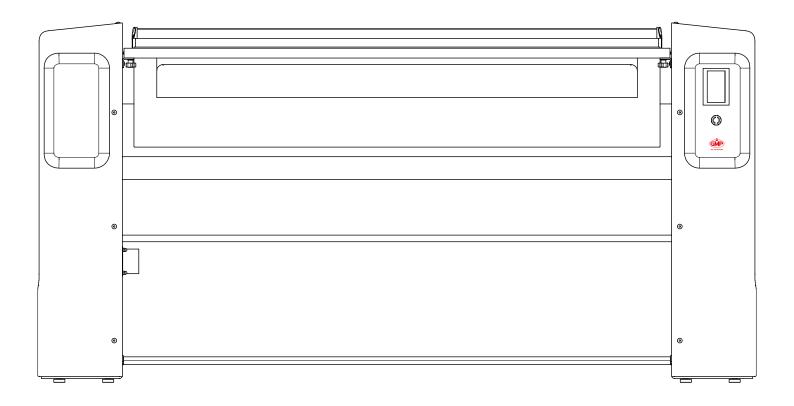


INSTALLATION, **USE & MAINTENANCE** MANUAL **2**²line



e² 100.25 **e**² 140.30 **e**² 120.25 e² 160,30 **2**² 140.25 e² 200.30



Before use, Read carefully the manual



Installation must be performed by qualified engineers complying with instructions supplied in the installation manual

EU - DECLARATION OF CONFORMITY



We GMP SRL
Via Sernaglia, 74
31053 PIEVE DI SOLIGO TV
Italy

Hereby declare on our own responsibility, that the products with the following type designation:

Industrial flatwork ironer

Model: E² 100.25 E² 140.30 E² 120.25 E² 160.30 E² 140.25 E² 200.30

Subject of this declaration, are manufactured in conformity with the provisions of the following EU directives:

- 2006/42/EC (machine directive)
- 2014/30/UE (electro magnetic compatibility EMC)
- 2014/35/UE (low voltage directive)

Applied harmonized standards are:

- EN ISO 10472-1 common requirements
- EN ISO 10472-5 specifically for flatwork ironers

Specifically for EMC:

- EN 55014-1:2006
- EN 55014-2:1997+A1:2001+A/A2:2008
- EN61000-3-2:2006

Specifically for low voltage:

- EN 60335-1-:2012
- EN 60335

Pieve di Soligo, 02.01.2022

GMP Srl Rudi Giaon

Should the product, mentioned above, be altered by the third party, then this declaration will be of no value, and the one who modifies, will have to respect, complete, and take over the legal commitments of the above mentioned directives.

GMP SRL

Via SERNAGLIA, 74 - 31053 PIEVE di SOLIGO (TV) - Italy - Tel. +39.0438.82354-82547 - e-mail info@gmp.it C.F. e P.IVA: IT 02040960268 - Cap. Soc. 52.000 € i.v. - Reg. Imprese Treviso n. 02040960268 REA n. TV 185943 - Ditta operante con estero n. TV019513

Person in charge of compiling the technical file: GIAON Rudi - Via Sernaglia, 74 - 31053 PIEVE DI SOLIGO - Italy

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TECHNICAL DATA

TECHNICAL DATA 5

SAFETY INFORMATION | MEANING





DANGER!

Informs of a dangerous situation that, if not avoided, will cause death or severe body injury.



WARNING!

Informs of a dangerous situation that, if not avoided, will cause severe body injury or damage to property.



CAUTION!

Informs of a dangerous situation that, if not avoided, will cause minor body injury or damage to property.

IMPORTANT!

Informs of a procedure that, if not respected, will cause damage to appliance.

IMPORTANT SAFETY INFORMATION



Failure to install, maintain, and/or operate the ironer according to the manufacturer's instructions may result in conditions which can produce body injury and/or property damage.



For your safety and to reduce the risk of fire or explosions, do not store or use flammable substances or substances that can generate flammable vapours and in proximity of this appliance.

Do not process with this appliance fabrics containing residuals of flammable substances.

NOTE: The DANGER, WARNING and IMPORTANT instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur.

It must be understood that common sense, caution, and carefulness must be applied whenever installing, operating or servicing the ironer.



