



CUTLERY DRYER

Model JET and Model MIG

Use and maintenance manual

110.425 / 110428

This unit is compliant with the following Community Directives:

- 2006/42/EC dated 17 May 2006 (Machine Directive);
- 2006/25/EC dated 12 December 2006 (Low Voltage);
- 2004/108/EC dated 15 December 2004 (Electromagnetic Compatibility);

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This use and maintenance manual is to be considered an integral part of the machine. It must be kept for future reference until the machine is dismantled.

If the machine is sold or transferred to another user, this manual must follow the machine to its new destination.

Before performing any operation with the machine, carefully read this instruction manual, especially the chapter on safety.

Keep the manual in a dry place near the machine. It must always be available to the qualified person assigned to operate and monitor the machine.

The following symbols are used in the manual so that the most important information can be found more quickly:



Safety information



Procedures to be followed



Suggestions



SAFETY

Installation

- Check that the machine has not been damaged during transport. If the machine is damaged contact the supplier.
- Installation of the machine and connection to the electrical power supply must only be performed by qualified personnel. Before performing any work, check that the machine is disconnected from the electrical power supply.
- For reasons of safety, do not modify or alter the machine in any way.
- Make sure the machine does not rest on the power cord.

The manufacturer shall not be held liable for personal injury or property damage which may be due to:

- **Modification or actions that are not explicitly authorized.**
- **Incorrect installation or installation performed by unqualified personnel.**

Use

- The machine was designed to dry and polish cutlery made of stainless steel, chromed steel or silver, using corncob. **Do not use it for drying or polishing other materials.**
- For drying and polishing, insert in the machine only corncob.
- The machine may only be used by persons who have been suitably trained to operate and monitor it.
- The machine may be used only in closed locations with adequate health and hygiene conditions and sufficient lighting (300-400 lux).

The manufacturer shall not be held liable for personal injury or property damage which may be due to:

- **Use of the machine which is improper, incorrect or not in compliance with the instructions.**
- **Methods of use that do not comply with current laws and standards.**
- **Use of the machine by untrained personnel.**

General safety standards

- Repairs to the machine must only be performed by specialized personnel. If there are problems with the machine, do not attempt to repair it by yourself. Work performed by unskilled persons may lead to damage and accidents.
- In the event of malfunctions, refer to this manual. Contact your dealer if you are not able to find the necessary information.
- When replacing components of the machine, insist on original spare parts.
- Periodically perform required cleaning and maintenance, as specified in this manual;
- In the event of prolonged disuse, empty the corncob from the machine and unplug it from the electrical power supply. Never unplug by pulling on the cord. Unplug by grasping the plug.

The manufacturer shall not be held liable for personal injury or property damage which may be due to:

- **Failure to perform required maintenance, or doing so carelessly.**
- **Incorrectly performed maintenance.**
- **Maintenance not performed by specialized personnel, when required by this manual or by current standards.**

INSTALLATION

Data on electrical connections is included on the ratings plate located on the back of the machine.

Before inserting the plug in the socket, make sure that:

1. The mains voltage specified on the ratings plate corresponds to the mains voltage at the place of installation.
2. The counter, the fuses, the power supply line and the socket are sized to support the maximum required current.

The machine is supplied with a 4-metre power cord with a SCHUKO model plug. Make sure that the power socket in the place of installation of the machine and the plug are compatible without using reductions, multiple sockets and various adaptors.



ATTENTION!: *The plug must remain accessible even after the appliance has been installed.*

If you need to replace the power cord, contact qualified personnel.



ATTENTION!: *The machine must be connected to a socket protected by a circuit breaker and an effective earth system. The manufacturer shall not be held liable if these instructions are not followed.*

Positioning the machine

Before positioning the machine, remove all packing materials.

For correct positioning, consider the dimensions of the machine as shown in the technical data at the end of this manual.

To keep the machine from overheating, leave a free space around it of at least 10 cm.

If the machine is equipped with wheels, once you have positioned it, you will need to lock it in place using the brakes on the front wheels. If it is equipped with support feet, you will need to level it by adjusting the feet.



ATTENTION!: *Make sure the power cord does not interfere with work and that workers will not trip over it.*



ATTENTION!: *Before you plug in the machine, turn the main switch to position 0.*

DESCRIPTION OF THE MACHINE

This CUTLERY DRYER is an automatic machine that has been designed and created for the drying of cutlery made of stainless steel, chromed steel, or silver.

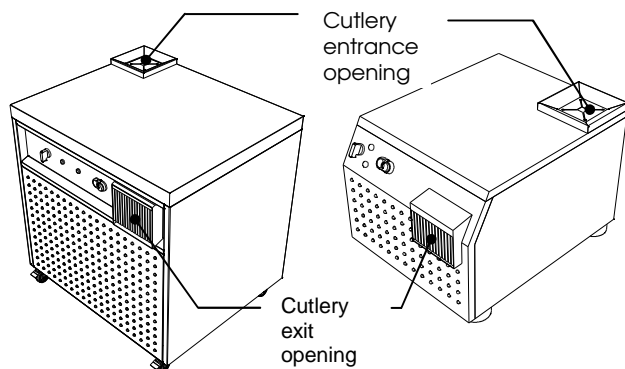


IMPORTANT!: To dry cutlery made with other types of materials, it is advisable to run tests first to evaluate the quality of the results.

