FILLER

USER AND SERVICE MANUAL

SELMI
CHOCOLATE
MACHINERY

PREFACE

SELMI S.r.l. would like to thank you for purchasing our "FILLER".
This manual is to be considered an integral part of the machine and its purpose is to allow use of the machine throughout its life, from delivery until demolition. Therefore, we suggest that your read it carefully. Everyone working with the machine must read this manual. It is also necessary to keep the manual in a place accessible to operators at all times.

In the event of loss or damage of this manual, please ask SELMI S.r.l. to send you a replacement copy.

The technical information contained in this manual belongs to SELMI S.r.l. and must be considered proprietary.

The total or partial reproduction of the graphic design, text and illustrations is forbidden
With a view to constant technical improvement, the company reserves the right to make any necessary amendments to the content of the manual, to the machine or to parts thereof. Consequently, some of the illustrations may differ slightly from your machine.

This document is an integral part of the "FILLER", as described in section 1.7.4 of annex I of directive 2006/42/EC.

The Italian edition of this manual contains the original instructions. The foreign language editions are to be considered as translations of the original instructions.

Edition June 2016

EC DECLARATION OF CONFORMITY

The manufacturing company SELMI S.r.l., with main office in S. Vittoria D'Alba (CN) Italy – Via Statale, 151, in its capacity as manufacturer, declares, under its own responsibility, that the machine named:

"FILLER"

Serial number:

is compliant with all the provisions contained in the following directives: 2006/42/EC (machine directive), 2004/108/EC (electromagnetic compatibility) 2006/95/CE (low voltage directive) and EC regulation 1935/2004 (contact with foodstuffs).

The norms adhered to that are used as a reference for the design, realization and testing of the machine are listed in the technical files archived at Selmi Srl.

The manufacturer also wishes to inform you that the technical file may, in the cases envisaged by the directive, be put together by the manufacturing company.

Year of construction:

Date:

CE

The liable person

Table des matières

1. General information

1.1. Structure of the manual

To simplify the reading and understanding of the information contained in this manual and to make searches quicker, it has been divided into sections, each dedicated to a specific subject.

1.2. Messages used

Attention

This type of message is used to draw the reader's attention to more delicate or particular procedures which, if not carried out correctly, may pose a risk to the safety of the operator and cause damage to parts of the machine.

Warning

This type of message is used to draw the reader's attention to procedures which, if not carried out correctly or at pre-set intervals, may cause damage to the machine or its parts, as well as to the product being processed.

Environment

Messages relating to the environment draw the operator's attention to the rules to be followed to prevent the risk of environmental damages deriving, directly or indirectly, from use of the machine.

Note

These messages highlight instructions, advice and notes that can be particularly helpful during the various uses of the machine.

1.3. Aim and contents

This manual has been drawn up in consideration of the requirements of directive 2006/42/EC and paying particular attention to describing all the procedures necessary to obtain the best working conditions for the machine and its operators, without neglecting product quality:

The aim of this manual is, therefore, to provide the user with all the information necessary for the correct use and maintenance of the machine. Consequently it is absolutely necessary:

- to meticulously follow the instructions given in the manual during every phase of the machine's life, from transportation to demolition;
- for every machine operator to thoroughly read the contents of this manual;
- for the company's safety officer to make sure that all machine operators have clearly understood how the machine works

Attention

In case of doubts on the correct interpretation of the instructions please contact the manufacturer to obtain the necessary clarifications. All those carrying out any kind of operation on the machine must have thoroughly read and understood the contents of this instruction manual.

Warning

If this manual is damaged or lost, please ask the manufacturer or the authorized distributor in the country where the machine is being used for another copy.

1.4. Preservation of the manual

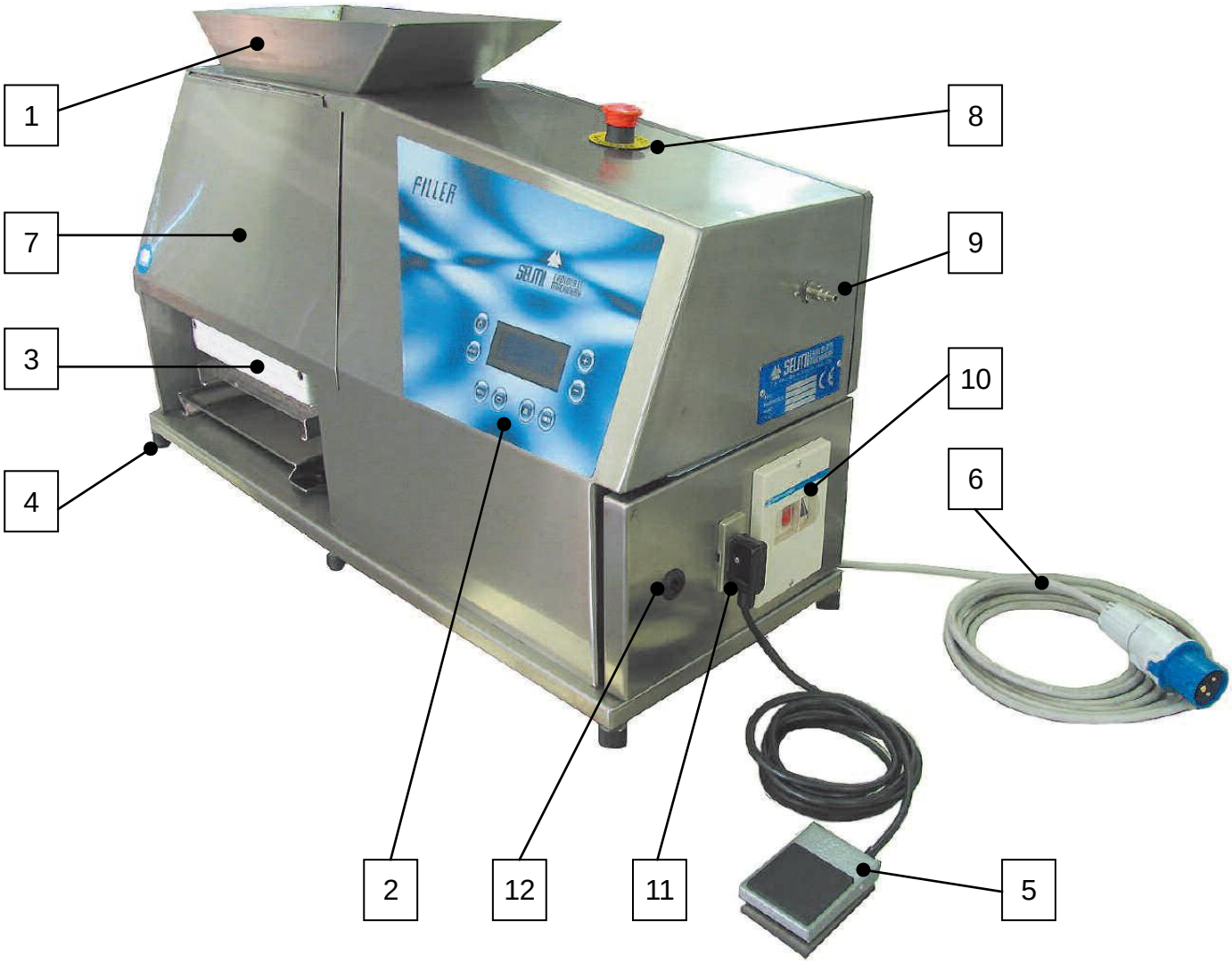
The instruction manual is an integral part of the machine and must be used to train and inform professional figures operating on the machine. Consequently, it is necessary to follow certain simple instructions regarding its preservation, as follows:

- store the manual in areas protected from humidity and heat, so as not to jeopardize the quality or legibility of any part of the publication;
- keep the manual is an easily accessible place known to the machine operators;
- avoid handling the manual with dirty or greasy hands;
- if you think it is necessary to highlight important steps of the manual, use non-permanent systems, to preserve its legibility;

do not remove, rip or rewrite any parts of the manual for any reason.

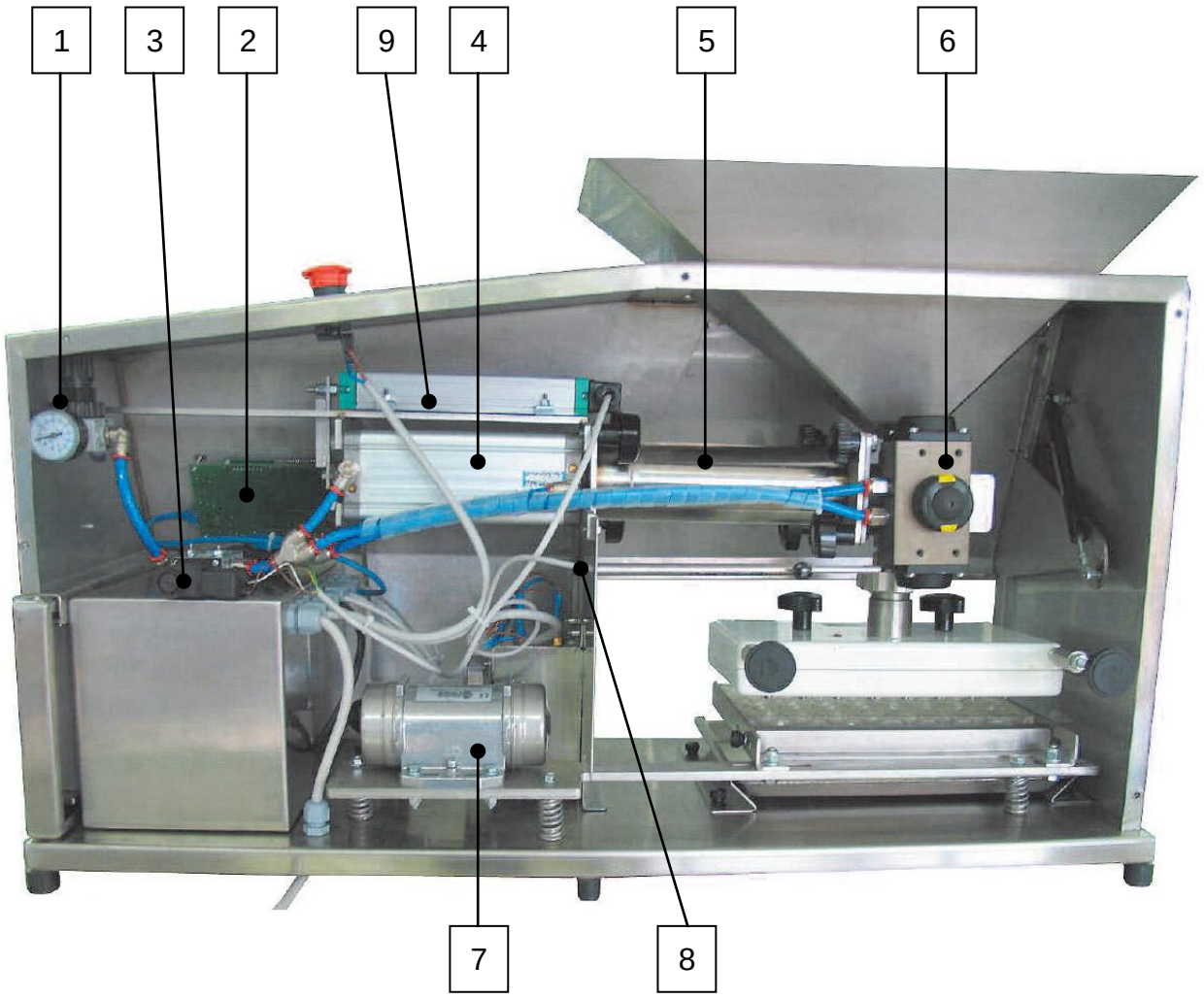
1.5. External components

1 Hopper
2 Control panel
3 Injection plate
4 Feet
5 Operating pedal
6 Three phase electrical plug
7 Front panel
8 Emergency button
9 Compressed air inlet
10 General safety switch
11 Pedal plug
12 Electric panel lock