To prevent personal injury, fire or explosion, the ironer may only be positioned, connected, adjusted, installed, and started by fully qualified engineers.

TECHNICAL DATA



Model	e ² 100.25	e ² 120.25	e ² 140.25
Roller Ø	250 mm	250 mm	250 mm
Roller length	1000 mm	1200 mm	1400 mm
Ironing speed	1 - 5 m/min	1÷5 m/min	1 : 5 m/min
Hourly production	kg 25 (r.h. 15-20%)	kg 30 (r.h. 15-20%)	kg 35 (r.h. 20-25%)
Ironer net weight	104 kg	110 kg	151 kg

Table A1

Model	e ² 140.30	e ² 160.30	e ² 200.30
Roller Ø	300 mm	300 mm	300 mm
Roller length	1400 mm	1600 mm	2000 mm
Ironing speed	1 - 5 m/min	1÷5 m/min	1÷5 m/min
Hourly production	kg 40 (r.h. 25%)	kg 50 (r.h. 25%)	kg 60 (r.h. 25%)
Ironer net weight	219 kg	231 kg	253 kg

Table A2

TRANSPORT | UNLOADING | UNPACKING



INSPECTION

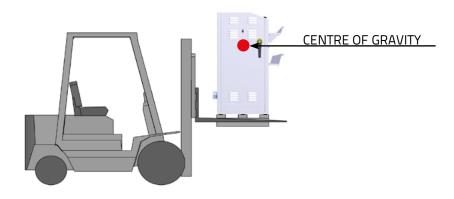
When ironer is delivered, visually inspect the packing and the parts of the ironer visible through the packing. Before signing any delivery document to the forwarder, make sure the product is delivered intact.

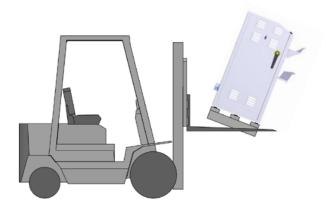
UNLOADING

The ironer must be unloaded from truck and transported keeping forklift forks as wide apart as possible in order to ensure stability during the handling.

IMPORTANT!

To avoid damaging the appliance, do not let it drop when handling.







Remember the center of gravity is high: machine should therefore be handled with extreme precaution, since shocks might cause it to fall.

UNPACKING

Keep all packing (plastic bags, polystyrene foam, nails, screws, metal or plastic straps, etc.) out of reach of children and dispose of suitably, as they are potential sources of danger and pollution.

All packing parts are completely recyclable, so a separate waste sorting should be used whenever possible.

IRONER POSITIONING





All operations must be carried out by fully qualified engineers.



Make sure that the floor static load limit complies with the equipment weight before positioning the ironer.

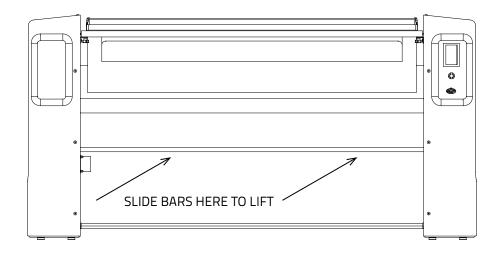
IMPORTANT!

To avoid damaging the appliance, do not let it drop when handling.

Remove the ABS shells using the key provided and remove the screws fixing the ironer to the pallet.

Put 2 metal flat bars suitable to lift the weight of the ironer under the slide for linen and lift the equipment keeping it perfectly straight. The right hand side is heavier than the left!

Place the ironer on the floor, ensuring it is perfectly stable and level. Adjustable feet are provided to compensate for uneven floors.



RECOMMENDED CLEARANCE AROUND THE IRONER

For a correct use and operation it is recommended to leave free space around the ironer: 50 cm on the sides and about 10 cm on the back are recommended.

ELECTRICAL SPECIFICATIONS





Electrical connections must be carried out by fully qualified engineers.

IMPORTANT!

Circuit connection and protection must be realized in conformity with regional electrical regulations.

Electrical specifications in Table 3 are subject to change without notice.