The machine is intended for use in the kitchens and dishwashing areas of hotels, restaurants, pizzerias and other dining facilities.

The entire structure is made of stainless steel, which allows easy cleaning and disinfecting.

The entire machine is composed of a stainless steel spiral tunnel that contains the corncob, an adhesive heating element and a motor-vibrator.

Figure 1 – CUTLERY DRYER
model JETFigure 2 – CUTLERY DRYER
model MIG

Cutlery drying

Cutlery, with the maximum dimensions shown in Figure 3, is inserted in the entry opening located on the top of the machine. From there, it reaches the bottom of the spiral tunnel. In the tunnel, there is the corncob, which is heated by an adhesive heating element applied to the outside of the bottom of the tunnel, allowing it to reach the required temperature of approximately 80°C needed to disinfect the cutlery. The motor-vibrator, located in the centre of the spiral, allows the cutlery to proceed along the tunnel until the exit opening, located on the front of the machine. The relative movement between the cutlery and corncob allows the corncob to absorb the humidity from the cutlery and to polish it.

Near the exit hole, in addition to a perforated track that allows the corncob to return to circulation. There is an electric fan that generates an air barrier capable of keeping the cob in the machine.

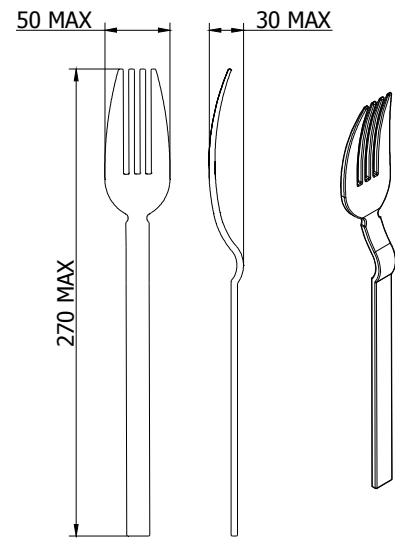


Figure 3 – Maximum dimensions of cutlery

CONTROL PANEL

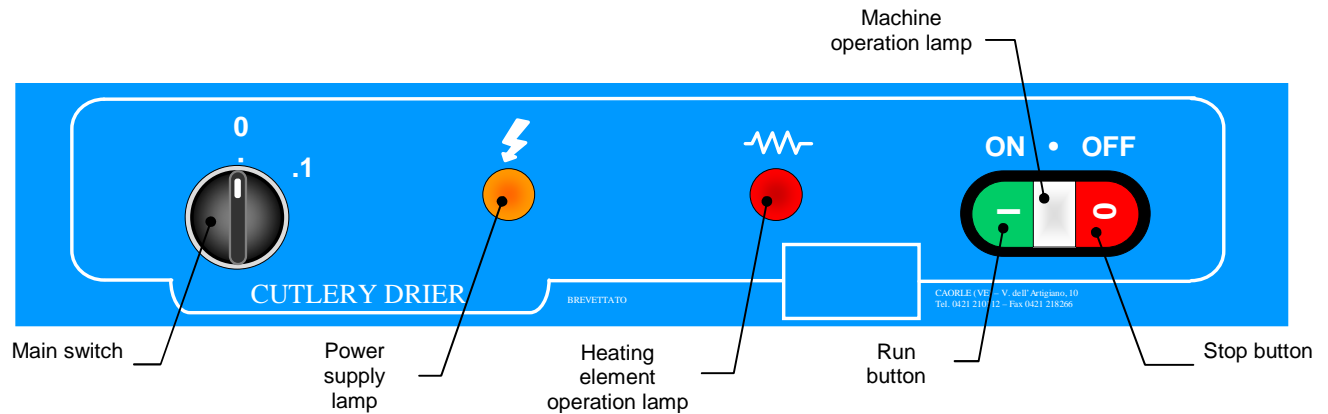


Figure 4 – CUTLERY DRYER control panel, model JET

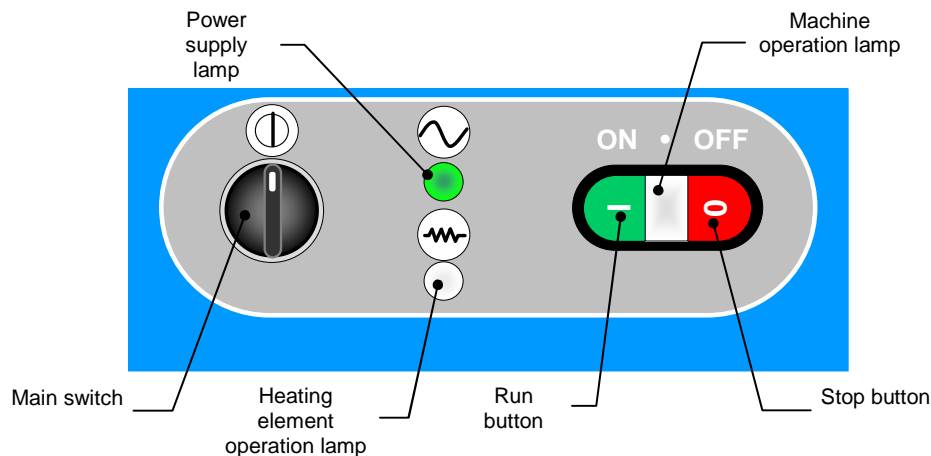


Figure 5 – CUTLERY DRYER control panel, model MIG

The control panel of the machine is powered at low voltage (24 volts) to avoid risks originating from high-voltage power supply.