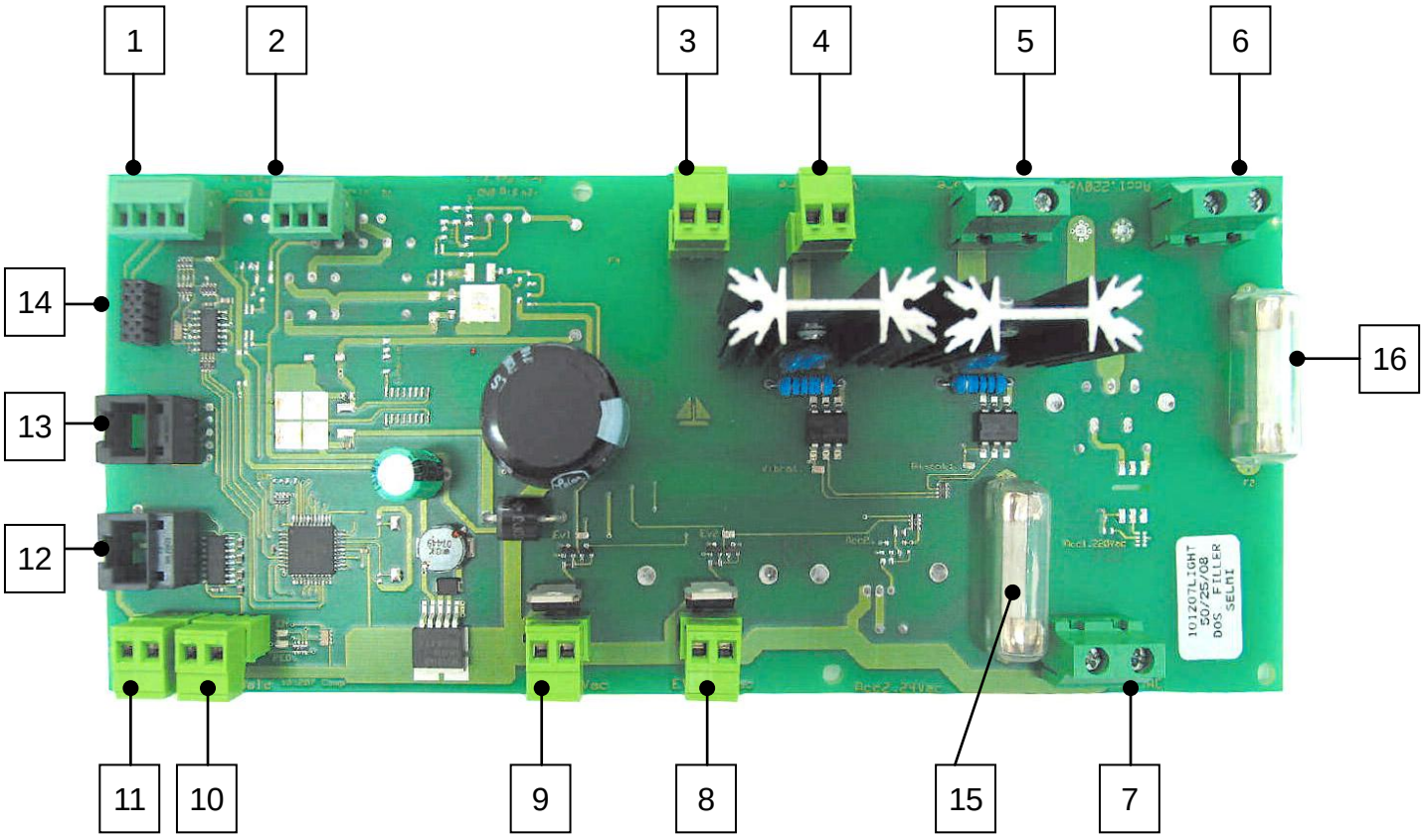
1.6. Internal Components

1. Compressed air manometer
2. Microprocessor board
3. Electrovalve
4. Piston
5. Sleeve
6. Pneumatic actuator
7. Vibrating table motor
8. PT 100 probe
9. Linear potentiometer



Power board

1. Probe
2. Piston depth gauge
3. Transformer
4. Vibrations
5. Heating
6. 220V supply
7. 24 Vac supply
8. return electrovalve
9. outflow electrovalve
10. Pedal
11. Emergency
12. Ethernet cable
13. Connection for programming
14. Probe temperature calibration
15. 24V fuse
16. 220V fuse



1.7. Details of the manufacturer

The machine described in this instruction manual was built by:

SELMI S.r.l.
Via Statale, 151 – 12069 – S. Vittoria D'Alba (CN) Italia
Tel. 0172.479273 - 0172.479275 - Fax 0172.477814
www.selmi-group.it - info@selmi-group.it

1.8. Identification plate of the machine (CE marketing)

There is a plate, similar to the one shown here, on the machine, indicating details of the manufacturer, the CE conformity mark and the machine's serial number. Always state this number when communicating with the manufacturer.

Example of identification plate on the machine structure

TYPE
SERIAL NUMBER
YEAR
WEIGHT

1.9. Identification plate of the CE marking electric panel (low voltage)

Example of identification plate on electrical panel. For the correct data, see the data shown in the section on the machine's technical specifications.

1.10. Inteded use

Thanks to the microprocessor control and adjustment of the dosage this machine is able to facilitate and quicken the injection of the fillings inside the pralines. The piston pump body is built with a completely cleanable material. The working environment at the point of injection is heated and thermoregulated. If the Filler is used with low density fillings it can reach high levels of productivity.
The mould is placed on a vibrating table to optimise the injection of the fillings so eliminating air bubbles which could compromise the shelf life of the product. The filling production of this machine can reach 300 moulds/hour.

Warning

A use other than that specified is considered improper. The machine is intended for professional use only.

Attention

Do not place any small objects near the control panel or the tank: they could fall and enter the tank, which would contaminate the product.

1.11. Operating environment

To guarantee proper functioning the machine must be protected from atmospheric agents. Its ambient operational temperature should be between 15C° and 35C° with relative humidity not exceeding 70%.
The working environment must be clean, sufficiently illuminated and away from an explosive environment.
The environmental characteristics of the installation site are specified in section 4.

Attention

The machine's fixed guards have a variety of openings to allow the internal units to cool. When the machine is running, make sure that these openings are not covered by cloths or objects that obstruct proper air flow.

1.12. Noise level

The phonometric tests carried out on this specific machine model show an acoustic pressure lower than **70 dB(A).**

1.13. Technical characteristics

Motor: Monophase 230 V

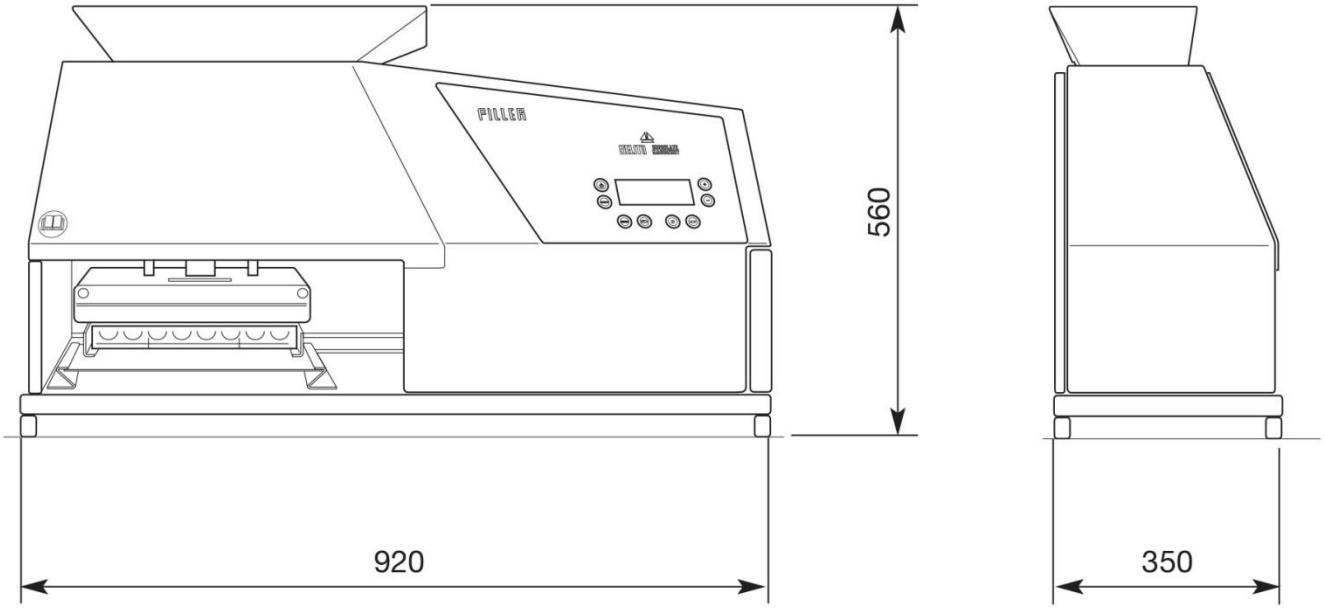
Power consumption: 1,4 kW

Tank steel: AISI 304 L

Weight: 62 Kg

Air compressed required: 80 lt/min, filtered, disoiled, dry.

1.14. Dimensions



1.15. Storage

Remove the remaining product left in the machine following the instructions in the appropriate section. Stop the machine using the main switch and disconnect it from the electricity main. Move it to a spacious place (it is necessary to work all around the machine).
Clean the tank, the removable components (i.e. screw pump, mixer, nozzle) and the pipes as described in the appropriate section.

Attention

It is absolutely necessary to follow the instructions in order to insure the safety of the operators and to avoid damaging the machine's removable parts.

Use a brush to cover the movable components and the mechanical moving parts with a thin layer of food grade lubricant. This can later be removed with an alkaline de-greaser (Sodium Hydroxide) if the machine needs to be re-installed.
Carry out the same operation on the machine surfaces, taking care of avoiding the heating elements located in the inner part of the machine.
Gather the parts (use as reference the delivery packing list) and put them in the original packaging. Place packets of hygroscopic salt based on silica gel in the packaging.
Store all the parts in a sheltered place away from atmospheric agents and in temperatures from 0° C to 40° C. Cover the parts with nylon in order to prevent the accumulation of dust.

1.16. Disposal

Disposal will occur at the end of the working life of the machine, which under normal conditions of use and maintenance will be over ten years.
In the case of disposal all the components of the machine will have to be disposed of in adequate waste yards according to the legislation in force.
Before disposal it will be necessary to separate the plastic or rubber parts and the electrical and electronic material.

