# FLATWORK IRONER
# FI

# INSTRUCTIONS FOR USE MAINTENANCE AND INSTALLATION

## ORIGINAL INSTRUCTIONS - STORE FOR FUTURE CONSULTATION

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Summary

## 1. CONTENT OF THE MANUAL

This manual is dedicated to the description of the use, maintenance and installation of industrial ironing machines called basin Calendar. It is drawn up in the consideration of existing Community directives. The information is addressed to the installer and the user, who must be sure to have fully understood it before operating on the machine. The user manual must always be available for consultation. In case of loss or damage, ask the manufacturer for a new manual. The manufacturer is not liable for the consequences deriving from a careless use of the machine due to a failure or incomplete reading of this manual. The manufacturer reserves the right to modify the specifications mentioned in this manual or the characteristics of each machine. Some figures in this manual may show details that are partially different from those assembled on the machines. Drawings and technical data may be modified without notice.
This manual is supplemented by the following annexes: EU declaration of conformity, data sheet and wiring diagram. All documents are contained in an envelope that accompanies the machine. The wiring diagram, depending on the versions of the machine, is contained within the electrical panel
The manual and its attachments are an integral part of the device; therefore, they must be kept and accompany the device, even in the case of transfer to another user.
The manual, the same attachments and the exploded with the relative spare parts, can be found in the technical area of the manufacturer's website. Before accessing the site, it is essential to have the serial number of the machine available.

**ATTENTION!**

**The manufacturer declines all responsibility for possible inaccuracies contained in this manual attributable to errors in printing, transcription, or translation. It reserves the right to make any changes to its products as it deems necessary or useful, without prejudice to its essential characteristics. It is forbidden to reproduce, even partially, texts or images of this manual, without the prior authorization of the manufacturer.**

This manual is also available in electronic format at the www.imesa.it website (technical area), in the following languages: Italian, English, German, French, Russian, Spanish, Arabic.

## 2. SAFETY REGULATIONS

**ATTENTION!**

**Risk of suffocation, permanent injury, or disability!**

**Failure to comply with the following safety regulations may cause damage to people, property, and animals.**

**The installation and maintenance of the machines described in this manual must be done by authorized personnel who know the product and comply with European industry standards.**
**Incorrect repairs can seriously endanger the user's safety.**

**Before starting the machine, read these instructions carefully: make the instructions accessible to all persons in charge of using the dryer.**

**The intended use of the Flatwork Ironer described here is the professional ironing of clothing and linen: any other intended use is therefore prohibited unless it has been previously authorized in writing by the manufacturer.**

**Never slip your hands between the bottom slide and the roller when the machine is on or when the machine is still hot.**

**Objects other than ironing must not be introduced into the machinery.**
**It is forbidden to iron garments that are soaked in substances manifestly harmful to the health of operators, poisons, or carcinogenic products.**

**Do not approach or iron with this machine fabrics soaked in fuels or flammable substances, including oils and greases in order to avoid the risk of fire and explosion.**

**Always follow the ironing instructions on each item of linen with great care.**

**It is forbidden to use the machine to children under the age of 16.**

**Do not allow children to play with the equipment.**

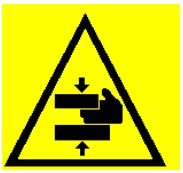
**Keep packaging materials out of the reach of children.**

**Keep detergents or chemicals used for ironing out of the reach of children.**

**Keep children and pets away from the equipment door when it is open and machine running.**

**Additional connections to the machine from the outside, not carried out in a work man like manner, relieve the manufacturer of any responsibility.**

## IMPORTANT WARNINGS



### DANGER OF CRUSHING

**It is forbidden to work with the side doors open or with the repairs of the machines removed!**

**It is forbidden to insert your hands under the roller, even when the machine is stationary!**

**In order to avoid sunburn or crushing of the limbs, it is absolutely forbidden to remove, even temporarily, the protection panels and security systems!**

**Always check the correct functioning of the safety devices every time the machine is started! At each start-up, perform the control procedure indicated in the relevant paragraph.**

**It is mandatory to know the operation of the machine and its emergency systems!**

**The operator, in introducing the fabric into the machine, must not accompany the same under the hand bar. The fabric must be flattened on the entrance table, here ripples or bends must be eliminated, so the fabric must be accompanied on the roller that will drag it into the heating bed.**
**It is strictly forbidden to iron fabrics folded into several layers or several layers of overlapping fabric.**

**It is forbidden to introduce bars, slats or metal objects between the ironing basin and the roller. In the event of an emergency, always perform the following procedures:**

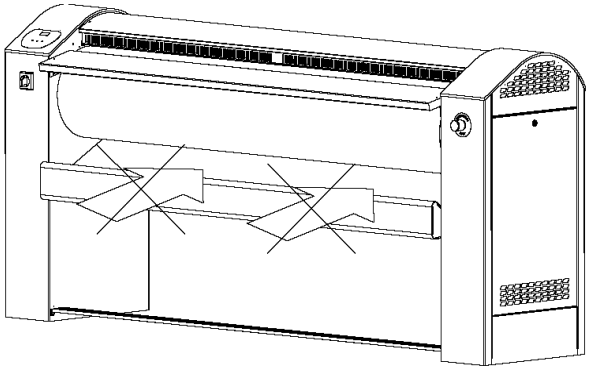
### DANGER OF BURNS

**The machine, by the very nature of the activity for which it is intended, presents the danger of burns.**
**Any burns can be caused:**

- **From contact with the fabric leaving the machine.**
- **From contact with the upper edge of the basin during the insertion of the fabric.**
- **From contact with the basin following its opening.**
- **From contact with the basin during maintenance operations performed "hot."**
- **From contact with the extracted tissues after being trapped between the cylinder and the heating bed.**

### ATTENTION

**To avoid possible sunburn, never insert your hands under the roller!**



**The machine must always and only be used by professionally trained personnel and in the presence of at least one other operator!**

**CAREFULLY READ AND INFORM ALL OPERATORS ABOUT THE INTERVENTION SYSTEMS IN CASE OF SUDDEN POWER FAILURE OR IN CASE OF ENTRAPPING: CHECK THE POSITION OF THE UNLOCKING SYSTEMS**

**DANGER OF ELECTRIC**

**Any intervention on the electrical parts of the machine must be carried out only by qualified personnel and after removing the power supply to the machine.**
**The power and control circuits can only be tampered with by the manufacturer's staff, under penalty of forfeiture of the warranty conditions.**

**On the electrical panel there is the following monitor plate that must be replaced with an identical one in case it has been damaged or removed.**

**ATTENTION**

**Even when the position of the main switch is "0", the cables upstream of the switch are in voltage!**

**PSYCHOPHYSICAL CONDITION OF THE OPERATOR**

**The operator in charge of the machine must be in perfect psychophysical condition; during the work, the vertical posture in front of the machine must be assumed. Abrupt movements or uncontrolled gestures must be avoided, for example during the picking and insertion of the fabrics to be ironed to avoid dangerous collisions with the machine frame.**
**If other operators or other personnel are present, these must not be a source of distraction for the operator in charge of the machine.**
**During the use of the machine, the operator must not be distracted by televisions, radios, etc. nor be subject to any other source of distraction.**

**LIGHTING**

**In the room where the machine is installed, there must be uniform illumination of intensity 300-500 lux, annoying glare must also be avoided.**

**ATTENTION!**

**These warnings do not cover all possible risks. The user must therefore proceed with the utmost caution in compliance with the rules.**

## 3. RESPONSIBILITY OF THE MANUFACTURER

The instructions in this manual do not replace but supplement the obligations for compliance with current legislation on safety and accident prevention standards. With reference to what is reported in this manual, the manufacturer declines all responsibility in the event of:

- use of the machine contrary to the laws in force on safety and accident prevention.
- incorrect installation of the machine.
- lack of periodic and scheduled maintenance.
- failure or incorrect observance of the instructions provided in the manual.
- defects in voltage and mains supply.
- unauthorized modifications to the machine.
- use of the machine by unauthorized personnel.