Main switch: when it is in position **0** it makes it possible to cut the power supply to the machine. When it is in position **1** it provides power to the machine.

Voltage present lamp: indicates that voltage is supplied to the machine when the main switch is in position **1**.

Heating element operation lamp: indicates operation of the cob heating element. The power supply of the heating element is controlled by a thermostat that cuts off the power supply when the temperature of the heating element reaches 110°C for the model JET and 95°C for the model MIG .

Run button: controls start-up of the motor-vibrator and hence the drying cycle.

Stop button: controls shutdown of the motor-vibrator and hence the drying cycle.

Machine operation lamp: signals operation of the motor-vibrator.



INSTRUCTIONS FOR USE

Inserting the corncob

The corncob used for drying and polishing the cutlery must be inserted in the machine prior to starting the drying cycle and inserting the cutlery.



ATTENTION!: Place in the machine only GM20 corncob provided by the manufacturer or with the characteristics listed in the paragraph on technical characteristics in this manual.

The manufacturer shall not be held liable if materials are used other than those specified.



To insert the corncob, proceed as follows:

1. Turn the main switch of the machine to **0**.
2. Press the green run button.
3. Pour into the tunnel, through the entrance opening for the cutlery (Figure 6), the amount of corncob specified in the technical data at the end of this manual;

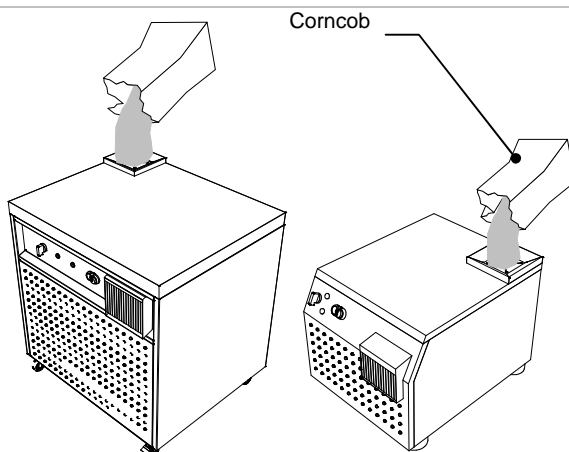


Figure 6 – Insertion of corncob

Drying and polishing cutlery

Before inserting the cutlery in the machine, it must first be drained to obtain best drying results.



ATTENTION!: Do not soak the cutlery in anything other than water after washing it, so as not to alter the corncob.



1. Check for corncob in the tunnel of the machine;
2. About **20 minutes** prior to use, place the main switch of the machine in position **1** and press the green run button to power on the heating element and the motor-vibrator, so as to bring the corncob uniformly up to the correct temperature of use;
3. Insert from the entrance opening (Figure 7 and Figure 8) the number of pieces of cutlery according to the model of the machine, at intervals of 5/6 seconds;



ATTENTION!: Cutlery may be sharp and may cut and/or perforate the hands. Therefore it must always be grasped by the handle. If they are especially sharp, appropriate protective gloves must be used (individual safety gear).

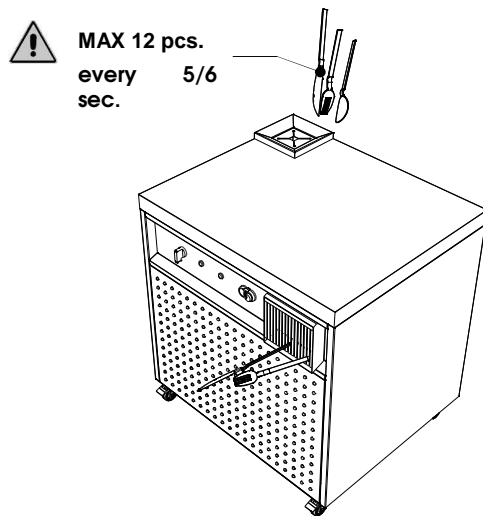


Figure 7 – Insertion of cutlery in the CUTLERY DRYER model JET

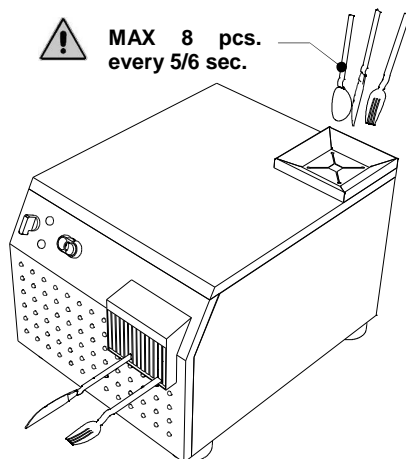


Figure 8 – Insertion of cutlery in the CUTLERY DRYER model MIG

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4. Upon conclusion of the drying cycle, which lasts about 50 seconds, the first cutlery will come out of the front exit opening.
5. When drying of the cutlery is complete, leave the machine running for **20 minutes** to regenerate the corncob. When this time is up, press the red shutdown button and turn the main switch to **0**.
-

Emergency shutdown

Any time it is necessary to do so, the machine may be shut down in emergency conditions during the drying cycle.