Environment

Parts made solely of plastic, aluminium and steel can be recycled in the appropriate collection centres.
According to the RoHS regulations electronic boards and electric material should be recycled separately in authorized collection centres.

1.17. Warranty

The manufacturer offers a warranty on this machine model for a period of 24 months from the purchase date, as shown on the fiscal document issued at the time the machine is delivered.
The warranty will be void if the machine is repaired by a third non authorized party or if fixtures and accessories not supplied by or recommended or approved by the manufacturer are used.
The warranty will also be void upon removal or alteration of the plate showing the serial number and other data.

Within the warranty period the manufacturer will repair or replace, free of charge, parts that are faulty due to manufacturing.
In case the repair has to take place at the manufacturer's site, the machine will have to be sent to the manufacturer in its original packaging.
Transportation expenses will be covered by the manufacturer during the warranty period.
The warranty does not cover the cleaning of the functioning parts.
Defects not clearly attributed to the material or the manufacturing will be examined. If the claim should turn out to be unjustified all repair expenses, changed parts and transportation will be charged to the buyer.
The warranty does not cover damage caused by the following:

- accidental damage during transportation
- damage due to lack of care or procedures carried out incorrectly
- damage due to improper use not conforming to the warnings of the user and service manual
- components subject to wear and tear; a detailed list is available in the components section.

Structural damage, modifications, improper alterations or repairs can affect the functioning of the safety mechanisms, thus making the declaration of conformity and warranty void. Alterations on the machine can be carried out solely by technicians authorized by the manufacturer.

1.18. Professional personnel qualified to operate the machine

The machine must only be used by authorized and purposely trained personnel; the same precautions i s also applicable to personnel who carry out maintenance.
Personnel who do routine and extraordinary maintenance must be specially trained professionals; good knowledge of the machine is needed for extraordinary maintenance.

Attention

Do not permit others to approach the machine during its use or maintenance.

The following professional people, after having received all the necessary instructions, are the only ones allowed access to the machine:

Safety officer
The safety officer is responsible for protection and prevention of risks in the workplace , as is mentioned in European Directive 89/391/EEC (Safety in the workplace), introduced in Italy with the 12/11/1994 Legislative Decree.
It is the responsibility of the safety officer to make sure that all personnel who use/maintain the machine have received all the instructions regarding their relative roles contained in this manual.

Operator (user of the machine)
Operator trained and qualified for the use of the machine (working cycle, potential adjustments, etc.).
He/she can only carry out the specific tasks described in this manual reserved for this role.

Mechanical maintenance technician
The technician is qualified to use the machine as the OPERATOR and furthermore to use it with the protection disabled, to attend to the mechanical parts for adjustments, maintenance and reparations.
He/she is not qualified to act on live electrical installations.
The mechanical maintenance technician must have a generic knowledge of the machine and a specific knowledge on this machine model.

Electrical maintenance technician
The technician is qualified to use the machine as the OPERATOR and furthermore to use it with the protection disabled, to attend to the adjustments and electrical installations for the purposes of maintenance and repair.
If qualified, he/she may work when the electrical panels, control devices, are live, provided he/she uses appropriate personal protective devices.
The electrical maintenance technician must have a generic understanding of the electrical panels and specific knowledge on the electrical panel and components of this machine.

Manufacturer
The manufacturer's personnel are qualified to perform all of the above-described operations.
Any operations not described in this manual may be performed ONLY by personnel authorized by the manufacturer.

2. Safety section

2.1. Safety information

Attention

The safety officer has the obligation to inform the workers on the risks related to the use of the machine.
Furthermore the employer must inform, educate and train the user according to statutory laws.

The lack of compliance with the basic norms or precautions could result in accidents during the functioning, maintenance or reparations of the machine. Accidents can often be avoided by acknowledging potential hazardous situations before they materialise. The operator must pay attention to the potential dangers and have the training, the competence and the necessary equipment to deal with these tasks correctly.
The manufacturer cannot be held responsible for accidents or damages resulting from the use of the machine by personnel not adequately trained of having used the machine improperly, as well as the lack of, even partial, compliance to the safety norms and interventions procedures contained in this manual.
The safety precautions and the warnings messages, the operator could be subject to accidents with serious consequences for himself and for other people.
In cases where tools, procedures, work methods or working techniques not explicitly suggested by the manufacturer are used, it will be necessary to make sure that no dangers are present for the individual carrying them out and to other alike.

Use exclusively original SELMI spare parts. The manufacturer will take no responsibility for accidents or damages in the case o fuse of non-original spare parts.

If a tool not supplied by the manufacturer is installed on the machine, the client needs to make sure that the norms stated in Directive 2006/42/EC are adhered to. If this new tool introduces new risks to the system then the new system must be re-certified. In any case the manufacturer cannot be held responsible for accidents or damages caused by the machine if it has been modified or equipped with non original accessories.

2.2. Safety limitations

Attention

The indications mentioned hereafter cannot completely safeguard from all dangers that one might encounter while using the machine; they must be used in conjunction with common sense and the experience of the operator, the only indispensable measures for the prevention of injury.

Every section has a list of specific safety measures for different operations. The safety measures mentioned here below are generic and should be followed for all procedures on the machine.
The responsibilities assigned to specific people concerning the use of the machine must be clearly defined as stated in the “Qualified Personnel” section.

Attention

The use of the machine is forbidden to personnel who have not been authorized or trained by the safety officer.
Consult the manufacturer before carrying out procedures that are not mentioned in this manual.

Prolonged overloads or anomalies can cause the electric motors and electrical appliances to overheat with resultant harmful fumes. In such cases immediately disconnect the machine from the mains and do not approach the machine until such fumes have been dispersed via adequate ventilation. In case of fires do not use water jets on the machine – use CO2 extinguishers instead.
The operator, any helping technician and the maintenance technician must use the appropriate personal protection equipment when working on the machine.
It is forbidden to climb on the machine.
Do not touch the electrical wires, switches, buttons etc. with wet hands.
The parts subject to wear and tear during the functioning of the machine must be checked and replaced as soon as they present noticeable signs of wear and tear.
The manufacturer has designed and built the machine to last for a reasonable time with the Client’s normal conditions o fuse in mind; it is however necessary to periodically check the components and the structure of the machine, paying attention to any anomalous conditions, such as, for example, cracks or deformations. If necessary, contact the manufacturer to ask for a complete check of the machine.
Please consult Section 4 (Installation) for the working environmental conditions of the machine.

2.3. Safety symbols and plaques

The machine has a number of plaques with symbols and/or safety messages stuck to it.

Attention

Make sure that all the safety messages are legible and in good condition.

Replace the damaged plaques with the new ones from the manufacturer. If a plaque happens to be on a part that is being replaced, make sure that a plaque is present on the new piece. For the cleaning of the plaques consult the appropriate section (6.3).

ATTENTION

THE PERFORMANCE OF WORK ON ELECTRICAL EQUIPMENT CONNECTED TO THE POWER SUPPLY IS STRICTLY FORBIDDEN

- *ANY EXCEPTIONS MUST BE AUTHORIZED BY THE EXECUTIVE MANAGER*

- *IN PARTICULARLY DANGEROUS SITUATIONS, ANOTHER PERSON MUST BE PRESENT IN ADDITION TO THE PERSON PERFORMING THE WORK*

WORK MAY ONLY BEGIN WHEN THE SAFETY MEASURES HAVE BEEN IMPLEMENTED

IN OBSERVANCE OF PRESIDENTIAL DECREE 543 ON THE PREVENTION OF ACCIDENTS

(positioned on the door of the electrical panel)

Label indicating compulsory reading of the manual (positioned on the front of the machine)

2.4. Safety and protection devices

Attention

The components shown here are particularly important for safety. In cases of malfunction or wear and tear they must be replaced with spare parts supplied or authorized by the manufacturer.
While the machine is in use all the protection features must be correctly installed.

The safety devices present on the machine are:
Emergency push button with mechanical unblock mechanism.

Restart button

The relay provides power to the machine and it is deactivated when the emergency button is pressed or when there is a mains power failure.

To activate it press the black reset button located on its side.

- ***Safety micro switch***

The safety micro switch located inside the electric panel will cut the power supply when the panel is opened for maintenance procedures.

Attention

Periodically check that the safety microswitch is working properly.

If faulty, please proceed immediately with its replacement.

- *Fuses*

The fuses are located within the electric panel for the protection of the electrical circuits of the machine. A possible voltage spike could blow the fuses. When a fuse blows one should act as follows:

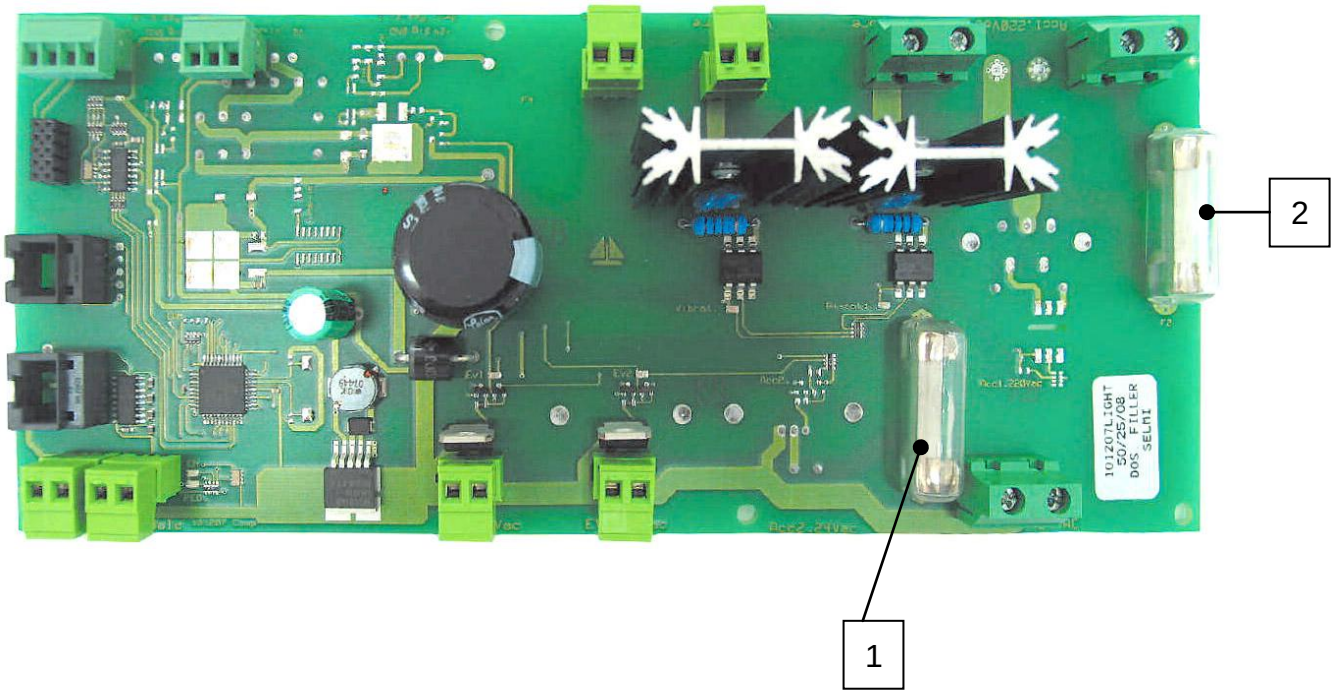
- switch off the machine and disconnect it from the mains;

- open the electric panel and with the help of a tester

locate the blown fuse. Replace it with a new one of the same ampere rating**.**

Attention

If fuses keep blowing it may be an indication of a fault of the electrical apparatus, in this case contact Technical Support.