Refer to product serial plate for most updated specifications of product being installed.

e100.25

Voltage	Wire size	Circuit Breaker	Absorption	Electric Heaters	: Power Motors	
V.230/1/50-60Hz	3 x 10 mm² (1Ph + N + ½)	32 A	27 A	6 kW		
					6 kW	0,18 kW
V.230/3/50-60Hz	4 x 4 mm² (3Ph + <u>↓</u>)	16 A	16 A			
V.400/3N/50-60Hz	5 x 4 mm² (3Ph + N + ½)	16 A	10,5 A		0,10 KW	
V.400/3/50-60Hz V.440/3/50-60Hz	4 x 4 mm² (3Ph + <u>↓</u>)	16 A	10,5 A			

Table 3A

e120.25

Voltage	Wire size	Circuit Breaker	Absorption	Electric Power Heaters Motors		
V.230/1/50-60Hz	3 x 10 mm² (1Ph + N + ½)	32 A	31 A	- 6,9 kW	6,9 kW 0,18 kW	
						0,18 kW
V.230/3/50-60Hz	4 x 4 mm² (3Ph + ≟)	25 A	18 A			
V.400/3N/50-60Hz	5 x 4 mm² (3Ph + N + ½)	16 A	12 A			
V.400/3/50-60Hz V.440/3/50-60Hz	4 x 4 mm² (3Ph + ½)	16 A	12,5 A			

Table 3B

e140.25

Voltage	Wire size	Circuit Breaker	Absorption	Electric Heaters	Power Motors
V.230/1/50-60Hz	3 x 10 mm² (1Ph + N + ½)	40 A	34 A		
				- 7,5 kW	0,18 kW
V.230/3/50-60Hz	4 x 4 mm² (3Ph + <u>↓</u>)	25 A	20 A		0,32 kW
V.400/3N/50-60Hz	5 x 4 mm² (3Ph + N + ½)	16 A	13 A		
V.400/3/50-60Hz V.440/3/50-60Hz	4 x 4 mm² (3Ph + ≟)	16 A	14 A		models

Table 3C



e140.30

Voltage	Wire size	Circuit Breaker	Absorption	Electric Power	
				Heaters	Motors
V.230/3/50-60Hz	4 x 10 mm² (3Ph + ≟)	40 A	32 A		
V.400/3N/50-60Hz	5 x 6 mm² (3Ph + N + ≟)	25 A	20 A	9.9 kW	1,1 kW
V.400/3/50-60Hz V.440/3/50-60Hz	4 x 6 mm² (3Ph + ≟)	25 A	20,5 A	J,5 KVV	.,

Table 3D

e160.30

Voltage	Wire size	Circuit Breaker	Absorption	Electric Power	
				Heaters	Motors
V.230/3/50-60Hz	4 x 10 mm² (3Ph + ≟)	40 A	36,5 A		
V.400/3N/50-60Hz	5 x 6 mm² (3Ph + N + ≟)	25 A	21,5 A	11,4 kW	1,1 kW
V.400/3/50-60Hz V.440/3/50-60Hz	4 x 6 mm² (3Ph + ≟)	25 A	22 A	,	.,

Table 3E

e200.30

Voltage	Wire size	Circuit Breaker	Absorption	Electric Power	
				Heaters	Motors
V.230/3/50-60Hz	4 x 10 mm² (3Ph + ≟)	50 A	46 A		
V.400/3N/50-60Hz	5 x 6 mm² (3Ph + N + ≟)	32 A	26,5 A	15 kW	1,1 kW
V.400/3/50-60Hz V.440/3/50-60Hz	4 x 6 mm² (3Ph + ⊥_)	32 A	27 A	13 100	1,1 1.00

Table 3E

ELECTRICAL CONNECTION





Electrical connections must be carried out by fully qualified engineers.



Turn off the ciruit breaker before carrying out any operation on the electric circuit.

The manufacturer cannot be held responsible should safety regulations not be observed.

Before connecting the ironer, check that the supply voltage corresponds to that indicated on the serial number plate, which is situated on the rear of the machine. See VOLTAGE CONFIGURATION paragraph.

To ensure safe connection to the mains use a cable as specified in the Table 3 and an automatic cut-out protective device (differential magneto-thermal switch Idn = 0.03 A).

The differential magneto-thermal switch must have characteristics of section and insulation complying with European norms EN 60947-2 e EN 60947-3 and must be adequate to the ironer absorption.