For emergency shutdown, proceed as indicated below:

1. Press the red emergency push button.
2. Turn the main switch to **0**.
3. Remove the plug from the power socket.
4. Eliminate the cause that made emergency shutdown necessary, provided this can be done in complete safety for the operator and without damaging the machine. Otherwise contact the dealer.

CLEANING AND MAINTENANCE

The machine must be carefully cleaned on a daily basis to ensure greater disinfecting of the cutlery.

For cleaning, do not use products that are toxic, solvent, irritant, acid, basic or abrasive, as they may damage the surface of the machine and contaminate the material to be dried if disposed of improperly. Use only water.

Do not use utensils that are abrasive, pointed, metallic, or any other object that may ruin the surfaces of the machine. Use plastic brushes or clean cloths.

At least every **120 days/600 hours of work**, you must replace the corncob, to ensure good drying and disinfecting results. To extract the corncob from the tunnel, start the machine, insert the hose of a vacuum cleaner in the cutlery entrance opening, until all of the corncob in the machine has been suctioned up (Figure 9).

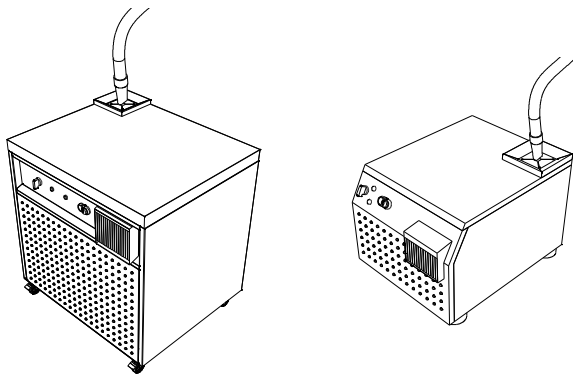


Figure 9 – Suctioning of corn cob in the tunnel



ATTENTION!: Before cleaning the inside of the machine, disconnect the power supply by turning the main switch to 0. Also pull the plug from the socket. The machine must be cleaned when it is cold.

Follow the directions on the warning/prohibition sign (Figure 10).



Figure 10 – Warning sign

Every **5 days** clean the inside of the machine. To remove the upper lid, you will need to remove the rear fastening screw (Figure 11).

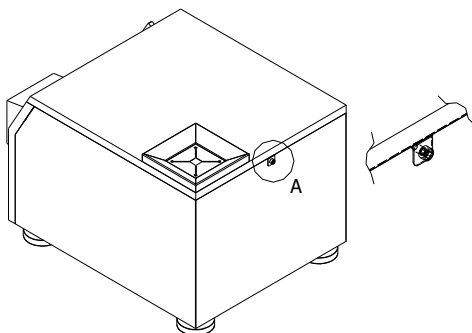


Figure 11



ATTENTION!: The inner parts of the machine may be hot and cause burns. For this reason, cleaning must be performed after at least 15 minutes from machine shutdown!

Remove the upper lid and remove dust and corn cob residue from the machine. To do so, use only a vacuum cleaner, if possible equipped with a narrow nozzle, to reach the least accessible parts. Never use air jets, to avoid dispersion into the environment of residues. When the operation is complete, close the lid and firmly secure the fastening screw.

Machine maintenance



ATTENTION!: Before performing any maintenance, disconnect the power supply to the machine by turning the main switch to 0. Also pull the plug from the socket. The machine must be serviced when it is cold.

Considering the simplicity of maintenance, it may be done by the user, provided the aforementioned safety precautions are observed.

Checks to be performed involve the safety devices installed on the machine (shutdown button). Daily, prior to starting the machine, proper operation of these devices must be verified.

On a yearly basis, check the state of conservation of the machine and replace any worn parts. In particular, check the tension of the springs, the integrity of the heating element, and correct operation of the motor vibrator and the electric fan.



ATTENTION!: *Replacement of any damaged or worn parts must be carried out by qualified personnel. In this case, contact the dealer's service centre.*



PROHIBITED!: *It is prohibited to carry out maintenance and/or cleaning while the machine is in operation.*

Prolonged periods of disuse

If the machine is not going to be used for an extended period of time (over six months) you should:

- Disconnect the machine from the electrical power supply
- Vacuum the corncob out of the tunnel
- Perform thorough cleaning inside and out
- Move the machine, if possible, to a clean and ventilated area
- Seal the machine in a multi-layer nylon bag, if possible opaque (black).



WHAT TO DO IF...

The instructions shown below may help you solve some of the problems which may arise with the CUTLERY DRYER



ATTENTION!: Before doing any work inside of the machine, disconnect the power supply by turning the main switch to 0. Also pull the plug from the socket.

