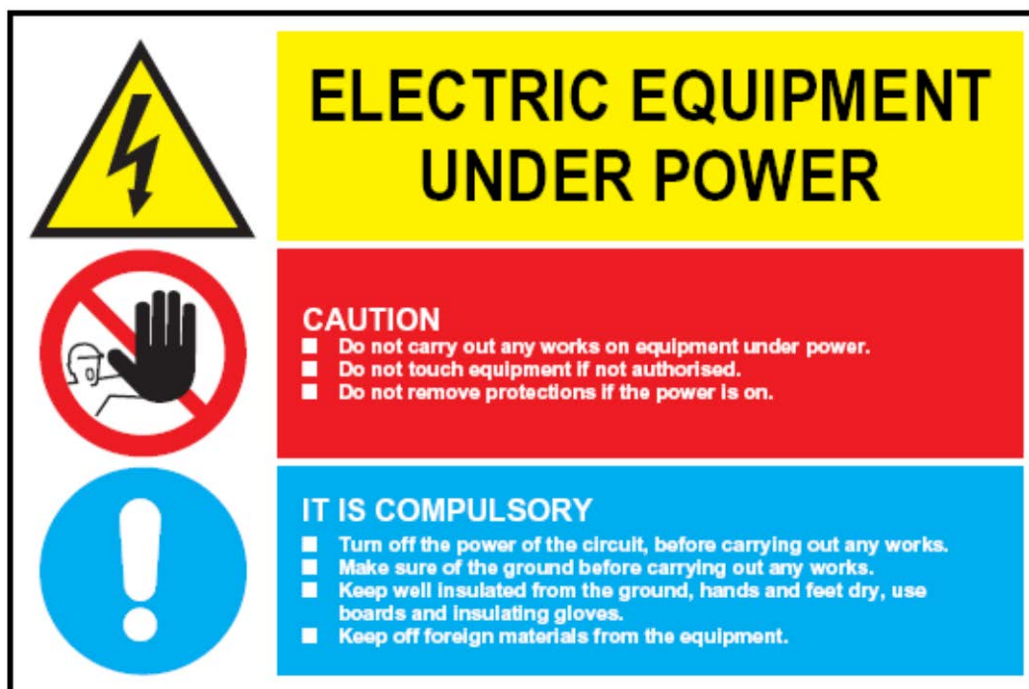
In the framework of continuous improvement of this machine's functions, some of its components and/or characteristics could be modified without notice. If differences are found between the contents of this manual and the actual machine operation, please communicate them to the builder.

1 OPERATORS

The machine was designed to be used even by just one operator. Operators must:

- have understood the contents of this manual;
- be aware of the main accident prevention norms;
- know how to react in case of emergency;
- be provided with the necessary personal protective equipment and know how to use it properly.

Qualified maintenance technicians, as well as possessing the listed characteristics, must be adequately trained in the mechanic and electrical sector.



2 CONTROL PANEL

The machine controls are set on a control panel located in the column, in a position easily accessible to the operator.

The control panel position allows control devices to be located:







- away from dangerous areas of the machine;
- away from the work area of the machine;
- near emergency stop devices.


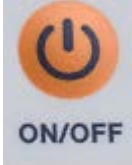



The control devices are divided into:





- mechanical actuators (buttons);
- information devices.

Please find below a short description of the function of every button and indicator located on the control panel.



BUTTON	BUTTON	FUNCTION
	START	<p>Pressing the START button the wrapping cycle chosen starts.</p> <p>During every wrapping cycle the pressing of the START button stops the carriage movement to reinforce locally the load wrapping. After releasing that button the carriage restarts its movement.</p> <p>Press START to restarts the cycle from the same position when it was interrupted.</p>
	STOP	<p>Pressing the STOP button machine working cycle stops.</p> <p>Press STOP to interrupt the machine working cycle.</p>
	JOG +	<p>Press JOG + to scroll the menu up vertically.</p>
	JOG -	<p>Press JOG - to scroll the menu down vertically.</p>
	ESC	<p>Press ESC to exit a menu or a parameter, to go back to a level or to cancel a value that has been set.</p>
	OK	<p>Press OK to select the displayed menu and enter the following level of displaying/setting or to confirm a value that has been set.</p>