This device and the connecting cable are not provided with the equipment.

The ironer must be connected to an individual circuit breaker.

IMPORTANT!

Grounding is necessary.

To guarantee protection against electrical shock, ironer MUST BE grounded.

To the purpose, only use the dedicated yellow/green terminal mounted on the ironer main supply terminals.

The earthing system must comply with national legal requirements.

Never connect ground wire and neutral on the same line.

IMPORTANT!

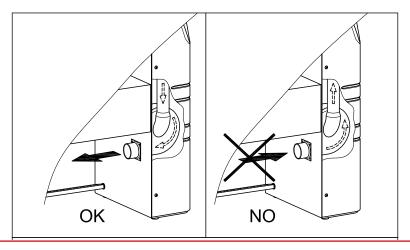
Check correct phases connection before starting the ironer! Required for **2**.30 ONLY.

When first starting the ironer, verify the correct phases connection checking the rotation sense of the steam extraction motor.

Should steam extraction motor turn in the wrong sense, switch off the ironer, turn off the main switch and invert 2 phases in the ironer main supply terminals.



Turn off the ciruit breaker before carrying out any operation on the electric circuit.



VOLTAGE CONFIGURATION





Electrical connections must be carried out by fully qualified engineers.

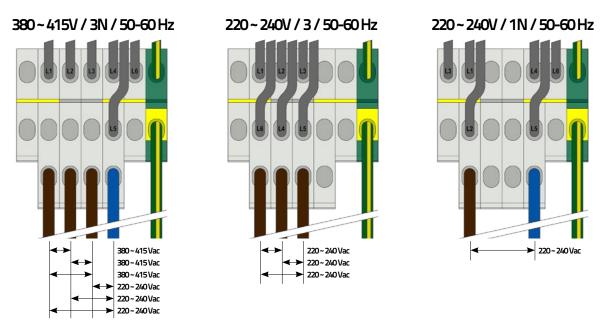


Turn off the ciruit breaker before carrying out any operation on the electric circuit.

e.25

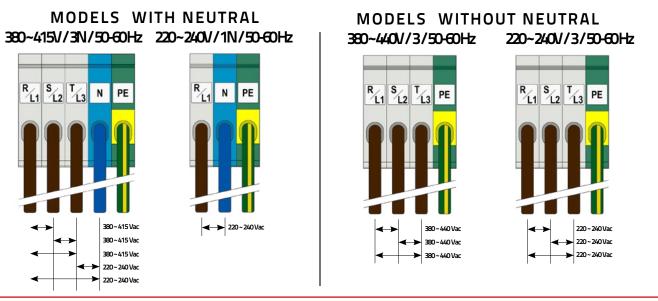
Models **2**.25 can be connected to different supply voltages thanks to an interchangeable voltage feature.

Refer to the scheme below to configure the ironer for supply voltage required.



e.30

Models **2**.30 are supplied in a fixed voltage configuration and cannot be updated in the field.



SAFETY DEVICES

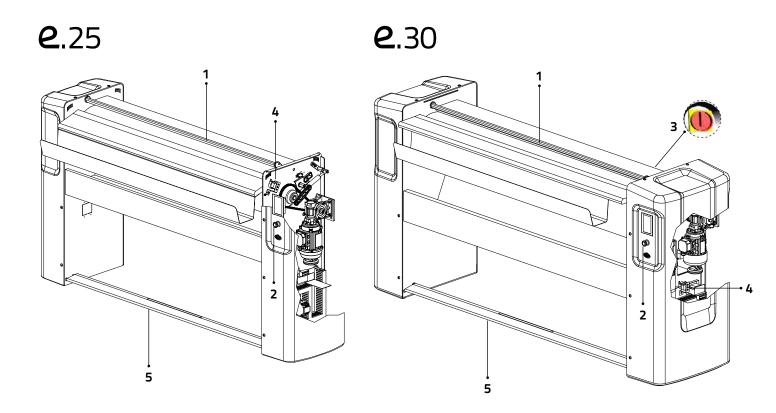




Before starting working, control the functioning of main safety devices: finger protection bar, emergency stop button and foot pedal.