Problem	Model	Possible cause	Remedy
The machine will not turn on	JET and MIG	The switch for protection of the power supply line is open	Close the switch
	JET and MIG	The plug of the machine is not inserted correctly	Check that the plug is inserted correctly
	JET and MIG	The protection fuse is burned out	Replace the fuse
The machine will not start	JET	The lid is not positioned correctly	Position the lid correctly
The machine is on but the heating element does not heat up	JET and MIG	The heating element, cable or thermostat are damaged	Contact the dealer's service centre
During use, the circuit breaker trips	JET and MIG	There is dispersion to earth of the electrical circuit	Unplug the unit and contact the dealer's service centre
At the end of the cycle, the cutlery is still damp	JET and MIG	The cutlery was not properly drained prior to insertion	Put the cutlery through another drying cycle
	JET and MIG	Heating element malfunction	Contact the dealer's service centre
	JET and MIG	The corncob has not reached optimal drying temperature	Wait longer before inserting the cutlery
The cutlery does not come out	JET and MIG	Too much cutlery is inserted	Reduce the amount of cutlery inserted.
	JET and MIG	The cutlery is jammed inside the tunnel	Remove the lid of the machine, raise the handle of the tunnel after removing the three black fastening knobs and remove the jammed cutlery
	JET and MIG	There may not be enough corncob in the machine.	Extract the corncob, weigh it and return the correct amount to the machine.
	JET and MIG	The corncob may be damp	Replace the corncob or leave the machine running until the corncob is regenerated.
	JET and MIG	Malfunction of the motor-vibrator	Contact the dealer's service centre
	JET and MIG	The motor of the motor-vibrator has burned out	Contact the dealer's service centre
	JET and MIG	The cutlery is jammed inside the tunnel	Remove the lid of the machine, raise the handle of the tunnel after removing the three black fastening knobs and remove the jammed cutlery
	JET and MIG	The fan does not function	Contact the dealer's service centre
	JET and MIG	There is too much corncob in the machine	Extract the corncob, weigh it and return the correct amount to the machine.
	JET and MIG	The corncob may be damp	Replace the corncob or leave the machine running until the corncob is regenerated.



Problem	Model	Possible cause	Remedy
Excessive noise during use	JET and MIG	The cutlery is jammed inside the tunnel	Remove the lid of the machine, raise the handle of the tunnel after removing the three black fastening knobs and remove the jammed cutlery
	JET and MIG	The plate and/or the fastening brackets are broken or loose	Contact the dealer's service centre
	JET and MIG	The screws that hold the springs or the tunnel are loose	Contact the dealer's service centre
	JET and MIG	Malfunction of the motor-vibrator	Contact the dealer's service centre
	JET and MIG	Breakage of tunnel suspension springs	Contact the dealer's service centre
	JET and MIG	No corncob in the tunnel	Try adding corncob until you reach the capacity indicated in the paragraph on technical data in this manual
The cutlery has corncob residue	JET and MIG	The cutlery has not been washed correctly or is still damp	Put the cutlery through another washing and drying cycle
	JET and MIG	The corncob may be damp	Replace the corncob or leave the machine running until the corncob is regenerated.

Table 1

After these checks, if the malfunction persists, contact the dealer's service centre, specifying the type of defect, the model of the unit (Mod.), the product number (type) and the manufacturing number (S.N.) found on the data plated with the CE mark.

We suggest you copy these numbers below so that you will have them handy.

Model :

Type :

Serial number :



IMPORTANT!: Any repairs to the machine must be performed by qualified personnel. Incorrect repair may create serious danger to the user. If your unit requires any repair, contact your dealer's service centre.

Always insist on original spare parts.




DISPOSAL

Packing material

The packing materials (wood crate, nails, metal staples, etc.) must be disposed of in compliance with current laws and standards, based on their type, by delivering them to special containers located at municipal waste collection facilities or by contacting specialized companies.

Machine

Before disposing of the machine, make it unusable by cutting the power cord. Before disposal, make sure that the machine does not contain anything you want to keep and that all corncob has been removed.

The symbol  on the product or on the package shows that the product must not be considered as normal household waste but must be taken to an appropriate collection point for the recycling of electrical and electronic equipment. By disposing of this product properly, you will be helping to prevent possible negative consequences for health and the environment which may arise from improper disposal of the product. For more detailed information about recycling this product, contact local authorities, the local waste disposal agency, the manufacturer or the dealer.

Corncob

Corncoobs are completely natural material and therefore they can be disposed of in appropriate containers.