	<p>RESET</p>	<p>Press RESET to initialize the machine.</p> <p>In every moment the RESET pressing brings the machine in the zero position with carriage down.</p>
	<p>ON/OFF</p>	<p>Turn on/off the control panel.</p>
	<p>TABLE ROTATION (BUTTON AND LED)</p> <p>PROGRAM 1</p>	<p>When the machine is in MANUAL mode, this button starts and stops table rotation.</p> <p>When selected (in AUTOMATIC or MANUAL mode - led light on), the table rotation speed (RPM) appears on the display. The speed can be changed using the JOG + and JOG - buttons.</p> <p>If the function buttons are disabled: select the 1st rapid program for the next wrapping cycle.</p>
	<p>BOTTOM WRAPPING ADJUSTMENT (BUTTON AND LED)</p> <p>PROGRAM 2</p>	<p>When selected (LED light on), the value set for BOTTOM WRAPPING appears on the display.</p> <p><u>If the function buttons are disabled:</u> select the 6th rapid program for the next wrapping cycle.</p>
	<p>TOP WRAPPING ADJUSTMENT (BUTTON AND LED)</p> <p>PROGRAM 3</p>	<p>When selected (LED light on), the value set for TOP WRAPPING appears on the display.</p> <p>The value can be changed using the JOG + and JOG - buttons.</p> <p><u>If the function buttons are disabled:</u> select the 5th rapid program for the next wrapping cycle.</p>

	<p>FILM TENSION ADJUSTMENT (BUTTON AND LED) PROGRAM 4</p>	<p>When selected (LED light on), the value set for FILM TENSION (percentage) appears on the display. The value can be changed using the JOG + and JOG - buttons. <u>If the function buttons are disabled:</u> select the 2nd rapid program for the next wrapping cycle.</p>
	<p>CARRIAGE ASCENT (BUTTON AND LED) PROGRAM 5</p>	<p>When the machine is in MANUAL mode, this button starts and stops the carriage ascent. When selected (in AUTOMATIC or MANUAL mode - led light on), the carriage ascent speed (Hz) appears on the display. The speed can be changed using the JOG + and JOG - buttons. <u>If the function buttons are disabled:</u> select the 4th rapid program for the next wrapping cycle.</p>
	<p>CARRIAGE DESCENT (BUTTON AND LED) PROGRAM 6</p>	<p>When the machine is in MANUAL mode, this button starts and stops the carriage descent. When selected (in AUTOMATIC or MANUAL mode - led light on), the carriage descent speed (Hz) appears on the display. The speed can be changed using the JOG + and JOG - buttons. <u>If the function buttons are disabled:</u> select the 3rd rapid program for the next wrapping cycle.</p>
	<p>EMERGENCY STOP BUTTON</p>	<p>When pressed, all moving parts of the machine are safely stopped in the shortest possible time. To be used in case dangerous or alarm conditions arise.</p>



The ON/OFF button does not partition the power supply! In order to avoid any danger, pull out the power plug before servicing.

In the control panel there are two red leds, which indicate respectively if the machine is powered (POWER), and the machine status (STATUS).



The STATUS led turns on for two seconds at the start of a cycle and flashes until its end, signaling that the machine is running a work cycle. In addition to the STATUS led turning on, at the starting of a cycle an acoustic signal of few seconds is emitted.

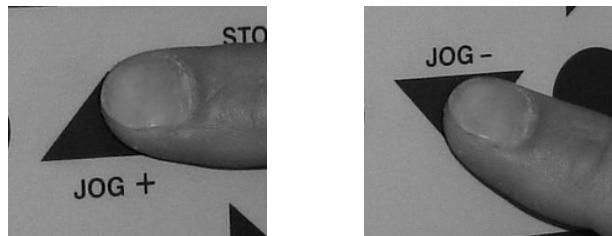
An acoustic signal is emitted every time a cycle starts and stops and in case of emergency.

Moreover, the control panel is provided by an infrared receiver for remote control, through which starting the machine.

3 DISPLAY

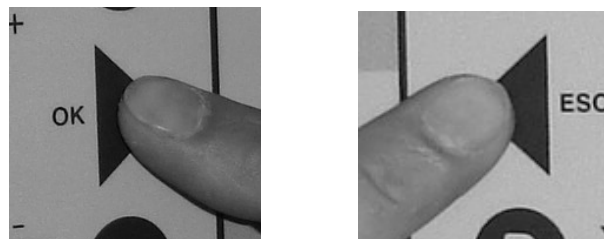
The display on the machine control panel allows operators to view alarms and parameter settings and to select menus.