## 4. TRANSPORT AND UNPACKING

During transport, and possible storage, the equipment must remain within the following environmental conditions:

- temperature: -25°C÷55°C
- Humidity: 0%÷90% (non-condensing)

It is recommended to check the machine upon receipt, taking care to report to the carrier any damage caused during transport, both to the internal components and to the external bodywork.

**ATTENTION!**

**During the handling phase, use a forklift that are as open as possible.**

**ATTENTION!**

**During the handling phase, the machinery must remain in a horizontal position. The machine must never be put up right!**

**The machine must be completely unpacked near the place of installation.**
**The strapped straps must be cut, and the covering casing removed.**
**The packaging materials must not be dispersed in the environment and must be stored in the appropriate collection spaces according to current regulations.**
**Open both side doors with the supplied key.**
**Remove with a wrench the fixing bolts to the pallet, visible at the base of the right and left shoulder of the machine.**

**ATTENTION!**

**Check on the technical sheet, attached to the machine documentation, the net and gross weight: check the compatibility with the available lifting equipment.**
**To get the Flatwork Ironer out of the pallet, pass the forklift forks under the slide of the machine (taking care to avoid scratching the paint).**
**Lift the machine with the forklift: remove the pallet from below and place the machine.**

**ATTENTION!**

**The pallet should not be used as a normal machine holder! The machine must always be taken off the pallet and positioned as described in the relevant paragraph.**

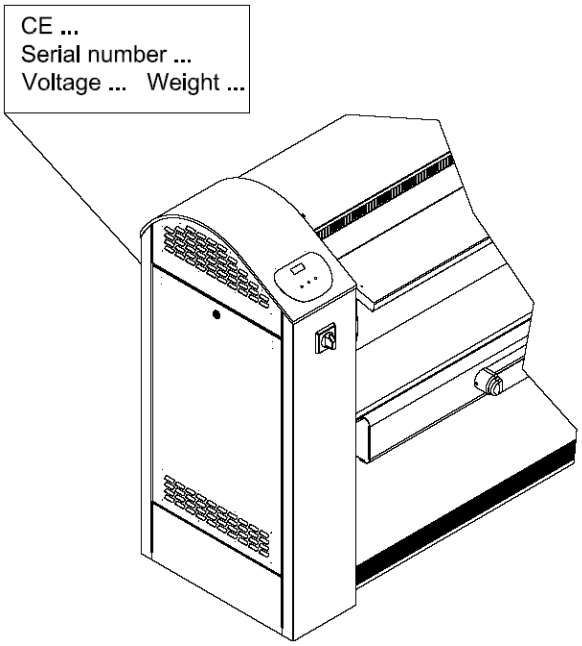
**ATTENTION!**

**The machine must be moved only when it is fixed to its pallet: the handling and lifting through the forklift must be carried out only by qualified and competent personnel.**

## 5. MACHINE IDENTIFICATION

The equipment is identifiable by an adhesive plate bearing the serial number, model, power, and technical

characteristics. Spare parts and / or interventions presuppose the exact identification of the model for which they are intended.



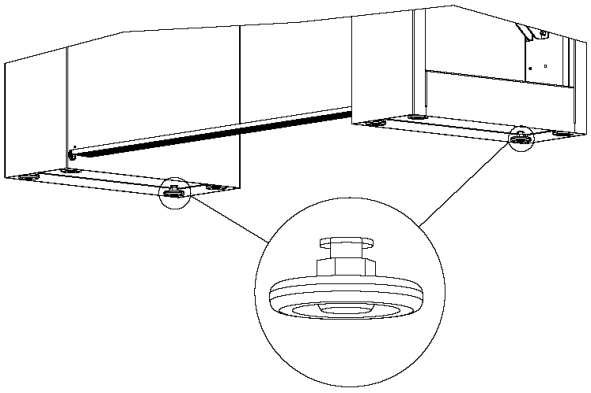

Tampering, removal, lack of identification plates or anything else that does not allow the safe identification of the machine, makes any installation and maintenance operation difficult and automatically voids the warranty.

Flatwork Ironer are intended exclusively for ironing fabrics and are intended for the professional and industrial sector.

| MODELS AND MAXIMUM CAPACITY OF INTRODUCTION<br>MODELS AND MAXIMUM INTRODUCTION CAPACITY (flat linen with single veil, wet at 20-15% single-ply flat linen, damp at 20-15%) | | |
|---|---|---|
| MANGANI A CONCA / FLATWORK IRONERS: (FI) | MAXIMUM FABRIC WIDTH / MAXIMUM WIDTH OF THE FABRIC: (mm) | HOURLY PRODUCTIVITY: (Kg/h) |
| F1000/25 | 1000 | 25 |
| F1250/25 | 1250 | 30 |
| F1500/25 | 1500 | 35 |
| F1500/33 | 1500 | 40 |
| F1750/33 | 1750 | 50 |
| F2000/33 | 2000 | 60 |

## 6. INSTALLATION AND POSITIONING

All installation operations must be carried out by professionally qualified personnel. Place the machine on a flat surface in a stable and horizontal way using the adjustable feet placed at the base of the sides. The adjustment of the feet is done from the outside, screwing, or unscrewing them until they reach the bubble positioning.



Check that the floor capacity is compatible with the weight of the machine that can be detected from the attached data sheet. The load of the machine can be considered static. Make sure that the floor is clean and heat resistant.

For proper use, operation, and maintenance, leave a free space of at least 500 mm around the machine.
The ambient temperature must be between +5°C and +40°C and the relative humidity of 50%.
The environment in which the machinery is installed must have sufficient air exchange.

The degree of protection is IP24.

Do not install or use the machine if it is damaged.

Correct operation is guaranteed up to altitudes of 1000 m.s.l.m.

**ATTENTION!**

**Ensure the inflow of clean air to the machine and not air contaminated with chlorine, fluorine, or other solvent vapors.**

**Do not use or store gasoline, petroleum, or other flammable materials in the vicinity of the car. It could cause fires or explosions.**

**Provide in the vicinity of the machine a fire extinguisher chosen and kept in maintenance according to current regulations.**

**ATTENTION!**

**The machine MUST NOT be installed outdoors, but in a CLOSED environment specifically built and used as a laundry.**

## 7. INDICATIONS ON NOISE EMISSION

The airborne noise produced by the machine produces an A-weighted continuous sound pressure level of less than 70 dB.