**TECHNICAL DATA CUTLERY DRYER MODEL JET**

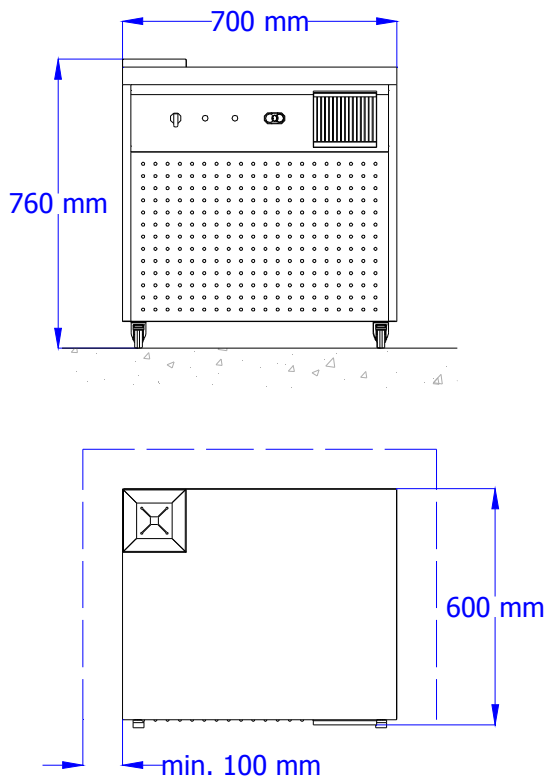
Dimensions	Width	700 mm	
	Height	600 mm	
Depth	760 mm		
Weight			80 kg
Electrical connection		Voltage / frequency	230 V / 50 Hz
		Input	0.90 kW
		Control circuit voltage	24 V
IP□insulation level			55
Noise			< 78 dB (A)
Amount of corncob to insert			7 kg
Production		12 cutlery sets for a cycle of 50"	
Admissible environmental conditions		Admissible operating temperatures 10°C – 45°C (50° F – 113° F) Variations in ambient temperature Max. 1.1°C / Min (Max 2°F / Min) Range of relative humidity 75% or less	

Table 2

**TECHNICAL DATA CUTLERY DRYER MODEL MIG**

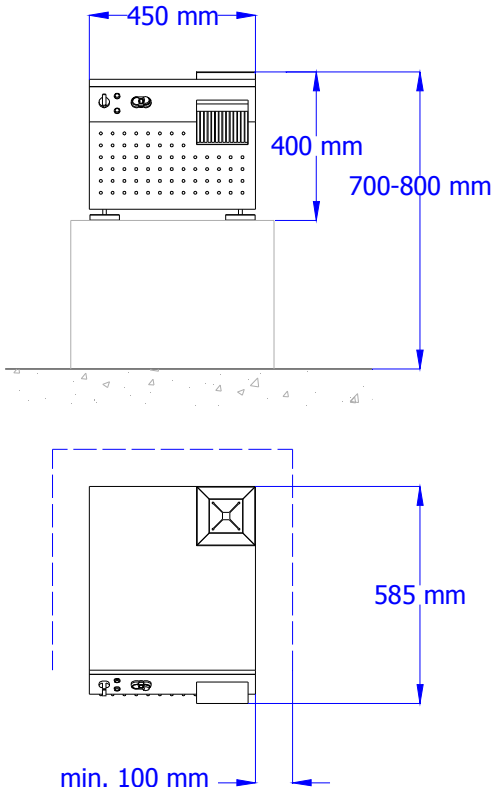
Dimensions	Width Height Depth	450 mm 400 mm 590 mm		
Weight			32 kg	
Electrical connection		Voltage / frequency	230 V / 50 Hz	
		Input	0.70 kW	
		Control circuit voltage	24 V	
IP□insulation level			55	
Noise			< 78 dB (A)	
Amount of corncob to insert			5 kg	
Production		7/8 cutlery sets for cycle of 50"		
Admissible environmental conditions		Admissible operating temperatures 10°C – 45°C (50° F – 113° F) Variations in ambient temperature Max. 1.1°C / Min (Max 2°F / Min) Range of relative humidity 75% or less		

Table 3

**TECHNICAL INFORMATION ON GM 20 CORNCOB**

Chemical and physical technical characteristics

Capacity of water absorption (water) by weight	138%
Average specific weight	0,48 g/cm ³
Flow rate (21 days at 38° and 90% rel. hum.)	13 ml/sec
MOHS hardness	4,5
Resistance to friction	98,6%
Flammability	205°C