With the JOG+ and JOG- buttons you can scroll menus and set parameter values.

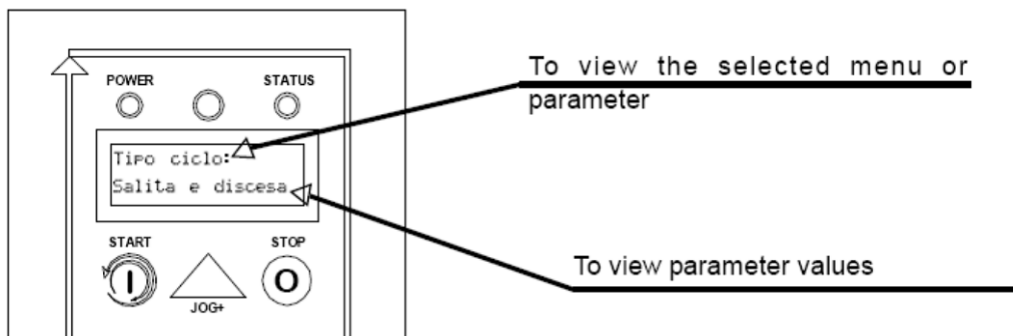


Press the OK button to select the menu option and enter the following view or setting level, or to confirm the values you have entered.

Press the ESC button to exit a menu or a parameter, to go back to the previous level, or to cancel the value you have entered.



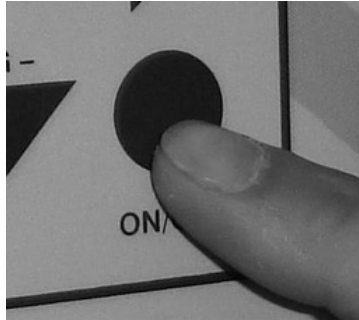
The following picture shows an example of parameter and selected value displaying.





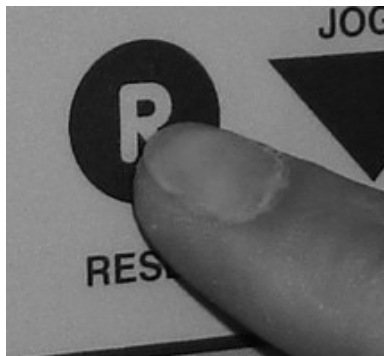
4 TURNING ON

If the control panel is off, press the ON/OFF switch to power it up, then wait a few moments.



The number of the board software version and then the value of the selected parameter will be displayed for a few seconds.

Press RESET to initialise the machine.



When the RESET button is pressed, an acoustic signal is emitted. The rotating table and the carriage reach their zero positions.

Once the RESET cycle has finished, the machine will have the same settings it had before it was last shut down. The machine has been programmed to carry out different wrapping cycles.

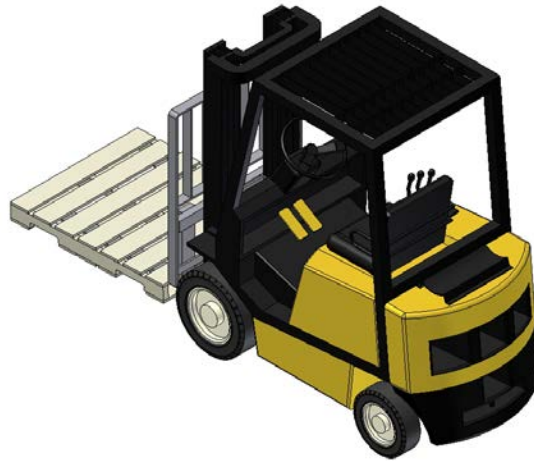
The operator shall select the cycle which corresponds best to the characteristics of the load to be wrapped. Select the cycle type to be carried out and set the parameter values according to the specific needs.

5 LOADIG AND UNLOADING

Place the load to be wrapped on the rotating table in the correct way, checking its stability and fix the film end to the pallet.



The load must be well balanced to avoid risks.

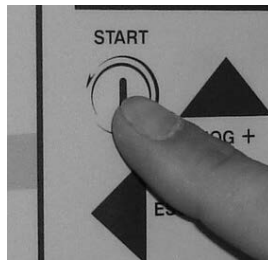


At the end of the wrapping cycle cut the film, unload the wrapped product and load a new pallet. If the machine is not in the correct position when it stops, press the RESET button and it will go back to its initial position.