Protective plates

The machine is equipped with removable protective plates (A) that can be removed with a tool to allow access to the inside of the machine in order to carry out maintenance operations.

The fixed protective plates are screwed into position and can be removed with the appropriate tool; if the screws are removed the fixed protective plates will not remain in place and must be placed on the floor.
All the protective plates have smoothed and rounded edges for the safety of the exposed individual and of the operators.

Attention

Do not switch the machine on if the protective panels are removed or not correctly fixed into position with the appropriate screws. Do not forget to remove cloths, keys or utensils used for the maintenance operation from within the machine. Before closing the protective panels and switching on the machine check carefully and if necessary remove any extraneous objects which may be present inside the machine.

2.5. Client's safety measures

The client must arrange for the following safety measures to be in places:

Provision of an adequate location for installation, paying particular attention to the characteristics below:

- Adequate flooring
- Normal and emergency lighting
- Adequate ventilation
- Clearly signposted emergency exits
- Provision of mains voltage connection with associated safety devices, conforming with the norms in force and the characteristics of the machine
- Adequate means for the collection and subsequent disposal of residues, even hazardous or special ones (oils and grease, broken or waste material, etc.).
- Adequate fire safety systems and equipment
- Prohibition of entry into the installation area to non authorized personnel

The customer must also provide for:

- Training of the operators and the maintenance technicians
- Training for the operators on the basic functioning of the machine and emergency devices
- Provision of personal safety equipment to protect the operator and the hygiene of the product
- Checking the qualifications of external maintenance technicians potentially called to work on the machine
- Keeping of a maintenance log book

The employer is also responsible for checking that the operators correctly carry out the procedures explained in this manual.

2.6. Personal protection equipment

The operators who carry out functions on the machine must receive appropriate instructions on the use of personal protection equipment such as shoes, gloves, etc… which will protect them from residual risks derived from the execution of various activities. The operators must furthermore be equipped with protection equipment for hygiene purposes (caps or hair nets, gown, etc…).
If the noise level in the working environment surpasses 85dB(A) appropriate ear protection must be used.

Warning

The clothing of whoever operates or carries out maintenance on the machine must conform to the essential safety requirements defined by European directive and the laws in force in the country in which the machine is installed.

Attention

During maintenance operations individuals must wear adequate clothing to prevent the occurrence of accidents.

In order to avoid mechanical risks such as snagging or dragging, it is prohibited to wear particular objects such as bracelets, watches, rings or necklaces during the working cycle and during maintenance operations.

2.7. Residual risks

The accurate risk analysis carried out by the manufacturer and archived in the technical file has eliminated most of the residual risks, which are nevertheless present during the use of the machine, to acceptable levels.
The manufacturer's recommendation is to meticulously adhere to the instructions, procedures and recommendations contained in this manual.

Attention

It is strictly prohibited to carry out any type of mechanical or electrical modification so as not to create added dangers and unforeseen risks.

Attention

During cleaning and maintenance operations and during the work cycle, do not allow the product inside the tank to come into contact with water or other fluids.

Attention

If the machine remains unused for long periods of time please take note of the expiry date of the product remaining inside the machine. Upon restarting the processing only insert new chocolate if the product already in the machine has not expired. If the old product has expired, proceed to empty and clean the machine before inserting the new product.

Attention

Keep the machine with the residual chocolate inside the tank in an adequate environment with temperatures ranging from 10 °C to 25 °C.

The residual risks present on the machine are:

Risks during machine transportation
It is recommended to fasten the machine, or its parts, at the dedicated locations and lift it with appropriate means to the minimum permitted height, proceed at low speeds and make sure that the people helping with the moving are at a safe distance from the moving object. Before moving the machine make sure that the passage is clear and that there are no objects placed on the machine. It is important that the means of support and transportation is controlled by a person qualified for such a role, so as to avoid unforeseen movements which may be dangerous to the people in the vicinity who are helping with the moving.

Risks of faults to the circuits of signalling, safety, protection and emergency stop
In the case of a circuit fault, the safety and signaling circuits, the anti-injury protections and the emergency stop can lose their effectiveness, therefore it is asked that their functionality is periodically checked.

Identified residual risks and information plaques
The manufacturer has placed on the machine danger and/or warning plaques, based on the residual risks, with pictograms in compliance with the norm pertaining to the display of graphic symbols on the machine.
The user should immediately replace these plaques if they are not clearly legible.

Attention

It is expressly forbidden to remove the safety and/or warning plaques placed on the machine. The manufacturer will not take any responsibility on the safety of the machines if this is not observed.

Risk to life (electrolocution)
Before commencing work on any electrical appliance it is necessary to disconnect the machine from the mains. If it were to become necessary to work within the electric panel by bypassing the electricity cut off devices, then the work must be carried out exclusively by specialized personnel.

Risk of spreading fire
In case of fire never use jets of water in the vicinity of the apparatus. Disconnect all connections to the mains and use the appropriate CO2 extinguishers located in the building.

2.8. Applied Directives

The following directives apply to the machine described in this manual:

- 2006/42/EC machinery Directive
- 2004/10/EC Directive for electromagnetic compatibility
- 2006/95/EC low voltage Directive

- And the regulation:
- 1935/2004 EC regulation for materials in contact with foodstuffs

2.9. Harmonized technical norms

The machine was designed and tested to conform to the "essential requirements to health and safety" present in attachment I of European Directive 2006/42/EC.
The norms used as reference for the design, the realization and the testing of the machine are listed in the technical file archived by the manufacturer.

3. Moving and transportation section

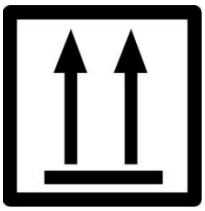
3.1. General norms

Before moving the machine always check the weight and general instructions shown on the packaging.
Personnel not responsible for the movement of the machine must not remain in the area needed for movement.

3.2. Packaging

The machine is delivered on a platform, secured by means of straps and placed inside a cardboard packaging which is also secured to the platform by means of straps. An example of the machine packaging is shown in the picture below.

Instructions for transportation are on the sides of the packaging



The first symbol shows the correct upright position of the packaging;

the second symbol shows that the packaging must be protected from the rain;

the third symbol shows that the content of the packaging is fragile and must be handled with care.
On two sides of the packaging there is a device called “TILTWATCH”, which can determine if the packaging has been tilted to such an extent that the content may have been damaged; it is necessary to pay attention to the instructions given on the adhesive label. If the machine has been excessively tilted during transportation (the dot at the centre of the TILTWATCH device will be red) some components could have been damaged.

Attention

The manufacturer’s warranty does not cover damage during transportation; the buyer should follow the instructions on the adhesive label in order to avoid disputes.

3.3. Transportation

To transport the machine it is necessary to use a suitable vehicle equipped with a platform to lift the load; the platform must be adequate for the weight of the machine, which is stated in the technical characteristics section (section 1.13).
When the machine, still in its packaging, is in the body of the lorry, it can be carried to the lifting platform only by means of a manual transportation trolley for euro pallets.
The lifting platform has to be equipped with side rails in order to prevent the machine from falling when it is still high off the ground.
The machine can be lowered to the ground from the platform only after having lowered the manual trolley.
The machine should be lowered slowly from the platform, avoiding shaking and sudden stops which could cause a loss of stability.
After having completed the unloading procedures, the machine should be moved exclusively by means of a manual transportation trolley adequate for euro pallets; the platform should only be lifted to the height needed to move the machine.
Before moving the machine verify that the passage to the final destination is clear.

Attention

Do not go on very steep ramps which could cause the loss of control of the trolley.

3.4. Removal of the packaging

Cut the straps that anchor the cardboard to the platform; remove the cardboard and put it out of the way.
Cut the straps that hold the machine to the platform, remove the machine's plastic cover and unravel the accessories provided.
Carefully lift the front of the machine and remove the wooden slat blocking the front wheels; subsequently remove also the wooden slat blocking the rear wheels by lifting the back of the machine.
Very carefully lower the machine from the platform.

Note

Keep the original packaging; it may be necessary to use it if the machine needs to be sent to the manufacturer for extraordinary maintenance or repairs.

4. Installation section

4.1. Positioning

Warning

Before positioning the machine check that the machine, the associated accessories and the parts supplied separately have not been damaged during transportation.

It is the task of the Client to make sure that the strength of the supporting surface, at the point of installation, is adequate for the weight of the machine.
The flooring at the point of installation must be sufficiently level.
Isolate the machine from any potential vibrations coming from other nearby machinery.

In the case where the machine or any of the associated accessories are found damaged it is important to alert the manufacturer of the found anomaly so as to agree on the actions to be taken.

Attention

The machine must be placed on a level surface; for the other environmental requirements necessary for optimal functioning of the machine please see sections 1.11 and 2.5..

4.2. Electrical connections

Attention

The connection to the mains must be carried out by specialized staff who must respect the aspects of the law dedicated to safety and prevention of injury in the workplace. Use the necessary personal protection equipment while connecting the machine to the mains

The connection to mains electricity must be carried out following the safety norms in force in the country in which the machine is to be used.

Before connecting the machine to a voltage supply make sure that the voltage supply values match values shown on the apposite plaque.

CE

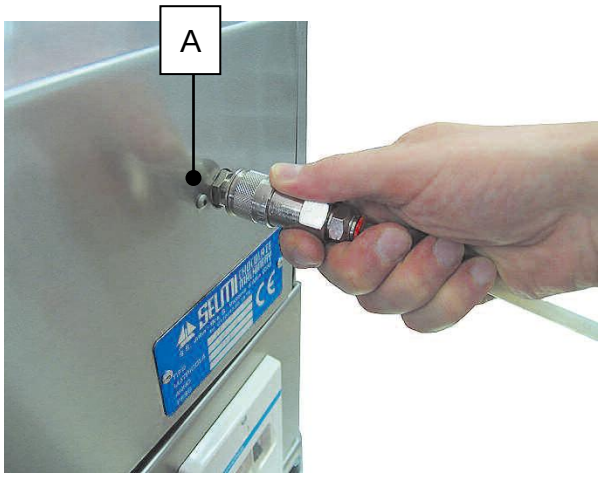
SCHEMA ELETTRICO	N°
POTENZA INSTALLATA	kW
TENSIONE	V
FASI	N°
FREQUENZA	Hz
CORRENTE PIENO CARICO	A
CORRENTE CARICO MAGGIORE	A
POTERE INTERRUZIONE	kA
PROTEZIONE	IP

4.3. Installation procedure

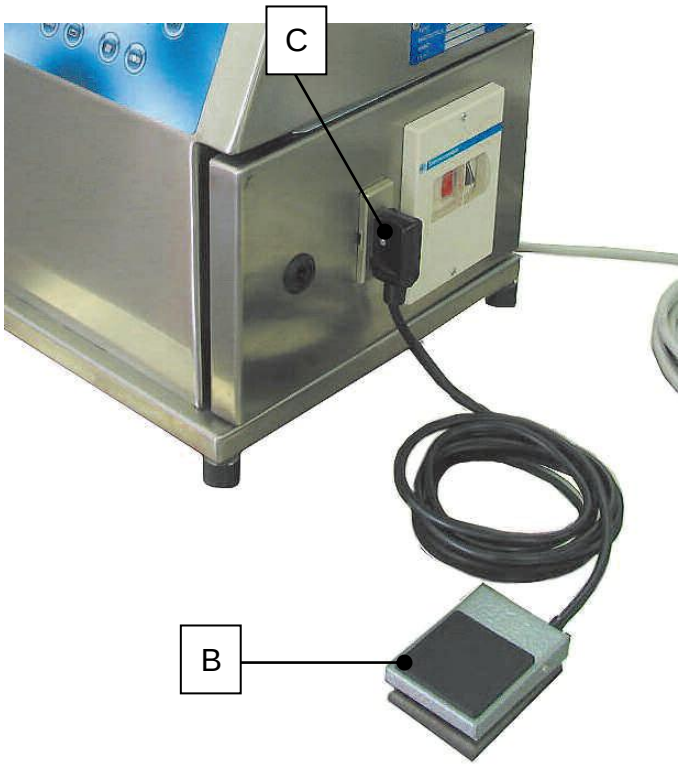
Attention

This procedure must be carried out with the machine switched off and unplugged.