Table 4



ELECTRICAL DIAGRAM MODEL JET

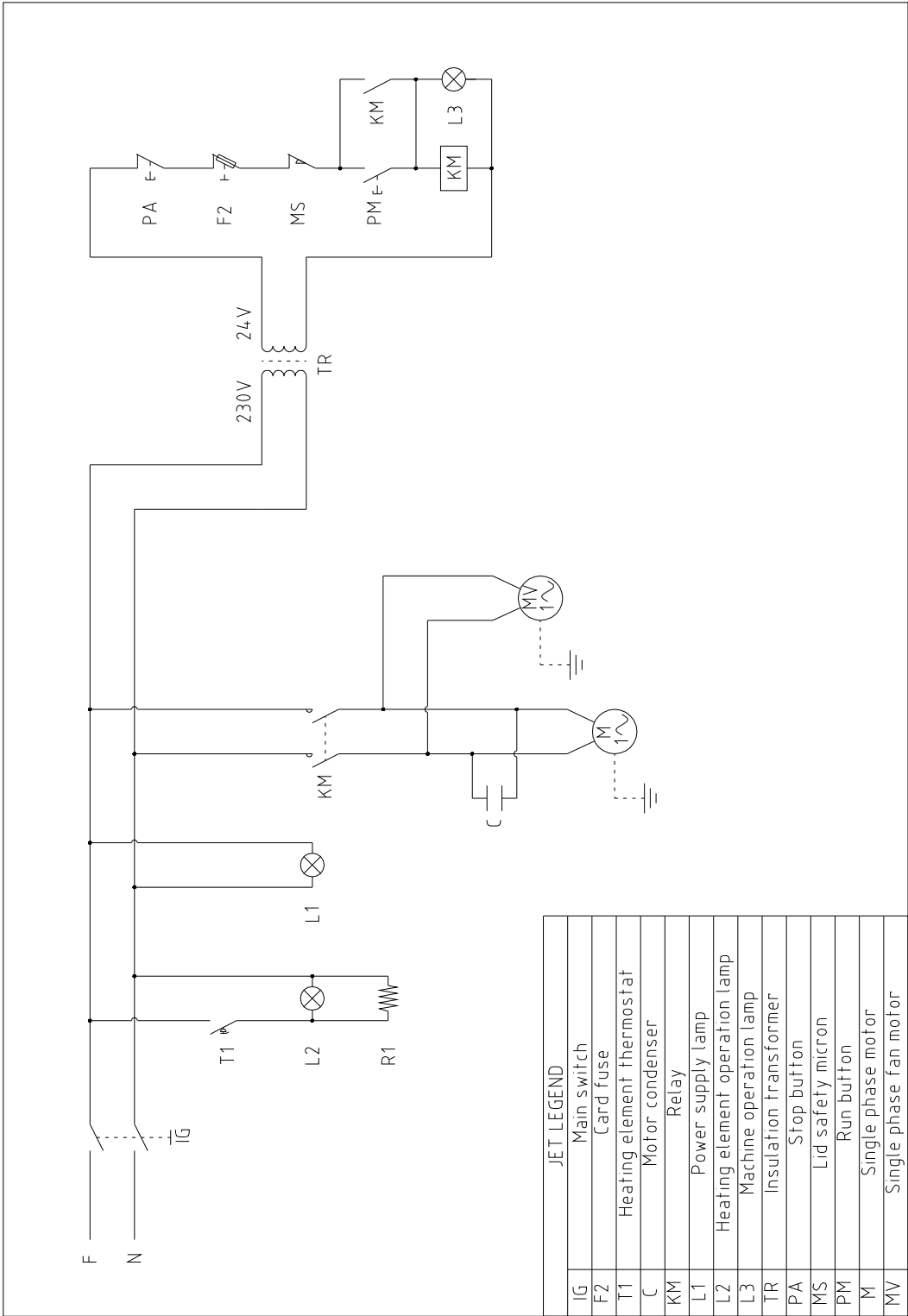


Figure 12



ELECTRICAL DIAGRAM MODEL JET

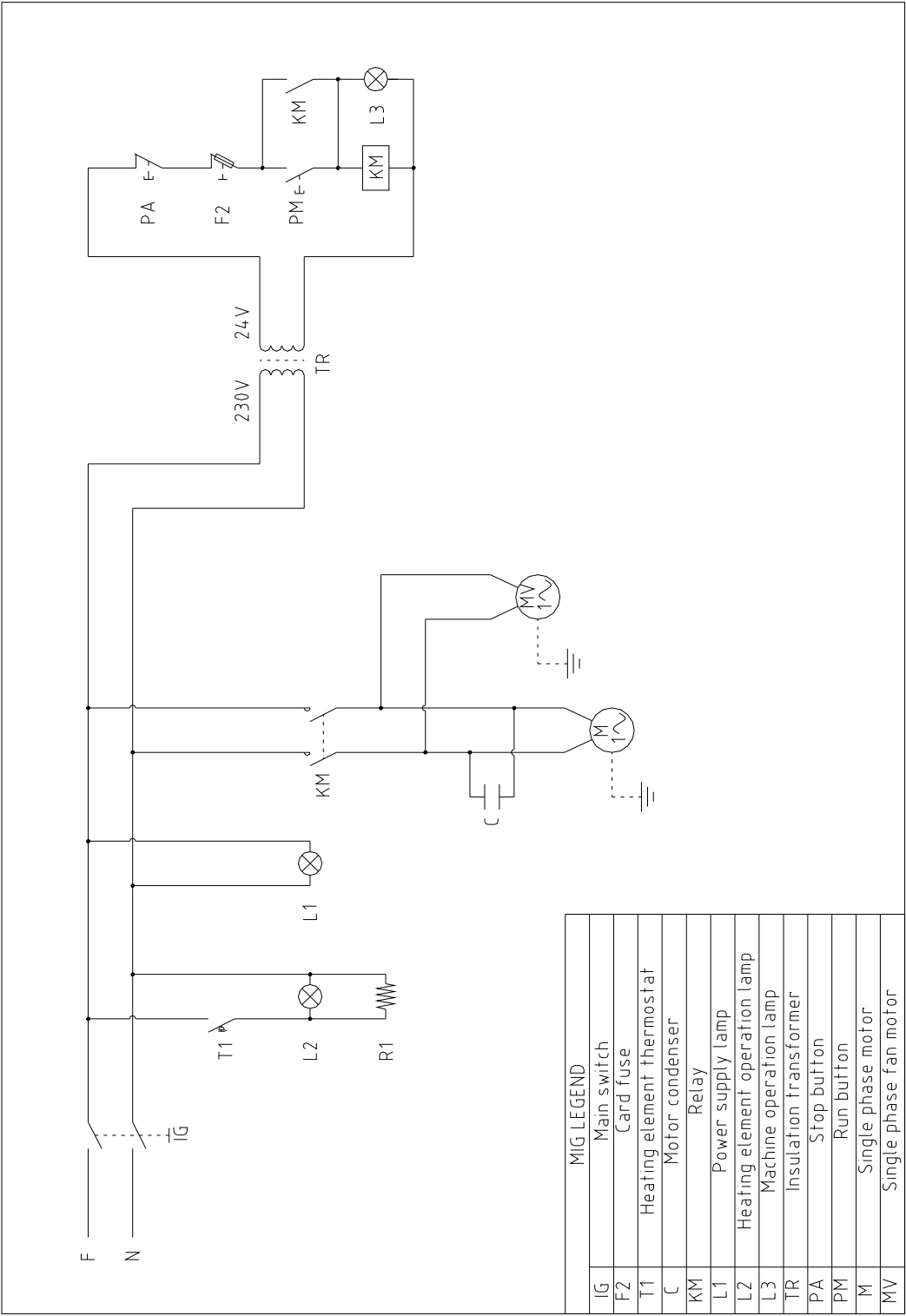


Figure 13



QUICK REFERENCE GUIDE

The machine carries the following quick reference guide label of the main operations that the user must carry out for proper use of the machine.

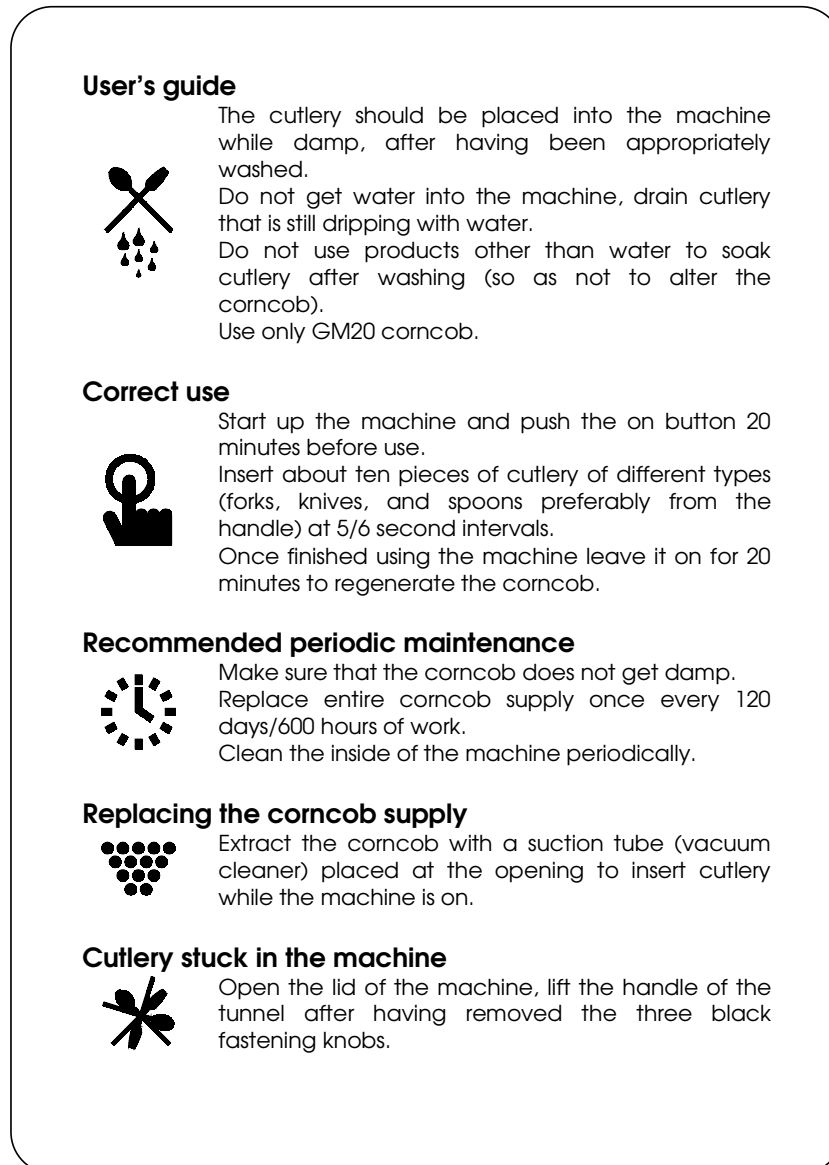


Figure 14



GUARANTEE

During the guarantee period, we will eliminate free of charge any problems with the machine due to manufacturing defects by either repairing the product or replacing parts, or the entire machine if necessary.

This guarantee does not cover:

- damage due to improper use of the product (breakage)
- normal operating wear
- marginal defects that have a negligible effect on the value or operation of the machine.

The guarantee is no longer valid if repairs are undertaken by unauthorized personnel or using spare parts that are not originals from the manufacturer. The guarantee is valid only if the date of purchase is validated by the stamp and signature of the retailer on this guarantee coupon.

The guarantee covers all countries where the product is offered by authorized retailers and where there are no laws or regulations that prohibit providing service covered by the guarantee. If you are not able to locate an authorized service centre, your dealer can provide further information.

Date of purchase:

Dealer's stamp and signature:



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