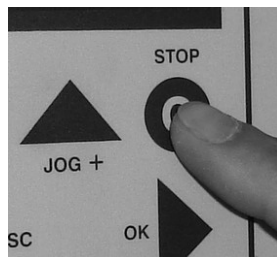
6 ASCENT AND DESCENT CYCLE

The pallet is wrapped while the carriage moves up and down .

Press START to start the automatic wrapping cycle. An acoustic signal is emitted. The STATUS led lights for two seconds and flashes until the end of the cycle.



At the end of the wrapping cycle the machine automatically stops in the unload position. When the machine is working in the standard mode, the cycle should not be manually stopped. Press the STOP button only if you need to stop the cycle for a particular reason. The cycle will be suspended.

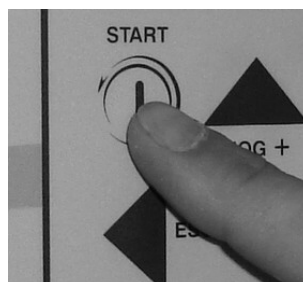


When the START button is pressed, the cycle will start again from the same position where it was interrupted and it will be completed.

7 ASCENT CYCLE

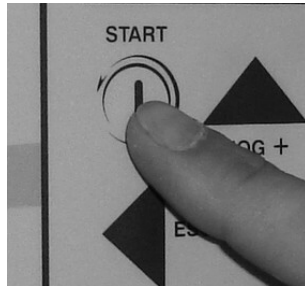
The load wrapping occurs during the carriage moving up and can also occur during the carriage moving down.

Press START to start the automatic wrapping cycle. An acoustic signal is emitted. The STATUS led lights for two seconds and flashes until the end of the cycle. The load is wrapped while the carriage goes up. Once the carriage has reached its top position both the carriage and the rotation stop.

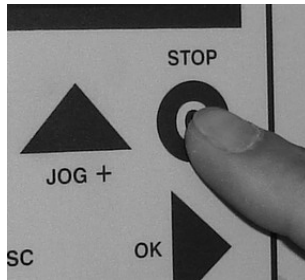


Choose how to complete the wrapping cycle:

- press START to continue the wrapping cycle while the carriage descends;



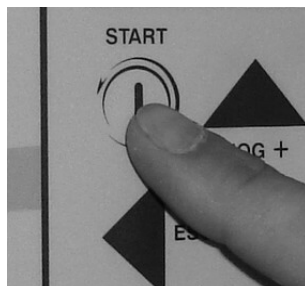
- cut the film and then press STOP to stop the cycle. The table stops while the carriage goes back in its bottom position.



8 DESCENT CYCLE

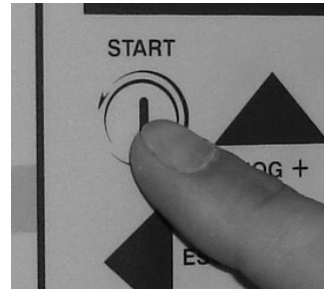
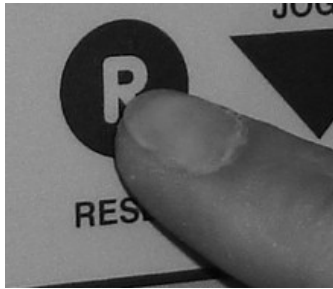
The load is wrapped while the carriage descends.

Press START to start the automatic wrapping cycle. An acoustic signal is emitted. The STATUS led lights for two seconds and flashes until the end of the cycle. The table stays still while the carriage goes up. Once the carriage has reached its top position the descent wrapping cycle begins.





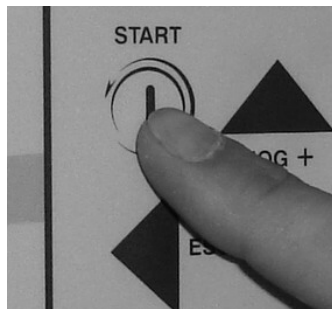
The wrapping cycle can also be started when the carriage is in its top position. Select the DESCENT cycle and press RESET. The machine goes back in its zero position with the carriage in top position. Press START to start the descent wrapping cycle.



9 TOP SHEET CYCLE

The cycle allows to apply a covering sheet on top of the load.