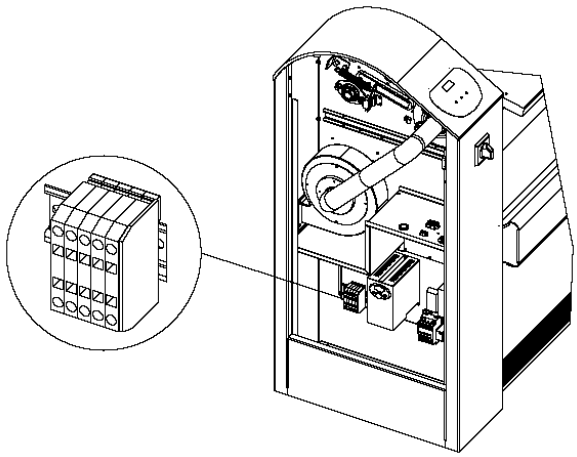
## 8. ELECTRICAL CONNECTION

**ATTENTION!**

**The electrical connection must be carried out by professionally qualified personnel and must meet the requirements of current local and national rules and / or regulations. Check that the supply voltage corresponds to that indicated in the license plate data (voltage tolerance ±10%, frequency tolerance ±1Hz).**
License plate data is visible on the back of the car. For the connection use a cable of type H05 VV – F or higher sized as reported in the license plate data. Interpose upstream of the appliance an interlocked omni polar disconnection device (e.g., a differential magnetothermal switch) with an opening between the contacts that allows complete disconnection under the conditions of the surge category III and complies with the relevant regulations in force.
The breaking power of the circuit breaker shall be at least 10 kA.

**ATTENTION!**

**Provide electrical protection by RCD type B interrupting device (sensitive to the average current value).**
Make sure that the main switch of the system is in the "0" (OFF) position when the machine is connected.
Open the left side door using the key that is delivered with the machine documentation.
Remove the door by rotating it at the base.
Pass the power cord through the cable press located inside the left shoulder of the machine.
The power supply must be carried out on a series of marked terminals (already present in the appliance).



Depending on the type of power supply provided by the serial number plate of the machine, connect the wires, with the help of the tip of a screwdriver, to the terminals marked as follows:

PE : earth clamp

L1, L2, L3: phase terminals

N: Neutral clamp

When installing or replacing the power cord, the ground conductor must be at least 5 cm longer than the others.
It is not necessary to check the direction of rotation of the motors, since the intake fans are single-phase, and the roller motor is driven by an inverter.
**The appliance must be connected to an effective ground system: the manufacturer declines all responsibility in the event that this connection is not carried out according to the provisions of the regulations in force on the subject.**
**Before any maintenance operation, disconnect the power supply: for maintenance, refer to the wiring diagram of the machine, inserted in the left side door or available on the manufacturer's website.**
The sections for power cables expressed in $mm^2$, are as follows:

| | **1ph230V** | **3ph230V** | **3ph400V** |
|---|---|---|---|
| **FI 1000**<br>**FI 1250** | 6 $mm^2$ | 4 $mm^2$ | 2.5 $mm^2$ |
| **FI 1500**<br>**FI 1750** | 10 $mm^2$ | 6 $mm^2$ | 4 $mm^2$ |
| **FI 2000** | 16 $mm^2$ | 10 $mm^2$ | 6 $mm^2$ |

**ATTENTION!**

**The minimum sections shown may vary depending on the length of the connection. For lengths longer than 5 meters, increase the section proportionally to the additional length.**

**ATTENTION!**

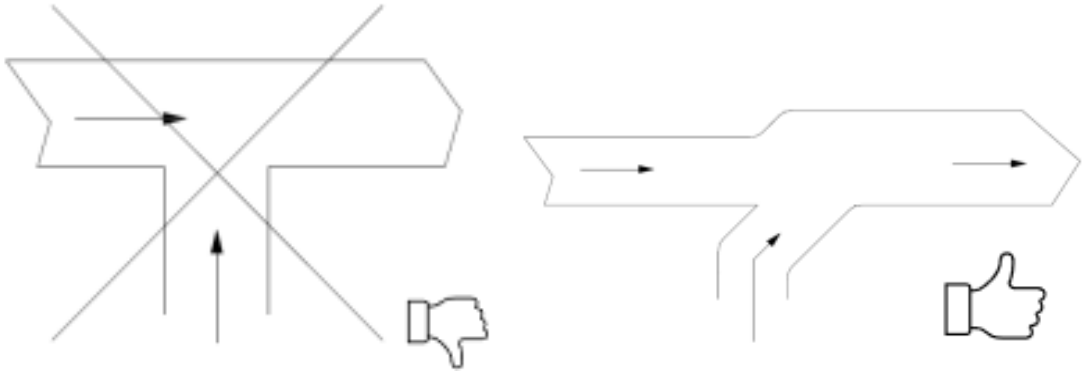
**Even when the position of the main switch is "0", the cables upstream of the switch are in voltage!**

**ATTENTION!**

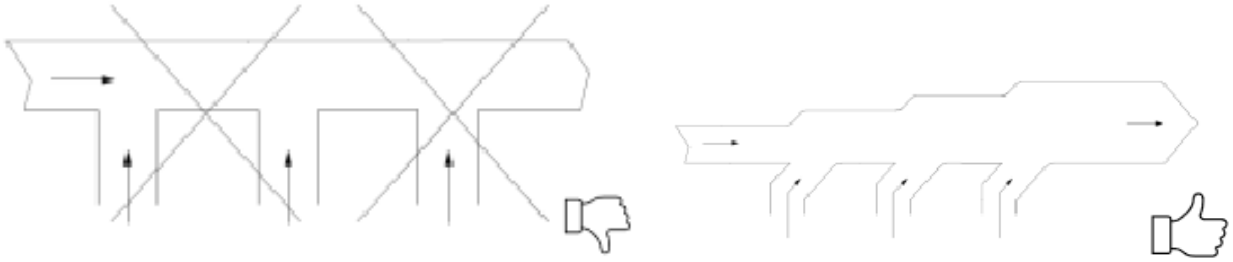
**The connection of the machine must always be carried out according to the matricular data (power, supply voltage, frequency). For supply voltages other than those envisaged, request information from the manufacturer**.

## 9. WET AIR EXHAUST DUCT

The wet air exhaust duct (for machines with suction system) must be made according to current regulations.
The exhaust pipe can have a maximum linear length of 15 meters and must be equipped with a condensate collection system, so as to avoid water returns to the aspirator.
To avoid leakage of moist air and noise, the exhaust joints from the machine to the outside must be made airtight, with materials (stucco, mastics, silicone preparations) resistant to an elevated temperature.
To avoid pressure drops, avoid the use of spiral ducts: therefore, use smooth and rigid metal pipes. The material used must be compatible with the exhaust temperatures of the machinery.
To reduce pressure drops, avoid 90° curves, preferring two 45° curves.
At the lowest point, a condensate trap must be provided, and the derivation of this trap must comply with the local provisions for connection to the water drain.
The pipeline must withstand crushing.
In the case of input into a collector, do not make "T" connections and consider the correct value of the collector section. If necessary, provide for an increase in the collector section.