Connect the compressed air hose to point (**A**) on the machine.



Connect the plug (**C**) of the operating pedal (**B**).



4.4. Commissioning

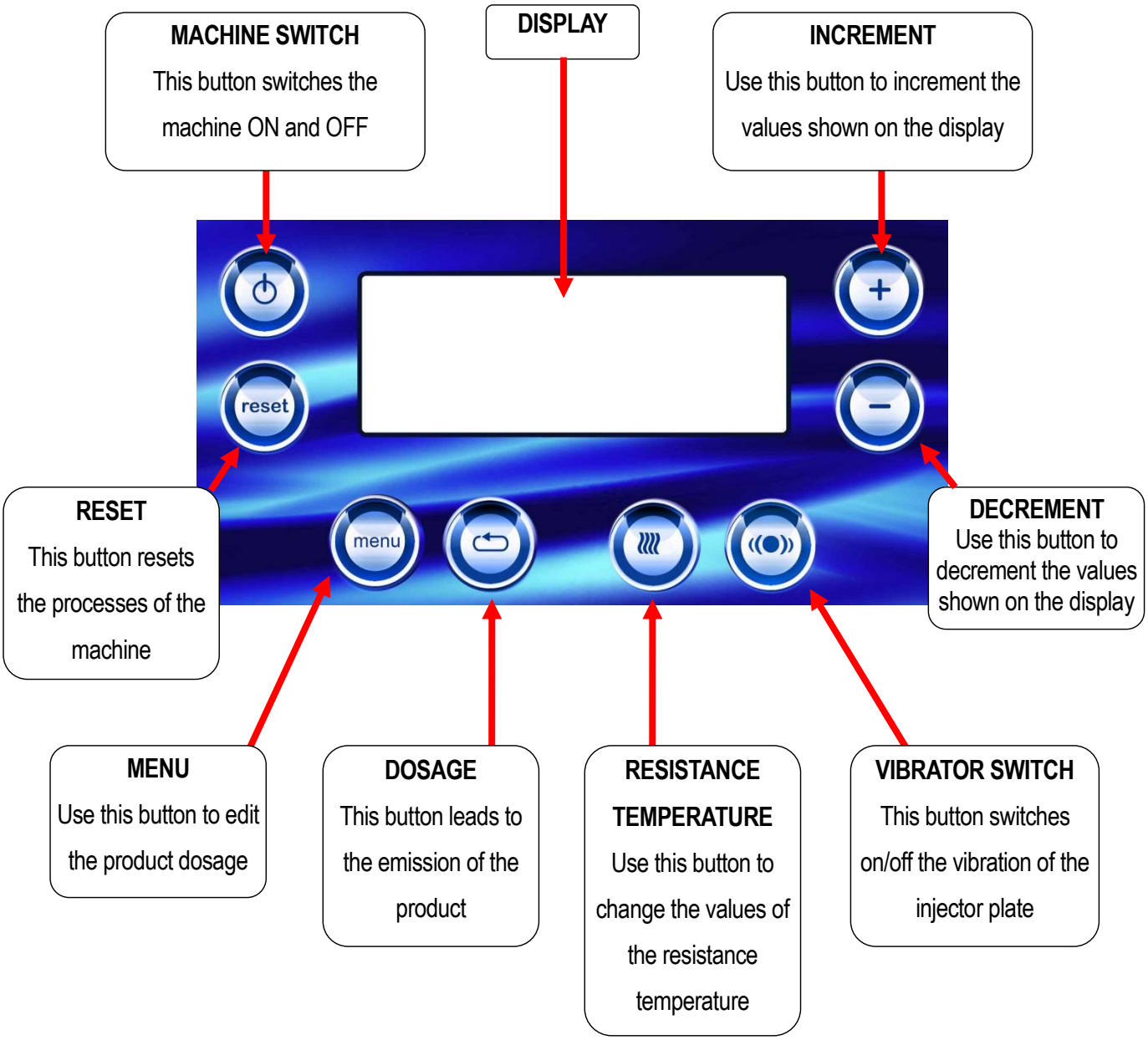
Make sure that there are no particular mechanical anomalies, foreign parts in the working field of the machine and protective plates positioned improperly. Check the safety systems: anti-injury protections, emergency devices, control devices.

Make sure that the working area is free from potential extraneous objects to the processing and free of oil stains.

Make sure the main control panel and indicator lights are working properly and that the machine correctly responds to the commands given.

5. Operation section

5.1. Description of symbols



5.2. Using the machine

Attention

The use of the machine is forbidden to non authorized personnel who have not been trained in its use.
Operators who carry out permitted activities on the machine must receive adequate instructions with regards to personal protection equipment which eliminates the risks from the execution of the various activities.

Press the main black switch to switch on the machine.

Press button **“ON/OFF”** The following text will appear on the display. To set the amount of product to be injected into the mould the user can make use of the ten preset parameters by using the **“INCREMENT”** and **“DECREMENT”** buttons.

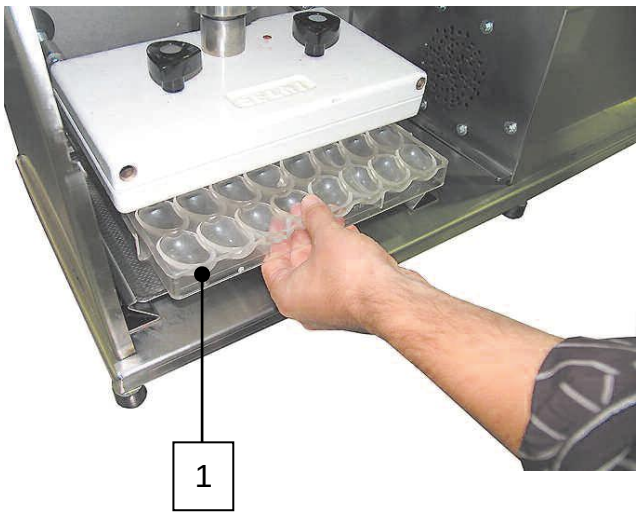
If none of the preset values are adequate for the type of work at hand, press the **“MENU”** button followed by the **“INCREMENT”** and **“DECREMENT”** buttons to set the required dosage value.

To change the temperature of the resistance press the **“RESISTANCE TEMPERATURE”** button followed by the **“INCREMENT”** and **“DECREMENT”** buttons to set the required temperature.

Note

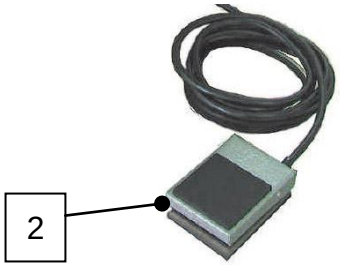
It is recommended that the resistance temperature is set to about 30 0C.

Insert the mould (1) as shown in the figure.



Press the **"VIBRATOR ON/OFF"** button to activate the vibrating plate.

Press the **"DOSAGE"** button or the operating pedal (2) to inject the product into the mould.



Having injected the product, replace the mould and press once more the **"DOSAGE"** (D) button or the operating pedal (2).

5.3. End of the working cycle

Once the working cycle is finished the following will need to be carried out:

Press the "VIBRATOR ON/OFF" (F) button to switch off the vibrator.

Press the "ON/OFF" (A) switch to switch off the machine.

5.4. Position of the user

During the working cycle a sole operator is needed located in front of the control panel with easy access to the emergency button.

5.5. Unintentional power cuts

If the voltage supply were to fail during the working cycle, a thermostat will prevent the machine from functioning for about 10/15 minutes (following the resetting procedure) to allow the machine to return to its working temperature.

6. Maintenance section

6.1. General information

Attention

The product present in the tank or internally to the machine must NEVER come into contact with water or other liquids: this may lead to the formation of moulds and bacterial loads.

Attention

If a bacterial presence is found on the product derived from the processing carried out with this machine model it will be necessary to stop production immediately and contact the manufacturer for the disinfection procedures.

Before carrying out maintenance or cleaning procedures on the machine, cover the tank with the supplied lid.
Never clean or lubricate components in motion.

Warning

Extraordinary maintenance on the machine is exclusively carried out by the technicians approved by the manufacturer. The training course carried out only gives the client the base instructions for ordinary maintenance. The manufacturer suggests carrying out a full service every two years to guarantee the safety conditions.

Note

The maintenance technician must note on an appropriate logbook all the interventions carried out on the machine. This section describes the ordinary checking and maintenance procedures needed to guarantee the correct functioning of the machine.

Any other intervention that may be necessary to eliminate anomalies or faults must be expressly authorized by the manufacturer.
For major repairs it is recommended to turn to the manufacturer whose specialized personnel, possessing the technical expertise acquired from the original manufacturing in the factory, are always reachable and able to intervene quickly.

For maintenance or replacement of commercial components installed on the machine keep to the instructions provided directly by the manufacturers.
Such instructions are normally attached to the components or obtainable via catalogues or manuals provided by the manufacturers.

Environment

The components replaced during maintenance operations must be disposed of according to the laws in force concerning waste materials. If necessary, they can be sent to the manufacturer, who will dispose of them in the most appropriate manner.

6.2. General safety practice

Attention

Before starting a maintenance procedure disconnect the machine from the mains and put in place all the necessary safety measures.

Attention

During maintenance procedures place on the machine, preferably on the control panel but in any case in a clearly visible location, a sign with the text: "MACHINE UNDER MAINTENANCE, DO NOT SWITCH ON".

Maintenance work must be carried out by specialized technicians who are trained in specific sectors, which for this machine are:

- mechanical maintenance technicians;
- electrical maintenance technicians.

It is the duty of the Safety Officer to ascertain the professionalism and competence of the maintenance technicians.

Before starting a maintenance procedure the safety officer must:

1) Clear the working area of extraneous materials and people.

2) Make sure that the necessary tools are conveniently available to the maintenance technician and that they are in good condition.