Press START to start the automatic wrapping cycle. An acoustic signal is emitted. The STATUS led lights for two seconds and flashes until the end of the cycle. When the wrapping ascent cycle finish, the carriage descends a little and the cycle stops.

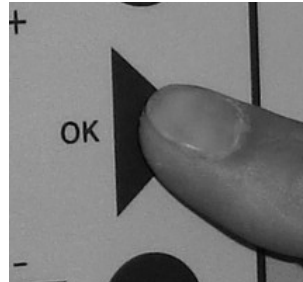


Apply the covering sheet. Press START to restart the cycle. The carriage slightly goes up and wraps the top sheet just applied. The cycle proceeds wrapping the load during the carriage descent.

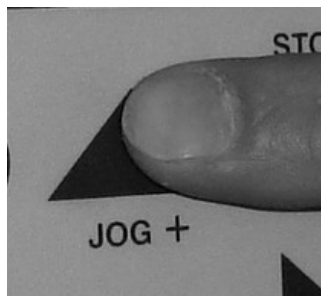
10 MANUAL OPERATION

The machine is operated by simultaneously using two maintained command buttons. After selecting the MANUAL operation proceed as follows:

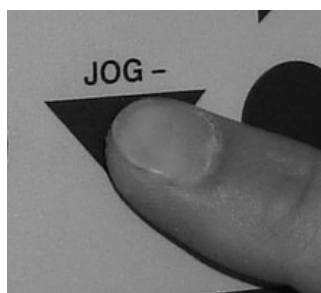
- press OK to start the table rotation;



- press JOG + to raise the carriage;



- press JOG - to lower the carriage.



It is always possible to press RESET to bring the machine back to its zero position and the carriage in its bottom position.

11 REINFORCING

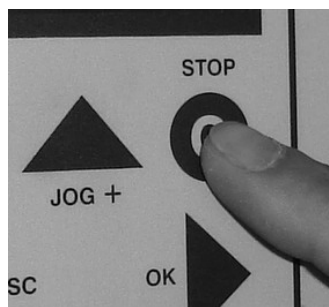


During every wrapping cycle (but not during the manually operated cycle) it is possible to press START to stop the carriage movement along the column in order to locally reinforce the load wrapping. The carriage will start again at the START button releasing.

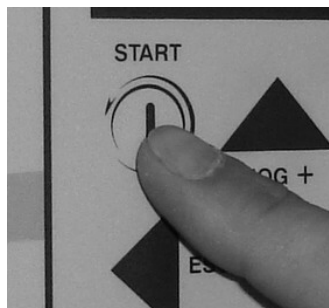
12 PAUSE

During every wrapping cycle, but not in the manually operated cycle:

- press STOP to interrupt the cycle;



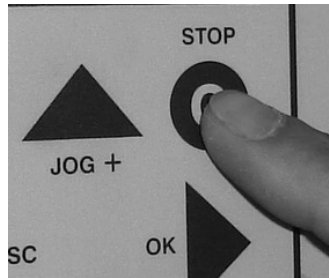
- press START to restart the cycle from the point where it was stopped.



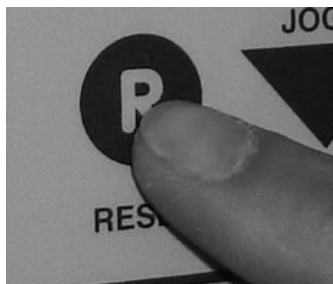
13 RESET

During every wrapping cycle, but not in the manually operated cycle:

- press STOP to interrupt the cycle;



- press RESET to bring the machine back to its zero position.



14 RESTARTING AFTER AN EMERGENCY STOP



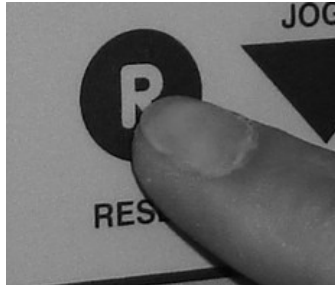
In case of danger press the emergency stop button located in the control panel (RED button on yellow background). The machine will safely stop in the shortest possible time.





After pressing the emergency stop button, act in the following way:

- reset the emergency stop button;
- press the RESET button to restore the machine.



When the RESET button is pressed, the machine reaches its zero position. Once the repositioning has finished, an acoustic signal is emitted.

Press the START button to continue the cycle being carried out before the emergency stop. By pressing only the START button after the emergency button has been reset, the machine cannot be restarted. A request to reposition the machine (by pressing the RESET button) will appear on the display.