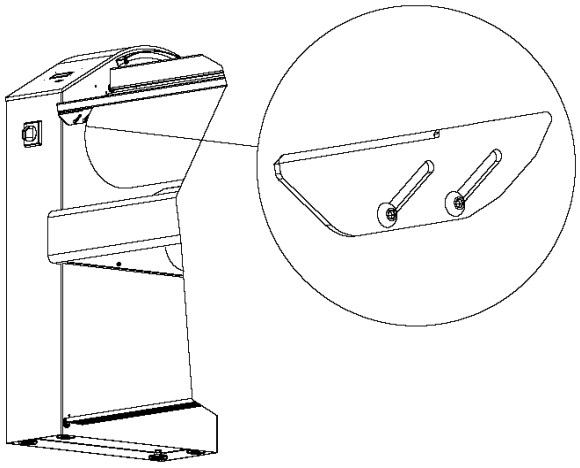
The exhaust manifold for several *Flatwork Ironer* cannot be shared with other types of machinery, even more so it cannot be shared with machines equipped with gas heating.



The outlet of the exhaust pipe must not flow at human height and/or be directed towards residential units.

## 10. THE INTRODUCING TABLE

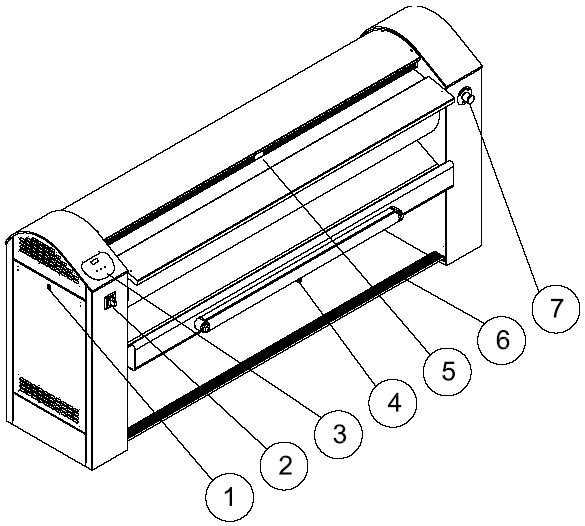
The fixing system of the introduction table allows you to customize its position.
During installation, adjust its position according to the user's requests.



Loosen the screws on both sides of the machines, place the board with the desired inclination, and finally close the screws on both sides of the machine.

## 11. KNOW THE MANGANO

The Flatwork Ironer is characterized by some elements that you need to know immediately, before starting to use the machine.




1. Access door to the electrical panel of the mangle. The flap can be opened using the plastic key that is delivered with the machine documentation. Access to the electrical panel must be allowed only to specialized and competent personnel.
2. Main switch: when you operate it by bringing it to the "I" (ON) position, you power the machine electrically.
3. Flatwork Ironer control microprocessor.
4. Panic bar: if pressed it causes the immediate lifting of the basin.
5. Hand saving bar: when lifted, the machine stops.
6. Pedals: the roller turns in the direction of introduction after pressing the pedalboard. The roller stops when the pedals are pressed again.
7. Emergency button that must be pressed whenever it is necessary to stop the Flatwork Ironer quickly for emergency reasons.

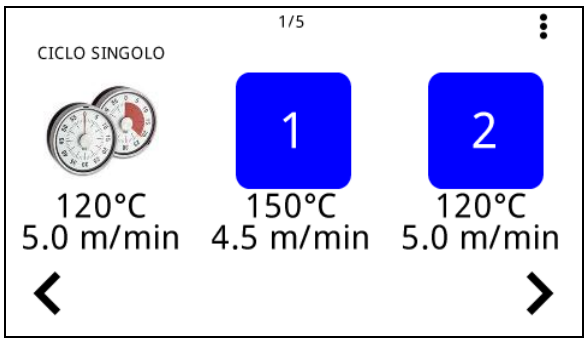
**ATTENTION!**

**The openings for the passage of air on the back of the machine must always remain free. The passage of air through the louvers must not be limited in any way.**

## 12. START AND STOP

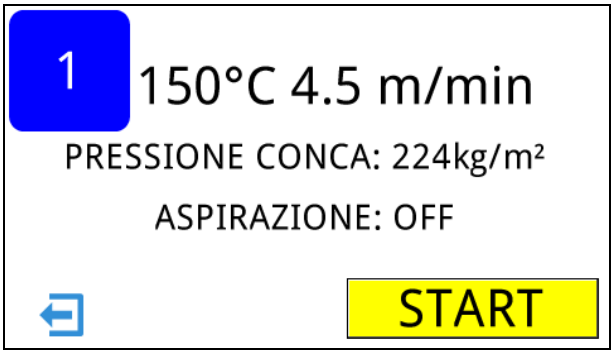
Turn on the machine by bringing the main switch, described in the previous paragraph, to the "I" (ON) position.

Make sure that the emergency button is in the resting position, and that it has not been activated during transport or before the last shutdown of the machine.
Before starting the machine, always perform the safety check procedure (check the relevant paragraph).
When you turn on the machine, the display shows for a few moments the software version of the installed microprocessor and its release date.
Then view the menu for the selection of the program:




To select a program simply tap on the desired icon.
To view additional programs in memory, slide the screen, or tap one of the two arrows.

When a program is selected, its name (editable: see the relevant paragraph), its numerical storage and its characteristics appear on the display.
For example,




Below is a detailed description of the programming parameters that may appear in the preview phase:

*HEATING (symbols of blue and red thermometers)*
It is the temperature set for the ironing cycle.
Please note that the choice of temperature must be made by referring to the specific characteristics of the fabric.
The definition of temperature is also related to the choice of roller speed.

*ROLLER SPEED (hare and turtle symbols)*
It is the speed of rotation of the roller fixed for the ironing cycle.
Please note that the choice of speed must be made by referring to the specific characteristics of the fabric.
The definition of the speed is also related to the choice of the temperature of the ironing basin.

*BASIN PRESSURE (symbols of pressure basin and released basin)*
It is the pressure that the basin exerts on the roller during the ironing cycle. This parameter is not present in roller ironing machines (Flatwork Ironer).

The lower the pressure chosen and:
- less wear of the machine coatings
- less heat exchange and the consequent hourly productivity
- the greater the delicacy in the treatment of the fabric

The higher the pressure chosen and:
- the greater the wear of the machine coatings
- the greater the heat exchange and the consequent hourly productivity

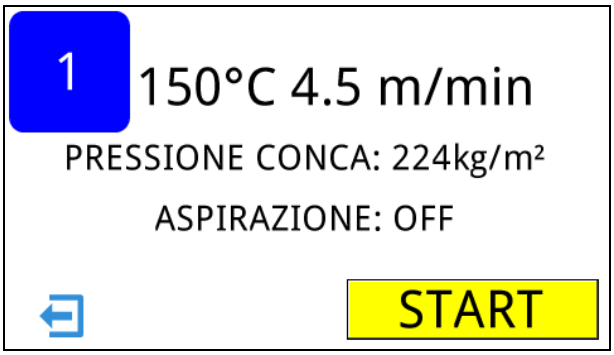
- less delicacy in the treatment of the fabric

*SUCTION (only for machines that are equipped with it, symbol of a 4-blade fan)*
When in ON, activate the humid air aspirator; when in OFF, the vacuum cleaner is turned off. In the case of roller ironers, the vacuum cleaner is always present and always in ON, during the ironing cycle.