3) Make sure that the lighting is sufficient and provide, if necessary, portable low voltage lights.

4) Make sure that the maintenance technician is equipped with the necessary approved personal protection equipment for the specific operation (gloves, safety glasses, shoes, etc.).

5) Make sure that the maintenance technician has carefully read the instructions contained in this manual and has excellent knowledge of how the machine works.

At the end of every maintenance intervention the following procedures need to be carried out before restarting the machine:

6) Carefully clean the floor in the work area, removing any residues that may cause slippage

7) Lock the protective panels back into place, check the functionality of the interlocking parts and of the safety devices. Make sure to re-activate them if they were previously deactivated

8) Make sure that no extraneous components have been left in the machine, especially mechanical parts, utensils or components used for maintenance that could cause damage to the machine or put personnel at risk.

9) Before switching the machine back on make sure that all personnel are at a safety distance.

10) Before restarting the processing, the maintenance technician must check the entire working cycle, the functionality of the safety mechanisms and the integrity of the fixed protective panels.

11) before restarting the working cycle the machine must be cleaned according to the instructions in section 6.3.

Attention

Following every maintenance intervention it is the Safety Officer duty to ascertain that the machine is working properly and that all the safety devices are present and functional.

Unless expressly required for the solution of a breakdown, never interfere with the adjustments and positioning of the limit microswitches; their tempering can cause serious damage to the machine and pose risks to the operator.

Before assembling a block always cover with a thin layer of alimentary grade oil the internal parts and coupled surfaces. replace all the seals and gaskets with original parts before reassembling the components.

Note

Before reinstalling the machine components that have been washed with water or other liquids, check that they are completely dry.

Work on electrical components must only be carried out by the electrical maintenance technician specially trained and authorized by the Safety Officer.

6.3. Cleaning external parts

Attention

The chocolate present inside the tank and inside the machine must not come into contact with water or other liquids: there is a risk of mould formation leading to bacterial presence.

Attention

Use appropriate personal safety equipment while carrying out the cleaning of the machine.

Clean persistent stains with dry and soft clothes that do not fray or use flexible bristle brushes.
If the stains are incrusted and hard to remove with dry clothes or brushes use a liquid solvent appropriate for use in an alimentary environment. Avoid the use of flammable or toxic solvents.

Clean the signalling plaques with a cloth, soap and water or any other mild liquid; avoid using chemical solvents.

Before beginning and at the end of every maintenance operation it will be necessary to vacuum away the dust and other residues, recurring to using appropriate solvents if necessary but avoiding the use of compressed air jets which can create zones of dirt accumulation and may cause injury to the individuals present in the area

6.4 Cleaning of injection system

This procedure can be carried out without dismantling any parts of the machine.

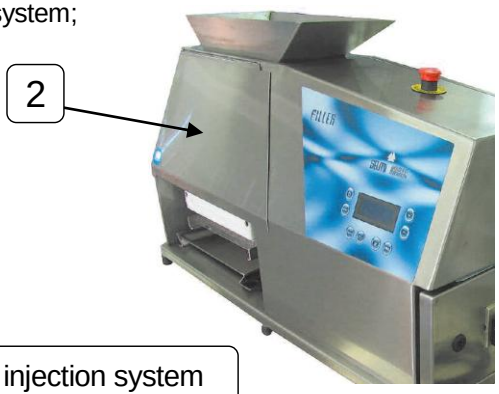
To clean the injection system follow this procedure:

Press and hold for a few seconds the **"INCREMENT"** button until the display shows the text "pulizia" (cleaning);

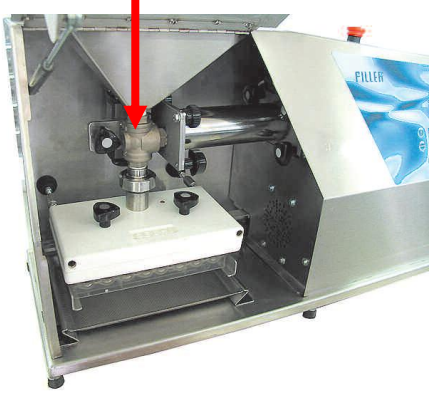
Press the «dosage» button

or the operating pedal.

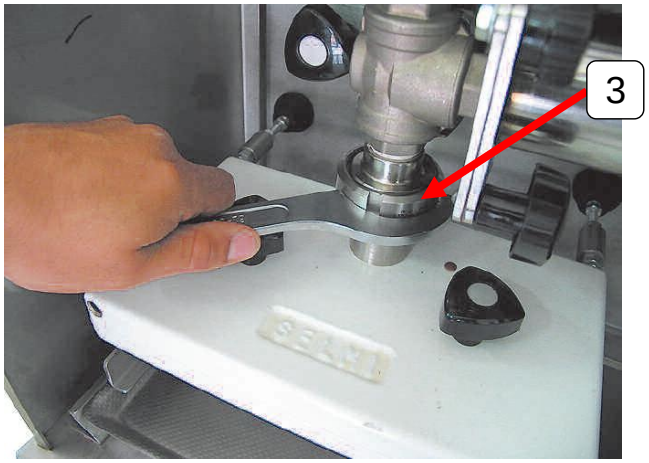
Lift the fron cover (2) to gain access to the injection system;



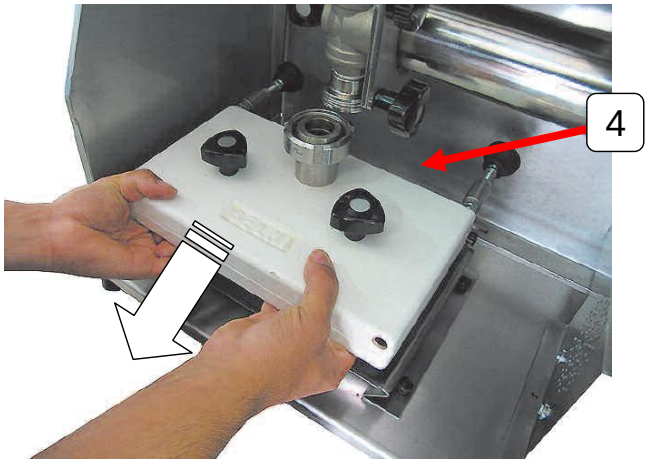
injection system



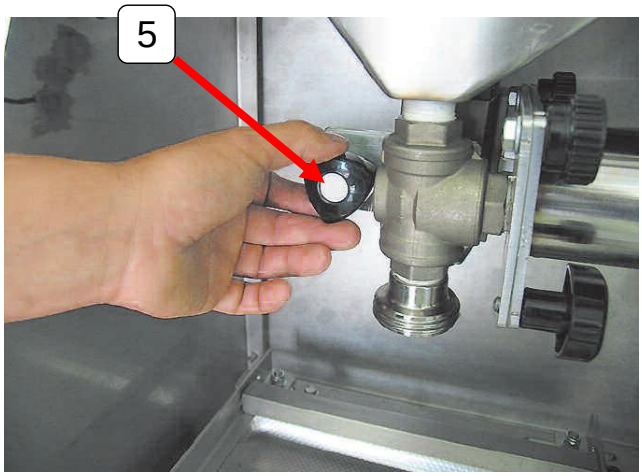
- unscrew the ring nut (3) using the supplied spanner;



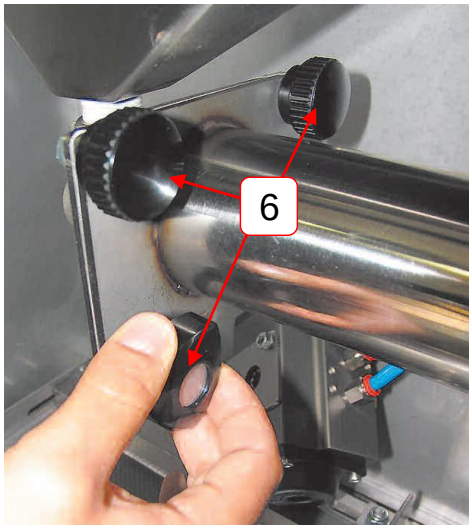
Remove the injector plate (4).



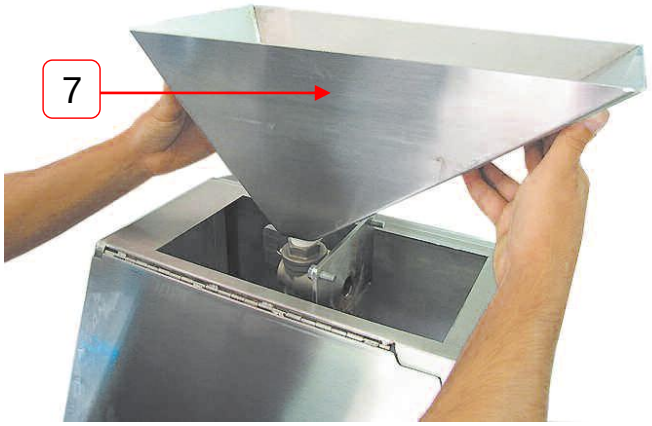
Unscrew knob (5) that locks in place the pneumatic actuator;



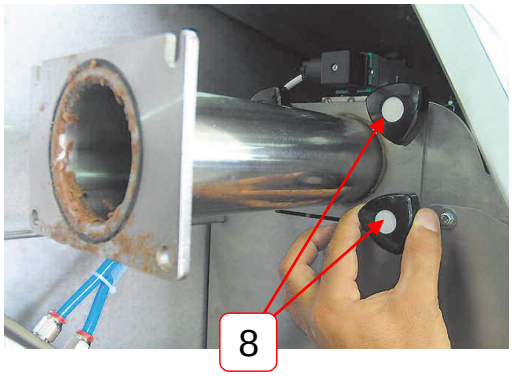
Unscrew the four knobs (6) that hold the valve in place



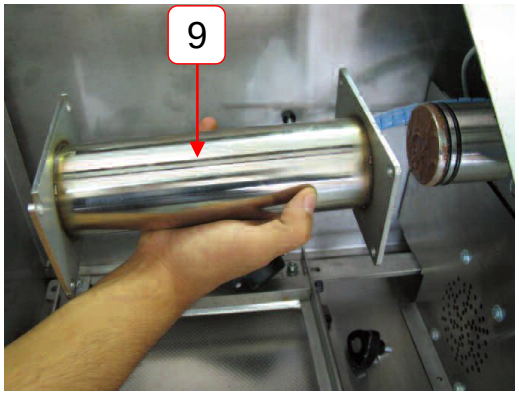
Lift the hopper (7).



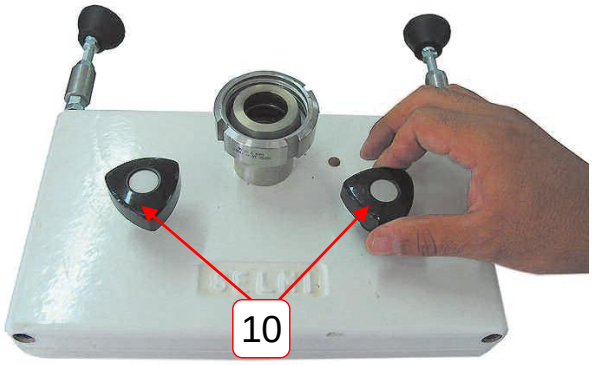
Unscrew the four knobs (8);



Slip off the sleeve (9).