In case one of these devices does not work properly, do not start ironing and immediately call a qualified engineer.

The fundamental part to operation of all the models is a heated element (chest). Avoid deliberate contact with points which in normal working position (hands on the feeding table) cannot be reached.



- **1 FINGER PROTECTION BAR**: prevents the operator's hands being exposed to the heated chest. By exerting minimum pressure on the bar, the roller stops, the chest opens and the ironer immediately switches off.

 To begin ironing again, press start button \circlearrowleft and then press the pedal.
- **2 EMERGENCY STOP BUTTON**: protects the operator in an emergency condition. By pressing the red knob, the roller immediately stops, the chest opens and the ironer switches off.

To begin ironing again, disengage the emergency button turning it in the direction of the arrows, press the start button \circlearrowleft and press the pedal.

3 MAIN SWITCH (E.30 models only): prevents contact with live electric circuits.

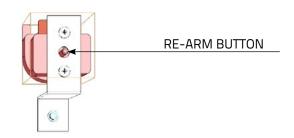


When the main switch mounted on the ironer is in position 0, there is still tension on the ironer supply terminals.

4 MAXIMUM TEMPERATURE SAFETY THERMOSTAT: this device provides a double check on temperature, limiting its excessive rise should the main thermostat fail.



To re-arm the thermostat, simply press the button located on the safety thermostat.



5 <u>FOOT PEDAL</u>: The foot pedal control also has a rapid stop function: when pressing it during working, the roller stops and the chest opens.

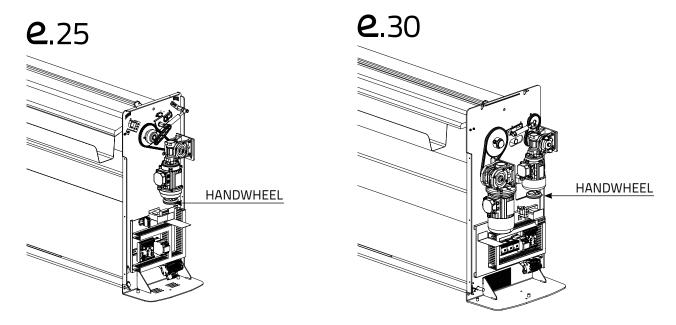
IMPORTANT!

When chest temperature is above 120°C, never stop the roller rotation for long time: the heat can cause roller cover scorching.

IN THE EVENT OF A POWER FAILURE



Only use the handwheel after having turned off the circuit breaker.



In the event of power failures, the chest can be raised from the roller by turning in anti-clockwise sense the handwheel installed below the motor controlling chest opening. This will avoid scorching the linens or the roller covering.

IMPORTANT!

Take the time to check the exact position of the handwheel and try the manual rotation procedure as soon as you receive your ironer, so that you will be prepared in the event of a power failure.

USE



Q² line industrial flatwork ironers have been designed to iron flat linen. Any other use is to be considered incorrect and therefore unreasonable.

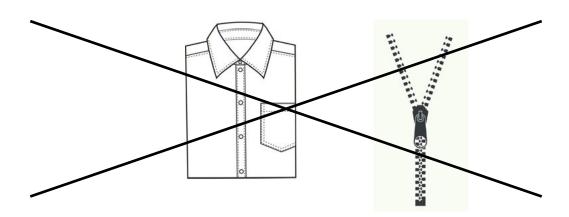
The manufacturer cannot be held liable for any damage to things or injury to persons caused by improper, incorrect or unreasonable use.

WHAT CAN BE IRONED

Flatwork ironers have been designed to iron flat linen, therefore they are not suitable to process clothes, carpets or blankets.

IMPORTANT!

- Items fitted with buttons or metallic zips might be damaged when processed on a chest ironer, and they might cause equipment damage, too.
- Always carefully read care label on the fabrics before starting ironing, and scrupulously follow care instructions in respect to suggested ironing temperature.
- Printed textiles should not be processed, since heat will melt the decorations, damaging the fabrics and the equipment.



PREPARING LINEN FOR IRONING

To optimize the ironer performance, and obtain best finish results, we recommend an appropriate preparation of the linen.