**PLEASE NOTE**
**After the cycle has been started, all the parameters described so far can be modified using the relative display icons: these changes, however, will not remain in the program's memory.**

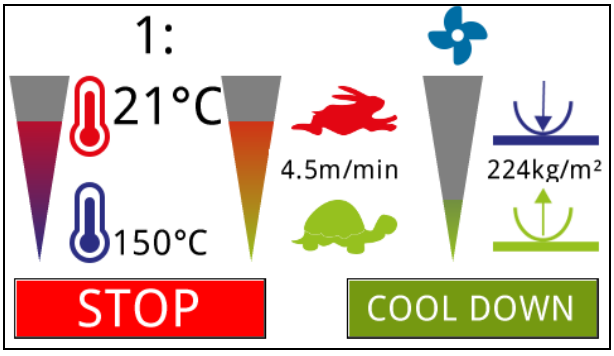
**ATTENTION!**
**The garments to be treated with the mangle must be taken from a rotary dryer with still a residual moisture of 10-20%, to allow proper ironing.**

When the desired program is displayed on display, simply press the START button to start it.

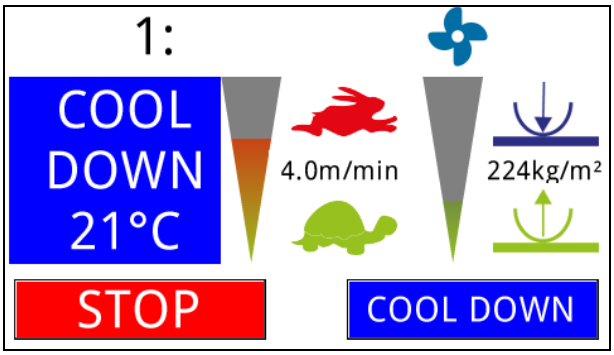



Pressing the START button starts the heating system.
To start the rotation, you need to press the pedals.
The ironing roller continues to turn in the direction of introduction and turns until the pedals are pressed again

While the machine is running, it is possible to adjust the temperature, speed, and ironing pressure (see relevant paragraphs).
At the first reach (after switching on) the set temperature value, the buzzer emits some beeps, to warn the user that the ironing temperature has been reached and that it is now possible to start ironing.
In any case, do not start the ironing work until the minimum temperature of 80 ° C is reached.
At the end of the ironing cycle, the machine can be stopped by pressing the *STOP* button.




In the case of the mangle, to extend the life of the coating, make sure that at the end of the cycle there is no residual moisture on the roller: it is advisable to leave the roller to rotate in contact with the basin for another two / three minutes, without introducing additional fabrics at a temperature below 80 ° C.
The machine can also be stopped via the *COOL DOWN* button (see the relevant paragraph).




**ATTENTION!**

**Before stopping ironing, make sure that the roller temperature is below 80°C. By suspending work at a higher temperature, you may have burns of the ironing cloth.**

**ATTENTION!**

**The machine is equipped with an automatic shutdown time. If the machine therefore waits for the pedal activation control for too long, the microprocessor automatically puts it in an *OFF* condition.**

**ATTENTION!**

**In case of breakdowns or malfunctions, immediately turn off the equipment and call the authorized technical service center!**

**ATTENTION!**

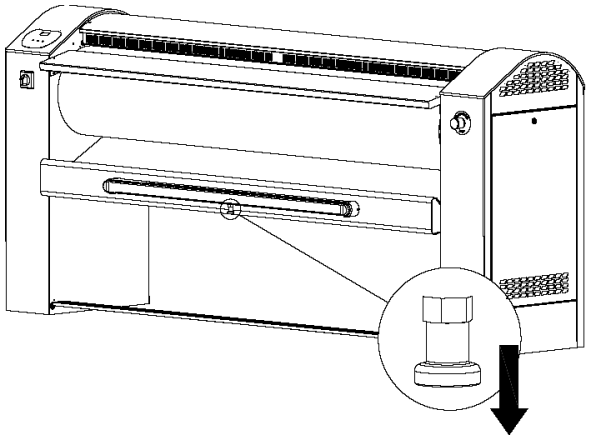
**At the end of the program do not leave the garments inside the stationary car or above the collection compartment: you could incur a phenomenon of self-combustion!**

## 13. USE OF THE EMERGENCY BUTTON

In case of emergency and need for rapid shutdown of the machine, press the emergency on the side of the machine.
When the emergency is pressed, the ironing roller stops at the same time the lay is lifted.
When the emergency has been resolved, rearm the emergency, rotating it according to the indications given on the fungus itself.
Press the SAFETY RESET button to re-enable the operation of the machine.
Stop Category 1: Controlled stop with power available to the actuators to achieve shutdown and then power removal when stop is reached.

## 14. USE OF THE MANGLE PANIC BAR

In case of emergency, such as entrapment or blackout, you can use the panic bar.
The pressure of the panic bar causes the immediate opening of the basin and the automatic shutdown of the machine.
The panic bar must in any case be used during blackouts, to lift the basin from the roller and avoid burning the roller coating or trapped linen.
Once pushed all the way down, the panic bar is blocked by a spring er.



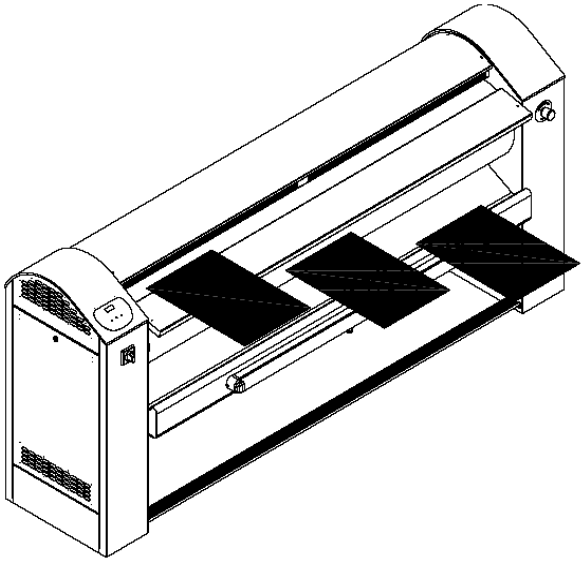
When the emergency is resolved, to unlock the panic bar, pull the spring per down, and keep it pulled, until the panic bar returns to its normal resting position (see figure).
Press the SAFETY RESET button to re-enable the operation of the machine.

## 15. IRONING WITH MANGLE

During operation it must be remembered to use the entire length of the roller, so as to maintain uniform temperature over the entire length of the machine.
Therefore, regardless of the size of the linen, introduce the same as shown in the figure.

**ATTENTION!**

**These machines should not be used to perform bending. It is therefore forbidden to fold one or more times the fabrics to be ironed, before introducing them!**



The temperature to be used must comply with the temperatures allowed by the characteristic plates of the linen to be ironed.
Remember that at the end of the work, the machine cannot be stopped, at least until the temperature has dropped below 80 ° C.
Also remember that the moisture conditions of the fabrics must be no more than 20%. Repasseuse
should be used on fabrics that have been previously treated by a dryer. Its purpose is therefore only to iron the flat garments, and not to dry them.
At the end of the ironing cycle and the cooling phase, turn off the machine, and bring the main switch to the "0" position.