Before restoring the machine after an emergency stop, make sure that the danger situation has been appropriately eliminated.



15 DIAGNOSTIC

The following table describes malfunctions that might occur.

MALFUNCTION	POSSIBLE SOLUTIONS
No electrical power (POWER led off)	<ol style="list-style-type: none">1. Check that the power plug has been inserted properly.2. Check that the machine's main switch is in the ON position.3. Check that there is voltage in the company power grid.4. Check the condition of the fuses of the control panel.5. Contact the builder.
The table turns abnormally	<ol style="list-style-type: none">1. Check that the table rotation parameters have been properly set.2. Check, and if necessary record the rotation chain tension as specified in the general information and maintenance manual.3. Check that the limit switches under the table work properly.4. Contact the builder.
The carriage goes up and down abnormally	<ol style="list-style-type: none">1. Check that the carriage going up and down parameters have been properly set.2. Contact the builder.
The film "rips" during the automatic wrapping cycle	<ol style="list-style-type: none">1. Check that the brake parameters have been properly set.2. Contact the builder.

The repair and the machine starting strategy after an intervention has to be set with the builder when the information above are not sufficient to eliminate the malfunction.

16 STANDARD FILM ROLL CARRIAGE

The standard film roll carriage is equipped with an electromagnetic brake to adjust film tension. The carriage is controlled by the machine's control panel. The operator does not need to adjust or calibrate anything.

16.1 OPERATIONAL DEVICES

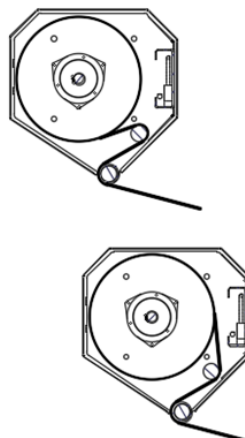
The standard film roll carriage is equipped with a pallet height detection photocell.



STANDARD CARRIAGE

16.2 INSERTING A NEW FILM COIL IN STANDARD CARRIAGE

The following picture shows all film passages through the rollers.



17 POWER PRE-STRETCH CARRIAGE

The power pre-stretch carriage can be used in place of the standard film roll carriage, to pre-stretch the film before wrapping.

Please find below a list of the warning pictograms and plates located on the carriage.