- Humidity content is a key factor to obtain a good ironing finish: fibres need to be humid in order to soften and predispose to be ironed.
- Do not leave washed or pre-dried linen for hours wrinkled and/or pressed waiting for the ironing phase. Humidity will evaporate, drying the fabric and impressing the wrinkles: it will be harder to remove them during the ironing, and this will force you using higher temperatures or working slowly.
- If because of laundry organisation reasons it is not possible to iron straight away, foresee 10 minutes dryer time to remove the spinning wrinkles and soften the fabrics.

 Then store the linen in a covered container, so that the humidity content does not evaporate and remains homogeneous for the entire load.
- When ready for ironing, prepare the linen in a trolley, unrolling and opening them.
 This last passage will allow you to feed them one after the other, saving time in the introduction phase.

HUMIDITY (MOISTURE) and FINISH





Q² line can process linen with residual humidity content varying from 30% down to 15%, according to the models and roller padding types.

To be perfectly ironed, linen need to dry completely. Consequently, the higher the moisture content -> the slower the ironing speed.

Q² line is not suitable to iron linen straight out of the washer extractor: humidity grades above 30% will reduce ironer performance and cause overheating.



CHOOSING THE IRONING TEMPERATURE

As a general rule, we should keep in mind that the lower the water content retained by the fabric after the spinning process, the faster the drying time, and the lower the temperature needed to dry.



Polyester: max. 120-125°C

This is a synthetic material, and as common experience teaches us with clothes, it absorbs very little water, drying up quickly.

Additionally, synthetic fabrics derive from plastic, so they are particularly sensitive to temperature effects.

When ironing pure polyester we should therefore precautionally use low temperatures, and never exceed 120-125.



Poly-cotton: refer to care label

Polycotton is a very popular fibre used for tablecloths and bedding, because it absorbs less liquids than cotton, so spots don't go deep in the fibres and can be cleaned easier.



Ironing temperatures can vary quite much, depending on the cotton percentage contained in the fabric processed, and on its thickness.

Recommended temperatures can therefore space between 130 and 160°C: care label will tell you the appropriate information.



Cotton / Linen: max. 160-170°C

Pure cotton and linen can normally be processed using the highest temperatures, so 160-170°C would be appropriate.

If processing coloured fabrics, refer to care label for their resistance to temperature, avoiding fading or colour change.

IMPORTANT!

The above information represent just a generic guide and do not substitute the care label information, which should be scrupulously followed when treating your linen.

Always make sure the linen you are processing or buying are fitted with care labels.

Remember that temperatures above 150°C will increase production but could scorch linen, especially on sensitive fabrics or colours.

CHOOSING THE IRONING SPEED

Once the ironing temperature and the humidity content have been chosen according to the fabric processed, the ironing speed will come as a consequence.

Ironing speed just represents the time the linen need to remain in contact with the heated surface to be perfectly dried.

Generally ironing speed is related to fabric type: natural fibres will need to be processed slowlier than synthetic fibres, because they retain more water, which requires more time to evaporate.

We suggest starting with a medium ironing speed, and decreasing it if linen are not perfectly dry after the ironing process. In case linen coming out of the ironing process are very hot (difficult to touch with hands) or present electro-static problems, increase the ironing speed.

HINTS & ADVICES





Linen ironed using the higher temperatures can be very hot out of the ironing process. In such a case, use appropriate protection gloves for the hands.

PROCESS

Make sure linen are well rinsed after the washing cycle prior to the ironing.

Linen containing soap residuals will be more difficult to iron and will lead to deposits building up on the chest surface, which is going to require cleaning and maintenance in a shorter time span.

If linen out of the washing process are sticky, this means they still contain detergent residuals.