**ATTENTION!**

**The formation of yellow stains on the stretched fabrics, signals the presence of detergent not carefully eliminated during rinsing or a temperature of use of the machine higher than that provided for the fabric!**

**ATTENTION!**

**The formation of folds on stretched fabrics can be generated on fabrics that at the time of introduction into the machine have too low residual humidity.**

**ATTENTION!**

**Significant differences in the thickness of the fabrics to be ironed (due for example to the seams or hems), can give rise to the formation of wrinkles, folds, and low quality of ironing.**
**Even the passage of a double-veil or folded fabric can be the origin of folds or curls and sometimes the introduction is not possible or easy.**

**ATTENTION!**

**The formation of horizontal pleats can be generated by a bad slipping of the fabric on the ironing board. Always keep the basin clean and possibly perform a cleaning with paraffin. Make sure that the ironing temperature conforms to the type of fabric to be ironed: excessive temperatures result in the slippage of the fabric with respect to the dragging action of the roller and the inevitable formation of folds. Excessive temperatures can still lead to melting or deterioration of the fiber.**

**ATTENTION!**

**Carefully avoid ironing fabrics that have buttons inserted or fabrics that have nylon seams. The elevated temperature could cause it to melt and the consequent smearing of the ironing basin. It is advisable to avoid exposing the maintenance label of the fabrics to direct contact with the basin: it may burn out and smear the ironing board: iron the garments with the maintenance label facing down. Also avoid ironing fabrics with metal parts such as zips: they may cause the surface of the roller or ironing board to be affected.**

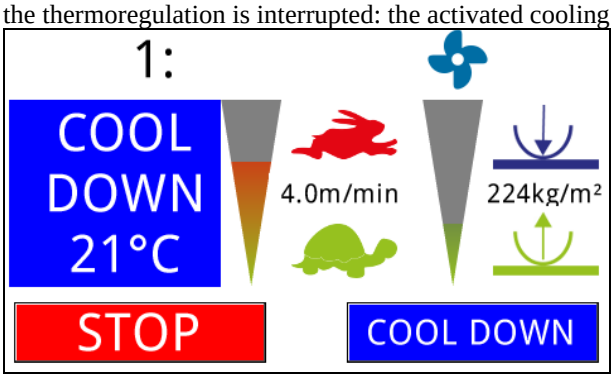
**ATTENTION!**

**The side filters placed on the ventilation passages must always be free: avoid occluding the passage of air and keep them clean from the fluff by cleaning them every day.**

## 16. HOW TO USE THE COOL DOWN

The cool down is a function that allows you to save and optimize the thermal energy accumulated in the machine. When you are at the end of the work shift, or when you need to stop ironing, you can use such a function. Cooling is turned on and off by pressing the *COOL DOWN* button.

When the function is activated, the thermoregulation is interrupted: the activated cooling signal slides on the display.

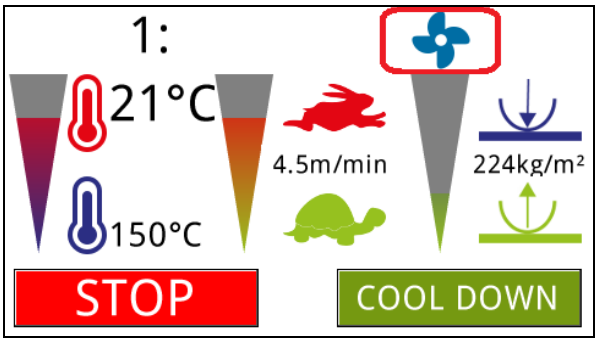



The roller continues to spin until the temperature drops below 80°C. Once this temperature is reached, the machine stops completely.
If it is necessary to reactivate the thermoregulation, the cool down function can be deactivated, before reaching 80 ° C, by pressing the COOL DOWN button *again.* In this way, the set point temperature is restored, and the work cycle can

be resumed. After the cooldown you can place the main switch on "0" (OFF).

## 17. THE "ASPIRATOR" BUTTON OF THE MANGLE

If equipped with suction, the user can decide whether or not to activate the suction through the appropriate *FAN* button.
The suction allows you to take the moisture that settles on the windings of the ironing roller, and to bring it outside through the exhaust pipe.
The suction is activated and deactivated by pressing the *FAN* button on display.
When the function is activated on the display, the icon of a fan rotates.
To turn off the suction, press the *FAN* button again.




## 18. OOMETER MANAGEMENT

During the activity of the machine, a counter of working hours is increased and is kept in memory between one shutdown and the subsequent re-ignition. The Installer is able to view the number of working hours by accessing a reserved area of the microprocessor.

## 19. SPEED TEMPERATURE COMPENSATION

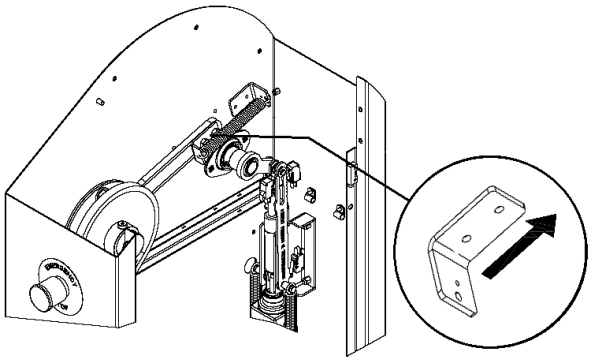
You can manage the ironing machine so that the speed changes automatically as the temperature changes. The change changes the speed value within a range of 1% to 20% of the set point value.
Based on the percentage difference between the current value of the temperature and the set one, the speed of the roller with respect to its set point value is also varied in a directly proportional way and by the same percentage quantity.
This management is optional: if you want to apply or remove it, make a request to the Installer, who will reconfigure the microprocessor.

## 20. CASE OF ENTRAPPING A LIMB

In the case of entrapping a limb, it is necessary to be able to manually open the basin.
There are multiple procedures that can be used for unlocking:

- pressure of the pedals with one foot, while the roller is turning in the direction of introduction: in normal operation this operation opens the hollow.
- pressure of the rod saves hands with hands immediately opens the basin.
- emergency mushroom pressure with your hands immediately opens the lay.
- pressure of the panic bar with the knee immediately opens the lay.

In case none of these operations should be sufficient, press the panic bar. Then use the key, supplied with the documentation, to open the lock of the right-side door.
Open the door by rotating it on the base.



To open the basin, push upwards the bracket shown in the drawing by making the basin retract until the blocked garment or trapped limb is released.

**ATTENTION!**

**It is important that the Laundry Manager is aware of the unlocking procedures listed above and that he ensures that the personnel who will use the machine are aware of the dangers of the machine itself and know the emergency procedures.**
**Periodic tests should be carried out on the personnel using the machine to ensure that the procedures have been correctly understood.**

## 21. WHAT TO DO IN CASE OF LACK OF ELECTRICITY

In the event that the power supply is lost, it is possible that one or more garments get stuck between the roller and the basin risking burning out.
In this case, press the panic bar with your knee and hold it down until the basin is completely retracted.
At the pressure of the panic bar the basin opens automatically freeing the garment and avoiding the burning of the cloth that covers the roller.