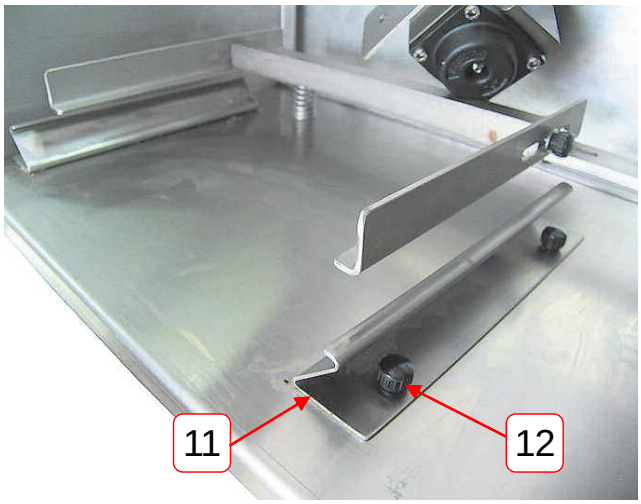


Unscrew the two knobs (10) of the injector plate;



Wash in a dishwasher all the components of the injector system.

Unscrew the four knobs (11) to wash the two guides (12).



6.5. Maintenance of mechanical parts

Carry out the dismantling and movement of heavy components (over 30Kg) with the help of block and tackles or cranes.

If detailed diagrams are not available take note of every item and mark its location so as to avoid errors in reassembling.

Always use spanners of the correct size.

Immediately replace screws or bolts which show signs of wear on the threads and the heads.

When screwing and unscrewing do not use the spanners in conjunction with extensions to augment the torque.

If dynamometric spanners and special tools are used verify that the calibration is appropriate for the component.

Special care must be taken when using pneumatic or hydraulic tools.

Before dismantling heavily oxidised parts spray them with adequate liquids (Svitol, etc.)

Before reassembling cover thinly with oil all the coupled surfaces.

During reassembly pay particular attention to anti-slip devices used by the manufacturer (flat washers, elastic washers, etc.), always replacing the worn out elements.
The anti-slip nuts and ring nuts having a plastic blocking ring must be replaced at every reassembly since the fatigued material will lose its functionality.

Attention

Always use personal protection equipment such as gloves, anti-injury shoes, etc. Unscrew the four knobs (11) to wash the two guides

6.6. Maintenance of electrical parts

Before taking any action on electrical components disconnect the mains-side supply (main power switch).

Always carefully check the isolating covers, the clamps and the grip of the sheaths.

This must always conform to the level of protection stated by the manufacturer.

Immediately replace the damaged gaskets and sheaths.

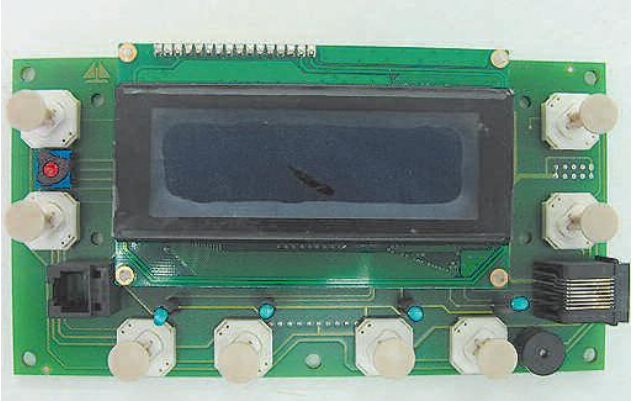
Check and restore, if necessary, the identification labels and stickers of the wires and of the components keeping to the indications shown in the diagrams.

Make sure that the hazard indications and explanatory plaques required by the norms are perfectly legible and firmly fixed.

Do not use compressed air for cleaning. Use only vacuum machines.

The replacement of faulty control components must always be carried out according to the norms (colours, dimensions, protections, etc).

In the case of replacement of the microcircuit board,
connect the wires onto the new board as shown in the figure.



6.7. Components subject to wear and tear and fatigue

Attention

Components subject to wear and tear due to their function must be periodically checked and replaced when they show noticeable signs of wear.

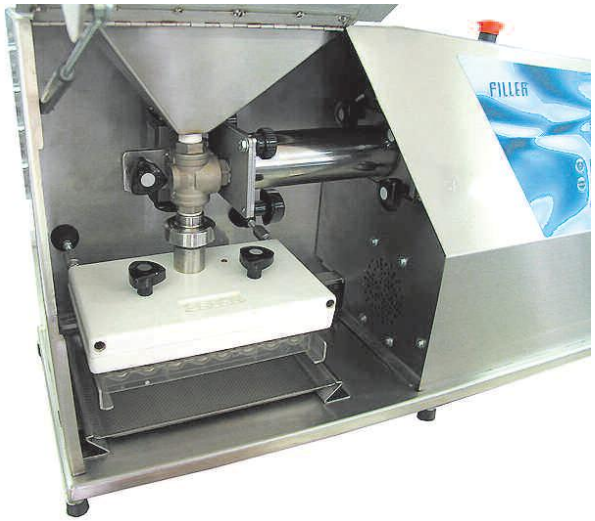
The manufacturer has designed and built the machine to last for a reasonable amount of time taking into consideration the normal conditions of use of the Client; it is nevertheless necessary to periodically check all of these components carefully. If mechanical fissures or permanent or cyclical structural deformations are found immediately contact the manufacturer and the expert technicians who will take the necessary steps.
The electrical wires will lose their isolating properties with time, especially if exposed to heat, humidity and low temperatures.
Verify their integrity with the help of expert technicians.
All electrical components having mechanical moving parts during the working cycle (buttons, selectors, relays,
etc.) are guaranteed by the manufacturer for a high, but always limited, number of cycles.
Frequently check their condition and consult with technical experts for the potential periodic replacement within their guaranteed lifespan.

6.8. Planned preventive maintenance

AT THE START OF EVERY PROCESSING

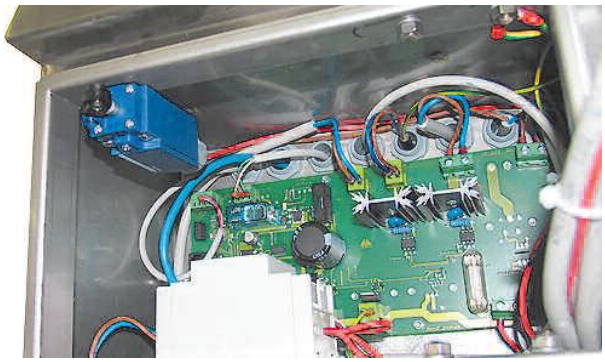
Check the functionality of the emergency button.

Cleaning of the injection system (see chapter 6.4 – cleaning of injection system)



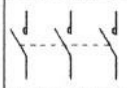
EVERY SIX MONTHS

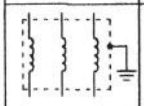
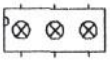
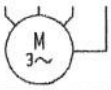
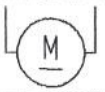
Check safety micro switch Check the correct functionality of the safety micro switch for the opening of the electric panel door.