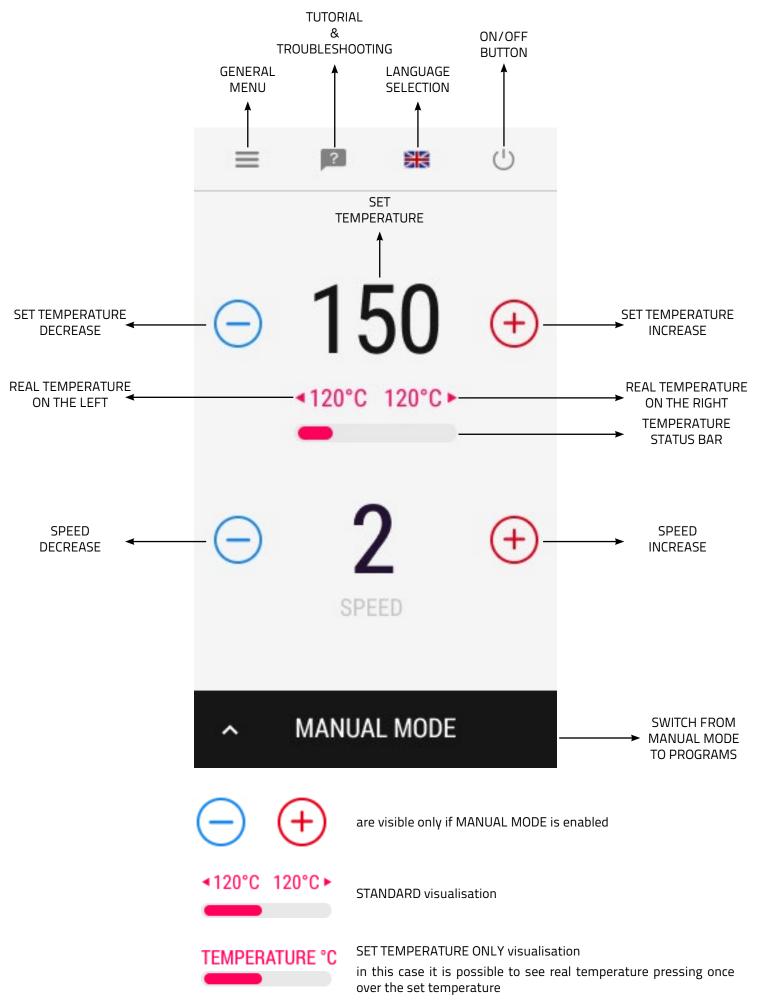
In this case, double-check detergent quantity taken by the washer during the wash cycle, and if this is correct, improve the rinse phase.

If starched linen are processed, a cleaning and lubrication phase should be planned at the end of every ironing session with the help of a cleaning cloth: starch makes the chest metal surface sticky and affects smooth gliding.

If water used is particularly hard, foresee regular chest cleaning with your service team.

CONTROL PANEL





17

OPERATION



PROGRAM MODE

Select the desired program choosing from PRE-SET programs or MY PROGRAMS. The heating will be activated: the temperature status bar turns red.

MANUAL MODE

After having set the ironing temperature, the heating will be activated: the temperature status bar turns red. Now choose the desired ironing speed.

When a temperature of 90°C has been reached, press the foot pedal. The roller will start rotating and the chest will close.

Wait until the desired temperature is reached (temperature status bar turns grey) and start introducing linen.

It is always a good norm to start ironing items that require lower temperatures, and then increase the set to process items requiring higher temperature set.

NOTE: When working in PROGRAM MODE, a manual change of speed or temperature will automatically switch the control to MANUAL MODE.

IMPORTANT!

In the breaks between different ironing sessions, it is avdisable not to let the roller rotate without linen introduction.

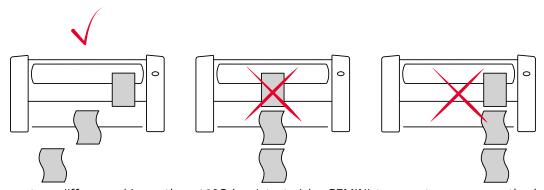
Rotation without introduction of humid items is a source of unnecessary friction and causes a quicker wear and tear of the roller padding.

FEEDING THE LINEN

Understanding the importance of a correct feeding procedure represents the basics to maximize ironer performance, save energy waste, avoid overheating damage and therefore reduce maintenance costs.

The ironer chest is heated inside by a system that gives same energy to all its points. When ironing, it is therefore important to subtract homogeneously the temperature from the chest, continuously changing the introduction point and not forgetting side spots.

Following the simple below schematic will ensure a homogeneous temperature all over the ironing surface.



Should a temperature difference bigger than 40°C be detected by GEMINI temperature sensors, the heating will be automatically disabled and a warning message displayed.