## 22. REPORTS OF MALFUNCTION

In the event of malfunctions, the microprocessor provides complete diagnostics. The list of alarms is followed. However, the user is invited to contact, in these cases, an authorized service center for the solution of the problem occurred.
Please note that the activation of each of the following alarms is accompanied by the intermittent and continuous sound of the buzzer.

- OVERTEMPERATURE

The temperature of the roller has exceeded the safe limit. In the event that this alarm occurs, the basin opens automatically, and the suction is inserted (if any). The alarm is automatically removed when the temperature falls below full scale.
While the alarm is active, you cannot start the roller. Call Technical Support to verify the fault.

- FAULT PROBE

There is a failure of the temperature probe, The behavior of the machine is the same as in case of overtemperature seen previously. Call the Technical Support service.

- THERMAL MOTOR

You have a signal from the motor saving thermal device when there is a failure of the inverter that powers the motor that drives the roller. The machine activates the cool down and turns on the vacuum cleaner (where present).
Once the cool down temperature is reached, the machine turns off: the display remains the alarm that can be reset by turning off the machine. Call the Technical Support service.

- WDT CONCA

If the resting position of the basin is not reached within the time limit by the ascent control, the machine is positioned in *OFF*.

**ATTENTION!**

**In the event that this alarm occurs, immediately suspend the use of the machine, and immediately call the Technical Assistance service.**

- ACTIVATION OF THE SAFETY RESET BUTTON

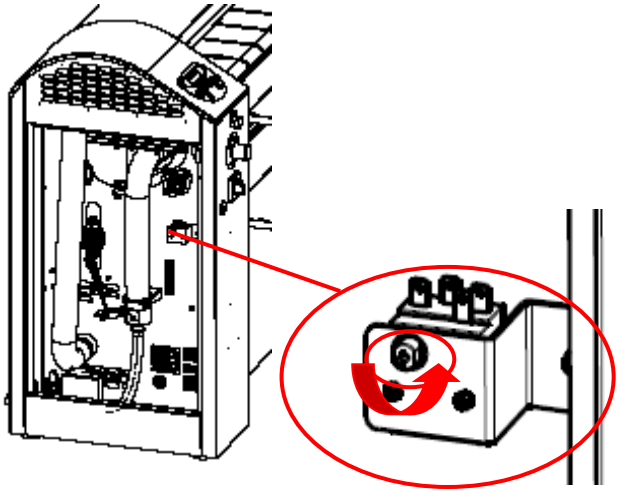
Below the touch screen is the SAFETY RESET button of the safety system. This system intervenes, illuminating the button, when one of the following events occurs:

- intervention of the hand-saving bar.
- activation of the panic bar.
- opening of one of the sides doors.
- emergency fungus pressure.

Safety is restored by pressing the SAFETY RESET button.
If the light does not turn off, the alarm has not returned.
It means that at least one of the elements listed above has not yet been restored, and that the machine is still on standby, waiting to return to safety conditions.

- INTERVENTION OF THE SAFETY THERMOSTAT

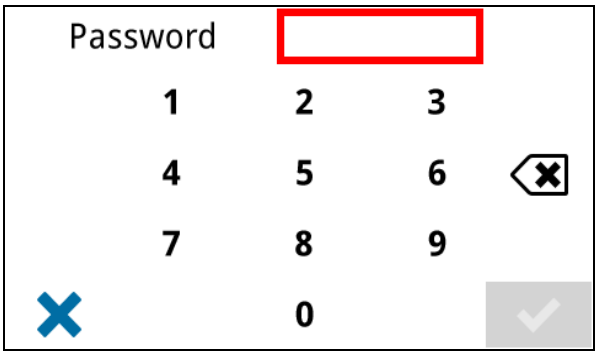
The safety thermostat intervenes when the temperature of the basin exceeds 230 ° C, turning off the heating of the machine and without forwarding any alarm to the display. When the thermostat has intervened, the machine does not heat.
In this case it is necessary to rearm it. Make sure that the roller temperature is below 80°C. Turn off the machine and disconnect all power supplies. Open the left door and locate the safety thermostat. Unscrew the black cap and press the white button inside it.
Finally, screw the black cap back on and close all the doors.
Call Technical Support to verify the fault.



## 23. PROGRAMMING

It is possible to perform a series of changes to the default data by entering the user menu.

To log in, while the machine is stationary press the menu icon "⋮" at the top right.
The screen appears on the display:




Enter the 6-digit code for access to the user area (default password) "123456".
Once the sequence is completed, the screen with the list of menus appears on display.
This screen is the gateway to the user programming area.
Browsing it you can access the configuration of:

- PROGRAMS
- SETTINGS
- RECORDINGS

By entering PROGRAMS, you can change the default settings of a program by choosing the following functions:

- Select the number of the program you want to change.
- NAME: The name of the program will appear above its icon.
- CYCLE TEMPERATURE: the temperature of the program.
- ROLLER SPEED: the speed of the program.
- BASIN PRESSURE: the pressure of the basin.
- SUCTION: (if available) possibility to activate the suction

Entering within SETTINGS you can choose the following functions:

- CHANGE LANGUAGE: to define the communication language of the touch screen.
- SET DATE: to adjust the local date.
- SET TIME: To adjust the local time.
- TEMPERATURE °C/°F: to decide the display of the temperature in °C or °F.
- DISABLE TOUCH: to decide that, while using the machine, the only active button on the keyboard is the STOP button (it is therefore impossible to change the parameters of the program in progress).
- USER PASSWORD: to customize the user password (the current one will be required)
- UPLOAD/DOWNLOAD PROGRAMS: to manage own set of programs
- BEEP KEYBOARD: to enable an acoustic signal with each typing or selection.
- PANEL MANAGEMENT: to move program icons to position, delete programs, select program icons
- UPLOAD ICONS FROM USB: allows you to load icons of custom programs through a special USB interface.
- LOAD SYSTEM ICONS FROM USB: allows you to load new custom system icons through a special USB

interface.

- MACHINE ON: allows you to manage the warning of the machine on when no ironing activity is in progress.
- PEDALS: allows you to manage the functionality of the pedalboard.
- TEMP./VEL COMPENSATION: allows you to activate or deactivate the speed compensation according to the temperature reached.
- MAX COMPENSATION %: defines in value % the compensation TEMP./VEL.
- BASIN PRESSURE: unit of measurement $Kg/m^2$or $lb./ft^2$.

Entering inside REGISTRATIONS you can check the diagnostics of the machine:

- WORKING HOURS: the total working hours of the machinery can be verified.
- PROGRAM STATISTICS: you can check the total number of programs performed and the repetitions of each individual program.
- DOWNLOAD RECORDINGS: you can download on usb the entire content of the recording's menu.
- ENERGY STATISTICS: It is possible to consult the consumption of electricity referred to the last ironing cycle, referring to the entire working day and referring to the total.

## 24. MAINTENANCE OF THE FLAT WORK IRONER.

**ATTENTION!**

**There is a risk of injuring yourself or damaging the equipment.**
**Any ordinary or extraordinary maintenance must be carried out by professionally qualified personnel.**
**Make sure all power supplies are disconnected before performing any type of maintenance.**
Lock the interlocked switch.
For cleaning do not spray water or steam.
Ordinary and extraordinary maintenance are reported to follow with the expected cadences.
Do not allow the accumulation of threads around the machinery.
For daily cleaning use a soft, moistened cloth. Do not use abrasive products, abrasive sponges, solvents, or metal objects.