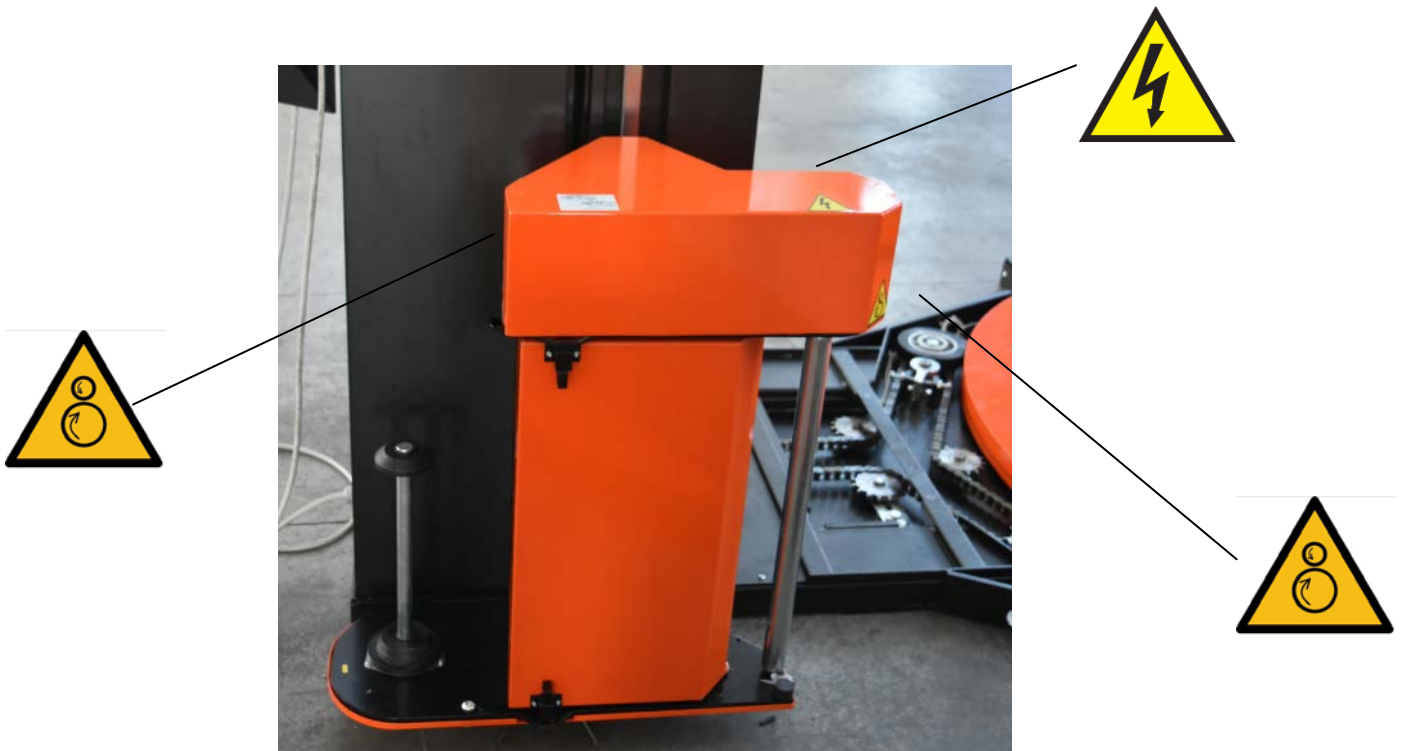


INDICATES DANGER WARNING OF HAZARDOUS ELECTRICAL VOLTAGE.



INDICATES DANGER WARNING OF BEING TRAPPED OR DRAGGED DUE TO ROTATING PARTS

The plates and pictograms are located as shown in the picture.



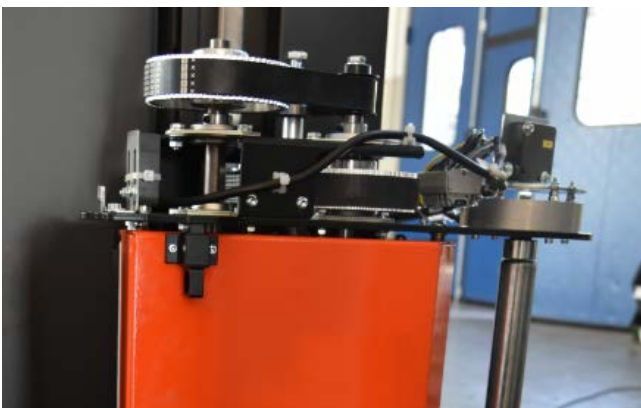
Do not remove plates or pictograms.

17.1 OPERATIONAL DEVICES

The power pre-stretch carriage is equipped with a pallet height detection photocell.



The electrical components are protected by a casing fixed to the carriage.



17.2 INSERTING A NEW FILM COIL IN PRE-STRETCH CARRIAGE

To insert a new film coil in the carriage, act in the following way:



Phase 1: open the carriage door and insert the new film coil in the coil holder.



Phase 2-A: pass the film end through the carriage rollers, as shown in the picture.

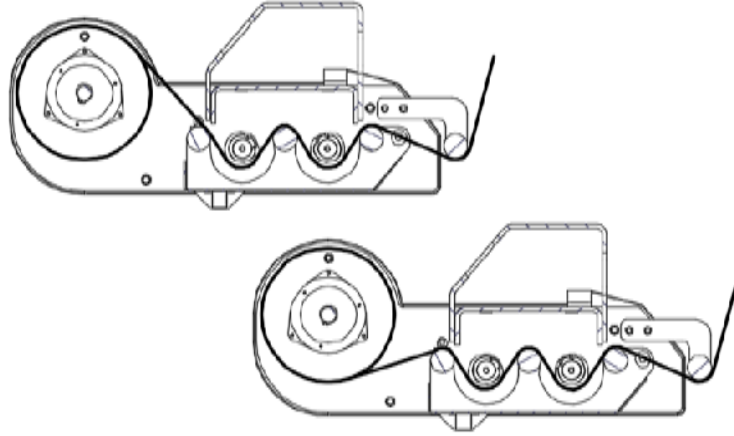


Phase 2-B: pass the film end through the carriage rollers, as shown in the picture.



Phase 3: close the carriage door.

The following picture shows all film passages through the rollers.





EvoPac
The Way to Wrap



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