HOW TO CREATE AN IRONING PROGRAM

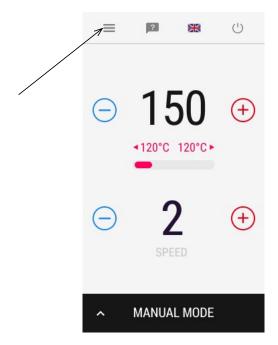


Program creation is enabled only when MANUAL MODE is enabled.

Tap on the general menu icon **=** . Select EDIT PROGRAMS. Now select ADD PROGRAM.

Tapping in the field PROGRAM NAME, keyboard will show up. Assign a program name and then set required TEMPERATURE and required IRONING SPEED.

Select SAVE to save the setting, CANCEL to abort the procedure and DELETE to eliminate the program.

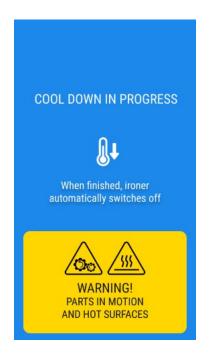




SWITCHING OFF THE IRONER

Press \bigcirc button to switch off. If the chest temperature is above 90°C, a brief automatic cool-down procedure will be activated, with the purpose of evaporating humidity from internal roller layers and extend roller padding lifespan, reducing hydrolises effects.

The equipment automatically switches off after 5 minutes.



SLEEP MODE



If Sleep Mode function has been activated, the ironer automatically goes in a stand-by mode, disabling the heating and the rotation/steam extraction functions.

Sleep Mode is activated if the control does not detect temperature variations for a pre-determined period. For setting temperature variation entity and duration of inactivity period, consult technical service.



INFORMATIVE MESSAGES

SOFTWARE CODE

When you connect electric power to the ironer, the display shows for few seconds the software code used for the specific equipment and then switches off, waiting for the ironer to be switched on with the \circlearrowleft button.

Software code starts with:

- E-25
- E-30

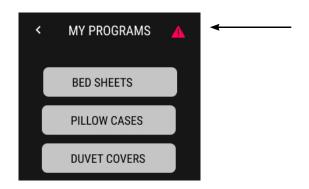
and does not represent an error message. This is just an informative message.

ERROR IN BACKGROUND

In case an informative message or an error message have been hidden by the operator, a triangle remains visible in the background.

Example:





MAINTENANCE & CARE





When the main switch mounted on the ironer (230 only) is in position 0, there is still tension on the ironer supply terminals.

Before any maintenance intervention:

- Turn off the circuit breaker or unplug the ironer
- Make sure the chest is cold (ideally carry out maintenance in the morning, before starting any work cycle).



Any work on mechanical parts and the electrical system must be carried out by fully qualified personnel. Contact your service team in case such interventions are required.

Under normal working conditions, **2** ironers require a minimum but regular maintenance.

Lint is the real enemy in the laundry, so ensuring to keep ironer clean from lint will extend lifespan of the equipment and reduce maintenance costs.

While some interventions can and should be carried out on a regular basis directly from the operator, we recommend agreeing a programmed maintenance agenda with your service team for the periodical inspections of internal components.

Interventions marked with the symbol



should be carried out by qualified service engineers.

DAILY MAINTENANCE

LUBRICATION

Use high-temperature resistant paraffin to lubricate the chest.

Ideally this operation should be carried out at the end of every 8 hours working cycle.

MONTHLY MAINTENANCE

Using a vacuum cleaner clean lint from the inner of the right side panel: specifically, motor ventilation grid and electric components.

Lint obstructing ventilation grids generates motor overheating, shortening its lifespan.

QUARTERLY MAINTENANCE

Grease chains.

2/3 TIMES A YEAR



Check that steam extraction rubber pipe (only for models fitted with this option) is clean from lint. Clean steam extraction motor fan and ventilation grid from lint.

ONCE A YEAR

Grease the slide guides.



Check steelwool roller padding and make sure it is even, by measuring the circumference in at least 3 points (right, left and middle).

Should the roller circumference have compacted, add steelwool to re-establish the original roller diameter.

This is an important operation to ensure a good contact surface between linen and chest, avoiding performance reduction and chest overheating due to scarce contact with the roller.