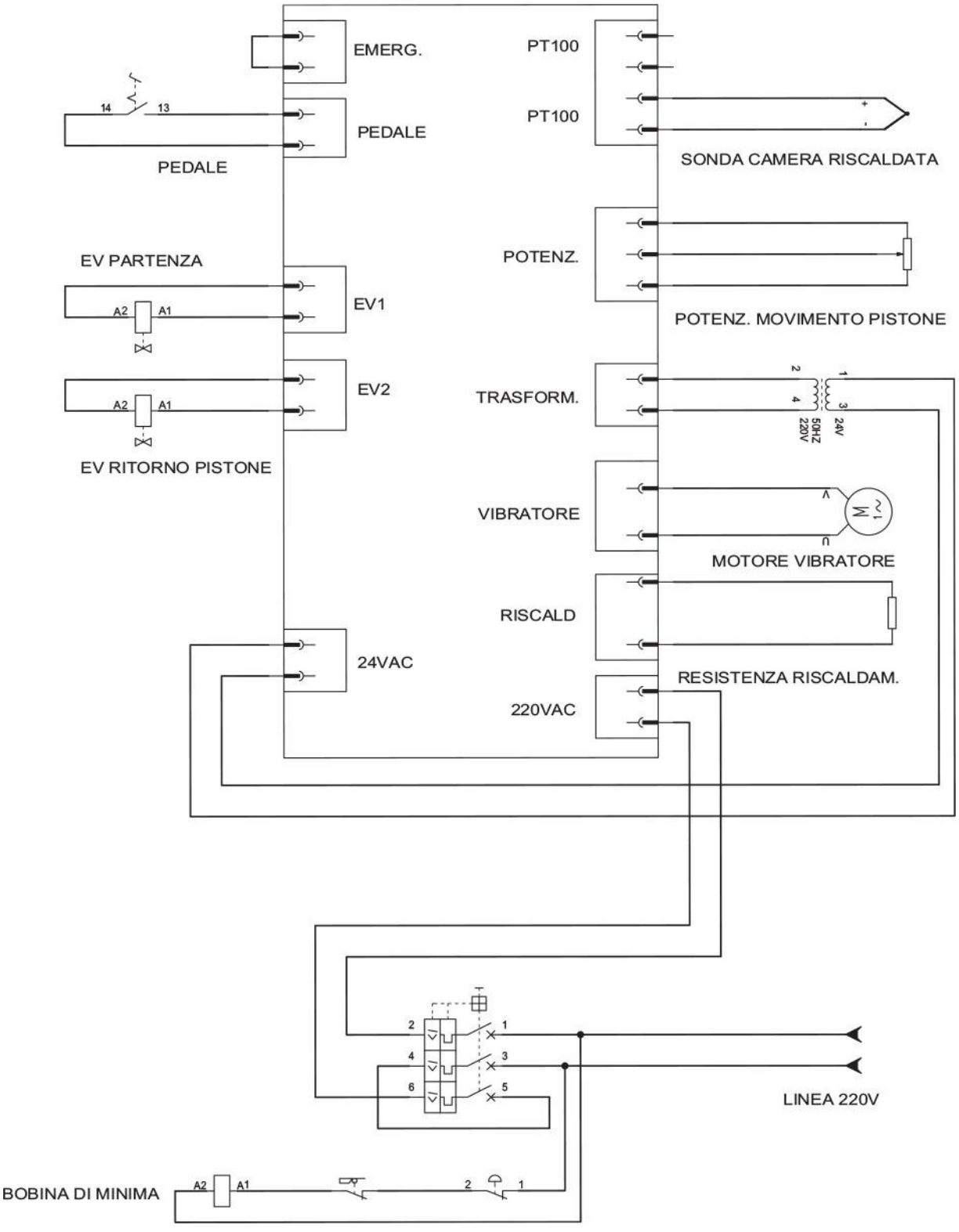
7. Electrical diagram section

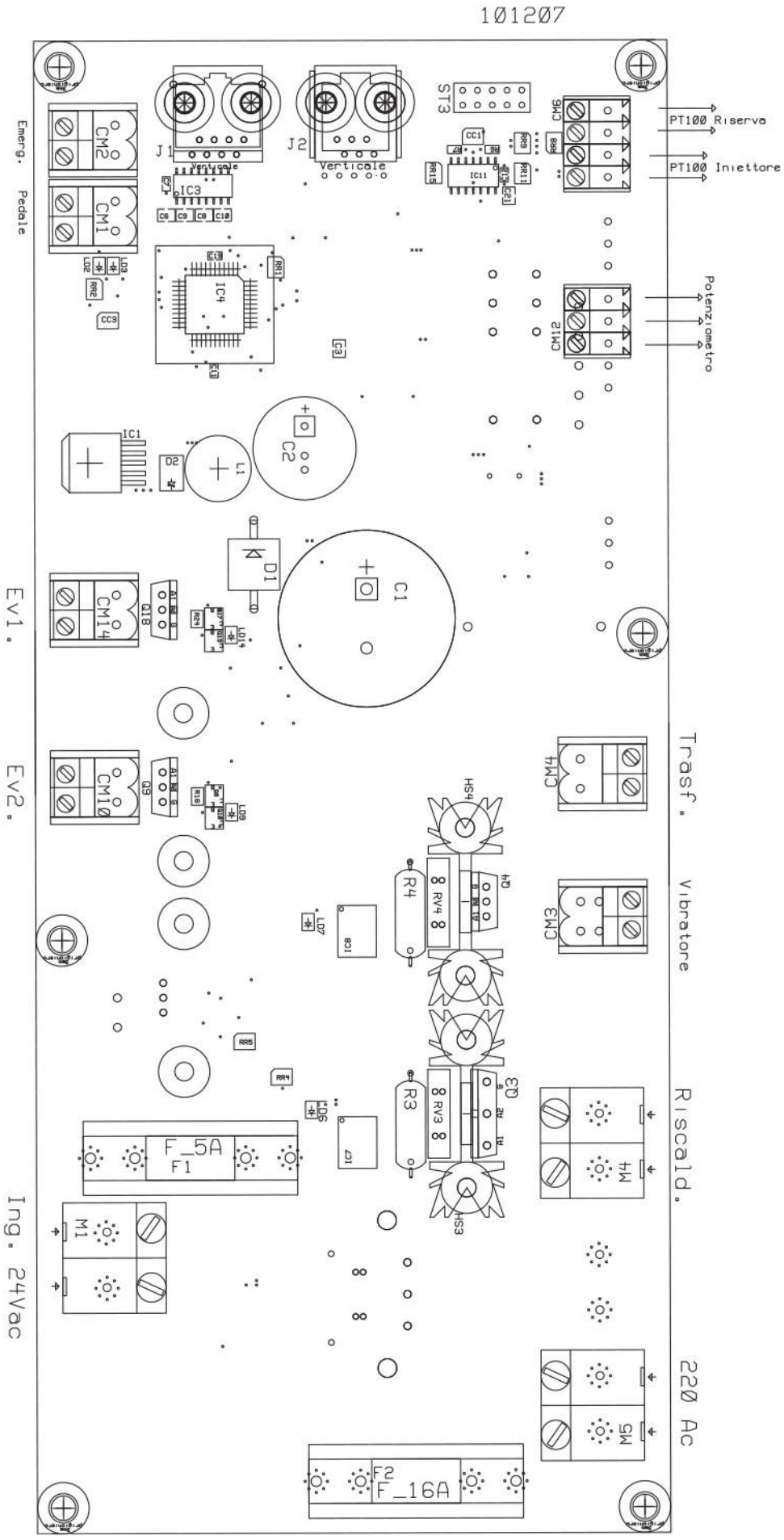
LEGENDA

Simbolo	Radice	Funzione
	QF	SEZIONATORE AUTOMATICO DI POTENZA AUTOMATIC POWER DISCONNECTING SWITCH SECTIONNEUR AUTOMATIQUE DE PUISSANCE SECCIONADOR AUTOMATICO DE POTENCIA AUTOMATISCHEN LEISTUNG TRENNSCHALTER
	QM	INTERRUTTORE GENERALE AUT MAGNETICO AUT MAIN GENERAL SWITCH INTERRUPTEUR GENERAL AUT MAGNETIQUE INTERUPTOR GENERAL AUT MAGNETICO GENERALSCHALTER AUT MAGNETISCH
	QF	INTERRUTTORE AUTOMATICO DI POTENZA POWER SUPPLY SWITCH INTERRUPTEURAUTOMATIQUE DE PUSSANCE INTERUPTOR AUT. DE POTENCIA LEISTUGSSCHALTER AUTO
	QM	INTERRUTTORE AUT MAGNETICO DIFFERENZIALE AUT DIFFERENTIAL MAGNETIG SWITCH INTERRUPTEUR AUT MAGNETIQUE DIFFERENTIEL INTERRUPTOR AUT MAGNETICO DIFFERENCIAL AUT DIFFERENTIALEN MAGNETISCHEN SCHALTER
	KM	BOBINA CONTATTORE POTENZA POWER CONTACTOR REEL BOBINE CONTACTEUR PUISSANCE BOBINA CONTACTOR POTENCIA LEISTUNGSKONTAKTOR ROLLE
	KA	RELE' AUSILIARIO AUX RELAY RELE AUX RELE AUXILIAR NEBENRELAIS
	YV	ELETTROVALVOLA SOLENOID VALVE ELECTROVANNE ELECTROVALVULA ELEKTROVENTIL
	K	CONTATTO AUSILIARIO NORMALMENTE CHIUSO AUX CONTACT NORMALLY CLOSED CONTACT AUX NORMALMENT FERME CONTACTOS AUX NORMALMIENTE CIERRE NEBENKONTAKT NC
	K	CONTATTO AUSILIARIO NORMALMENTE APERTO AUX CONTACT NORMALLY OPENED CONTACT AUX NORMALMENT OUVERT CONTACTOS AUX NORMALMIENTE ABIERTO NEBENKONTAKT NO
	KM	CONTATTI CONTATTORE DI POTENZA POWER CONTACT CONTACT CONTACTEUR PUISSANCE CONTACTOR POTENCIA LEISTUNGSKONTAKT
	K	CONTATTI AUSILIARI IN SCAMBIO RELE' RELAY EXCHANGE AUX CONTACTS CONTACT AUX EN ECHANGE CONTACS AUX EN CAMBIO NEBENKONTAKTE RELAIS
	SP	PRESSOSTATO PRESSURE GAUGE PRESSOSTAT PRESOSTATO DRUCKWÜCHTER
	SQ	FINECORSA NC NO LIMIT SWITCH NC FIN DE COUSE NF TOPA DE RECORRIDA NC ENDAUSSCHALTER NC

Simbolo	Radice	Funzione
	SQ	SENSORE INDUTTIVO QUADRATO SQUARE INDUCTIVE SENSOR SENSEUR INDUCTIF CADRAT SENSOR INDUCTIVO CUADRATO QUADRATISCHER INDUKTIVSENSOR
	L	INDUTTANZA INDUCTOR INDUCTANCE INDUCTANCIA INDUKTIVITAT
	S	PULSANTE MANUALE NORMALMENTE APERTO MANUAL PUSH BUTTON NORMALLY OPENED POUSSOIR MANUEL NORMALMENT OUVERT BOTON MANUAL NORMALMIENTE ABIERTO HANDKNOPF NO
	S	PULSANTE MANUALE NORMALMENTE CHIUSO MANUAL PUSH BUTTON NORMALLY CLOSED POUSSOIRE MANUEL NORMALMENT FERME BOTON MANUAL NORMALMIENTE CIERRE HANDKNOPF NC
	SB	PULSANTE EMERGENZA EMERGENCY PUSH BUTTON POUSSOIR URGENCE BOTON EMERGENCIA FESTER NOTKNOPF
	SA	SELETTORE A CHIAVE DUE POSIZIONI TWO POSITION SWITCH KEY SELECTEUR CLE DEUX POSITION SELECTOR LLAVE DOS POSICION SCHLÜSSELSCHALTUNG ZWEI STELLUNGEN
	HL	LAMPADA LAMP LAMPE LAMPARA LÄMPCHEN
	HL	SEGNALAZIONE QUADRO IN TENSIONE ELECTRIC PANEL VOLTAGE SIGNALING SIGNALISATION TABLEAU ELECTRIQUE SENALACION CUADRO EN TENSION SPANNUNGSANZEIGE SCHALTFELD
	M	MOTORE TRIFASE THREE PHASE MOTOR MOTEUR TRIPHASE MOTOR TRIFASE DREIPHASIGER MOTOR
	M	MOTORE CORRENTE CONTINUA DC MOTOR MOTEUR COURANT CONTINU GLEICHSTROM MOTOR MOTOR CORRIENTE CONTINUA
	XP	PRESA SERVIZIO SOCKET SERVICE PRISE SERVICE TOMA DE SERVICIO BETRIEBSDOSE
	X	MORSETTO TERMINAL BLOCK ETAU ABRAZADERA KLEMME
	XC	MORSETTO CONNETTORE CONNECTOR CONTACT ETAU ABRAZADERA CONECTOR ANSCHLUSSKLEMME

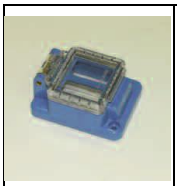
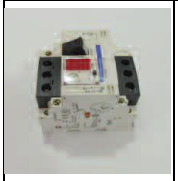
ELECTRICAL DIAGRAM




101207
Emerg.
Pedale
Ev1.
Ev2.
Ing. 24Vac
Trasf.
Vibratore
Riscald.
220 Ac
PT100 Riserva
PT100 Iniettore
Potenziometro
Verticale
Verticale
CM2
CM1
CM6
CM12
CM14
CM10
CM4
CM3
M1
M4
M5
ST3
IC1
IC3
IC4
IC11
C1
C2
D1
D2
L1
Q18
Q9
Q3
HS4
HS3
R4
RV4
R3
RV3
F1
F_5A
F2
F_16A

8. SPARE PARTS SECTION

	**FILLER 001** Transformer 220 V - 24 V
	**FILLER 002** Fan
	**FILLER 003** Power board
	**FILLER 004** Microcircuit board
	**FILLER 005** Display membrane
	**FILLER 006** Heating coil
	**FILLER 007** Pneumatic actuator
	**FILLER 008** Valve
	**FILLER 009** Air pressure manometer

	**FILLER 010** Flap for accessories socket
	**FILLER 011** Connection cable
	**FILLER 012** Four pole switch
	**FILLER 013** Box for four pole switch
	**FILLER 014** 220 V accessory socket
	**FILLER 015** 24 V accessory socket
	**FILLER 016** 220 V accessory plug
	**FILLER 017** 24 V accessory plug
	**FILLER 018** Microswitch

	**FILLER 019** Emergency button box
	**FILLER 020** Emergency button
	**FILLER 021** Pedal
	**FILLER 022** Fuses
	**FILLER 023** Motor vibration
	**FILLER 024** Vibration springs
	**FILLER 025** Gas springs
	**FILLER 026** Piston
	**FILLER 027** Linear potentiometer

	**FILLER 029** Solenoid valve
	**FILLER 030** Cylinder
	**FILLER 031** Foot
	**FILLER 032** Knobs
	**FILLER 033** Connections
	**FILLER 034** Injection plate
	**FILLER 035** Drops collector