- **EVERY DAY:**

**ATTENTION!**

**Cleaning the machine is extremely important. The accumulation of fluff could generate the risk of developing a fire!**
At the end of each working day, clean the side filters of the machine from any accumulated fluff.

- **EVERY THREE MONTHS:**

Check the cleanliness of the vacuum cleaner (for machines that are equipped with it). Open the left side door, unscrew the closing screws of the auger, and check the cleaning of the same. Check the tightening of the mechanical connection screws and the impeller clamping screw on the shaft.

- **EVERY SIX MONTHS**

Verification of the goodness of the cloth and the clothespin that cover the ironing roller. The replacement of the cloth and the clothespin is necessary when the formations of the first burns on the ironing fabric occur. Please note that the machine must be used along the entire length, in order to avoid burns concentrated in certain areas (classically on the sides of the roller), and that the machine must be turned off only after the temperature of the basin has dropped below 80 ° C.

Check the diameter of the ironing roller with a tailor meter in various places of the roller: near the right and left shoulders and in the center.

The replacement of the steel wool roller cover is necessary when the diameters of the rollers, complete with cloth and clothespin, fall below the following values:

- 785 mm circumference for Flatwork Ironer with a diameter of 25 cm
- 1005 mm circumference for Flatwork Ironer with a diameter of 33 cm

When the steel wool cover is replaced, the cloth and clothespin are also replaced. Please note that the machine must be used along the entire length, in order to avoid the formation of depressions of the padding (classically in the center of the roller).
Once the first part of the steel wool coating has been completed, the ideal dimensions of the roller are:

- 790±5 mm in circumference for Flatwork Ironer whose roller has a diameter of 25 cm
- 1045±5 mm in circumference for Flatwork Ironer whose roller has a diameter of 33 cm

Completed the second part of the coating with cloth and clothespin, the final dimensions of the roller are:

- 810±5 mm in circumference for Flatwork Ironer whose roller has a diameter of 25 cm
- 1070±5 mm in circumference for Flatwork Ironer whose roller has a diameter of 33 cm

- **EVERY TWELVE MONTHS**

Verification of the efficiency of gas springs.
The replacement of the gas springs is necessary when the basin can no longer approach the roller to perform ironing, or its pressure is no longer sufficient (case of gas leaks and relative inefficiency of the spring)

## 25. IRONING PROBLEMS

In case there are poor results in the stretched fabrics, check the following trouble shooting.

| PROBLEM detected | Probable SOLUTION |
|---|---|
| The fabric struggles to slide between the basin and the roller with the formation of curls at the exit. | a) Proceed to the cleaning of the basin. The cleaning of the basin must be carried out by passing a thin fabric folded once, which covers the entire length of the roller, and which contains paraffin powder inside. By ironing the folded fabric, the paraffin melts and is spread on the basin.<br>b) Check the selected ironing pressure: it may be too high |
| The fabric tends to get stuck between the basin and the roller. | a) Check that there are no solid residues on the basin. In this case the basin must be dismantled and cleaned with a brush equipped with brass bristles. The brush should be used in the direction of passage of the tissues. Do not brush horizontally (from right to left!).<br>b) Check the selected ironing pressure: it may be too high |
| Fabrics come out with yellowish spots. | a) Check that the rinses performed with the washing machine are accurate and completely eliminate detergent residues. The PH must be between 5 and 6. |
| The fabrics come out yellowed. | a) Check that the ironing temperature is compatible with the temperatures expected for the fabric: it is possible that the ironing temperature is too high<br>b) Check that the ironing speed is not too low |
| Black lines are formed on the cloth along one or more circumferences. | a) Check that there are no punctual residues on the basin due to the melting of buttons or nylon seams.<br>b) Check that the chrome plating has not been affected by zips or metal elements. |

| PROBLEM detected | Probable SOLUTION |
|---|---|
| The tissues come out with irregular folds, neither parallel nor perpendicular to the basin. | a) Check the degree of residual humidity at the introduction. Too dry fabric may not be ironed properly |
| The fabrics still come out wet. | a) Check the degree of residual humidity at the introduction which must not exceed 20%.<br>b) Check the ironing speed: too high a speed may prevent complete drying.<br>c) Check the selected temperature: it may be too low.<br>d) Check the humid air intake: a clogging could limit its efficiency.<br>e) Check the selected pressure: it may be too low. |

## 26. PROCEDURE FOR CHECKING SAFETY DEVICES

After turning on the machine, before starting the ironing cycle, it is necessary to always check the perfect functioning of the safety devices, The user must always scrupulously carry out the following procedure:

| Sequence of ACTIONS | CONSEQUENT REACTIONS |
|---|---|
| Press the ON/OFF button on the digital keyboard ... | ... the cylinder MUST NOT start the rotation |
| Operate the foot control without introducing any fabric to be ironed ... | ... the cylinder MUST start to rotate and MUST close the hollow. |
| Lift the bar saves hands ... | ... the roller MUST stop. The basin MUST reopen |
| As long as the bar saves hands remains raised ... | ... the machine MUST NOT be able to be restarted |
| Restart the machine and press the pedals ... | ... the cylinder MUST start to rotate and MUST close the hollow. |
| During normal operation, operate an emergency fungus ... | ... the roller MUST stop and the lay MUST rise. |
| As long as the emergency fungus is inserted ... | ... the machine MUST NOT be able to be restarted |
| Rearm the emergency fungus: restart the machine and press the pedals ... | ... the cylinder MUST start to rotate and MUST close the hollow. |
| Press the panic bar with your knee ... | ... the basin must open instantly. |

**ATTENTION!**

**After turning on the machine and before starting work, it is always necessary to check the perfect functioning of all safety devices.**

## 27. SCRAPPING

When the life cycle of the machine is concluded, proceed with the scrapping according to current regulations, separating the metal parts from the plastic parts, from the glass parts, from the electrical / electronic parts.

***Pursuant to art. 13 of Legislative Decree 25 July 2005, n. 151"Implementation of Directives 2002/95/EC, 2002/96/EC and 2003/108/EC, relating to the reduction of the use of hazardous substances in electrical and electronic equipment, as well as to the disposal of waste"***

The crossed-out bin symbol on the equipment or its packaging indicates that the product at the end of its useful life must be collected separately from other waste.

The separate collection of this equipment, which has reached the end of its life, is organized, and managed by the manufacturer. The user who wants to get rid of this equipment must then contact the manufacturer and follow the system that this has adopted to allow the separate collection of the equipment that has reached the end of its life.

Appropriate separate collection for the subsequent start-up of disused equipment for recycling, treatment and environmentally compatible disposal helps to avoid possible negative effects on the environment and health and promotes the reuse and/or recycling of the materials of which the equipment is composed.

The abusive disposal of the product by the holder entails the application of the penalties provided for by current legislation.

## 28. WARRANTY CONDITIONS

For warranty conditions, please refer to the manufacturer's price list.

**ATTENTION!**

**In order to take advantage of the manufacturer's warranty, the requirements contained in the manual itself must be scrupulously observed and in particular**

- **always operate within the limits of use of the machine.**
- **always carry out constant and diligent maintenance.**
- **use for the use of the machine adequately trained personnel.**
- **use only original spare parts indicated by the manufacturer**