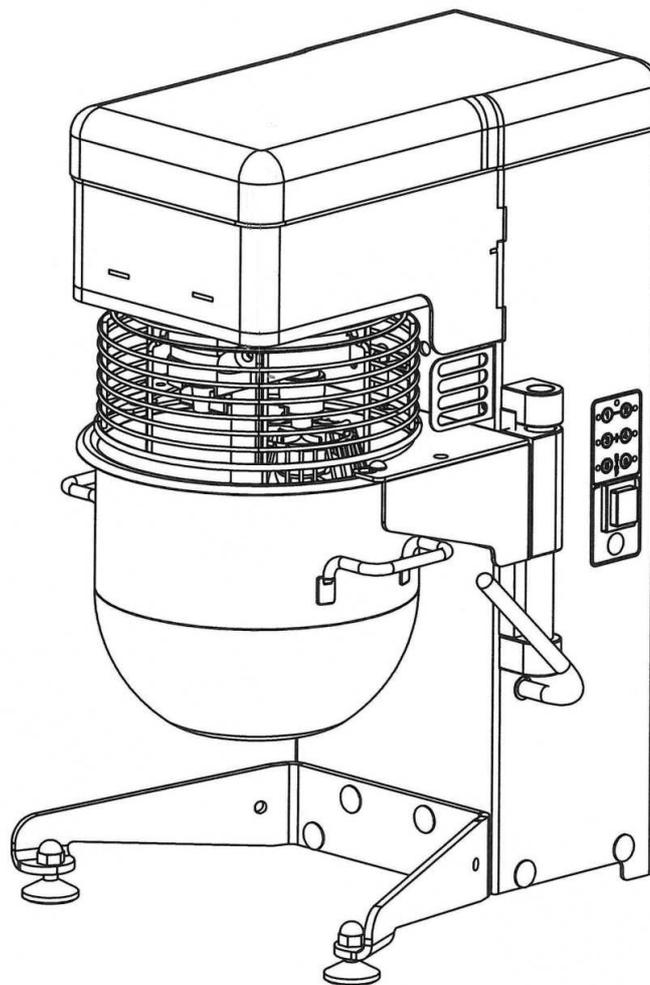


SIGMA

Bakery Pastry Pizza equipment

Via Artigianato 85 – 25030 Torbole Casaglia.
(BRESCIA) – ITALY – Tel 030 265 04 88 – Fax 030 265 01 43

INSTRUCTIONS, USE AND MAINTENANCE MANUAL CHR 7.5 PLANETARY MIXER WITH ELECTRONIC SPEED VARIATION WITH INVERTER Translation of the original instructions



Edition date 10/07/2015

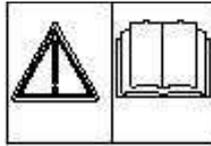


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1. General information



This instructions, use and maintenance manual provides the necessary instructions for machine transportation, commissioning, use and maintenance and it must be consulted before performing any of these operations.

The manual must be read by the maintenance technicians and by the machine operators who must perform their tasks correctly.

The manual is an integral part of the machine and it must be kept in an adequate place to ensure its integrity and availability for consultation throughout the machine life-span.

In case of loss or deterioration, request a copy from the manufacturer, clearly specifying all of the machine identification data (year or manufacture, model, serial number).

All references and/or instructions in this manual relating to:

- CE marking;
- CE declaration(s) of conformity;
- declaration(s) of incorporation of the partly-completed machine;
- directives and regulations issued by the EU institutional bodies (Parliament, Council, Commission, etc.) and related transposition deeds of the EU member states;
- European harmonised standards,

are to be considered valid only for the machines intended to be placed on the EU market or for which compliance with Laws, Directives, etc. issued by the EU was expressly required by the customer and formally accepted by SIGMA SRL.

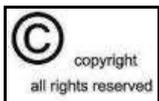
These references and instructions have no meaning and value for all machines not intended for the EU market, apart from the above exceptions. In the exploded view chapter we refer to the attachment hubs that are exclusively used for the extra-CE market

1.1. Foreword

This manual is intended for all those in charge of installation, use and maintenance of the machinery in question, so that they can make the best use of the product features.

It is important to keep this manual and ensure it follows the machine in all its transfers, including change of ownership, so that it can be consulted for the necessary information on safe operation.

The manufacturer is not obliged to notify any subsequent product changes.



It also reserves the right to ownership of this document in accordance with the law and prohibits tampering, reproduction and transmission to third parties without its authorisation.

The following symbols are used to highlight some parts of the text:

PERSONNEL QUALIFICATIONS: symbols used to indicate the specific competence required for the operation (they will be discussed further in the GLOSSARY chapter).



ATTENTION: indicates hazardous situations for which particular caution is required.



2. Content of the declaration of conformity

The undersigned manufacturer:

SIGMA SRL
VIA ARTIGIANATO, 85
25030 TORBOLE CASAGLIA (Bs), Italy
VAT number: 03121980175

Through Mrs. Ornella Salvadori, as Chairwoman;

DECLARES

that the machine: CHR 7.5

Year of manufacture:

complies with the relevant provisions provided by:

- Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery and amending Directive 95/16/EC (transposed by the Italian state with L.D. 27/11/2010, no.17);
- Directive 2004/108/EC of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC;
- Regulation (EC) No. 1935/2004 of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food and repealing Directives 80/590/EEC and 89/109/EEC
- Commission Regulation (EU) No. 1183/2012 of 30 November 2012 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food;
- Commission Regulation (EU) No. 1183/2012 of 30 November 2012 amending and correcting Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food;
- Commission Regulation (EC) No. 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food;
- Ministerial Decree of Health No. 76 of 18 April 2007, regulation on the hygiene control of materials and objects of aluminium and aluminium alloys intended to come into contact with food;

The Chairwoman
Ornella Salvadori

3. Warranty conditions

3.1. Validity

The warranty becomes effective from the date of shipment and lasts for twelve months, if:

- The machine was not damaged during transportation, and it was installed, commissioned, used and serviced as prescribed in this manual.
- It was not tampered with, modified and no unintended tools were installed on it.
- It has not been modified or repaired by the purchaser or by third parties in an inconsistent manner or without the prior consent of the supplier.

The following conditions constitute improper use of the machine:

- Loading more than what is allowed or use of unsuitable ingredients.
- Cleaning with unsuitable tools or instruments that can scratch the bowl or damage the machine, paint and plastic parts.
- Use of the machine in unsuitable places.

3.2. Warranty mode of provision

The purchaser must immediately notify the supplier of any detected machine defects; the supplier will quickly analyse the non-conformity and decide, in collaboration with the purchaser, on the actions to be taken.

After agreement with the supplier, the purchaser must give the same the necessary time and opportunity to carry out any changes, improvements, repairs or supply of under-warranty parts it deems necessary, otherwise the supplier is exempt from property vices.

3.3. Wear parts

Some components are sized to last longer than normal use of the machine under warranty time. The failure or malfunction of these parts depends on the use, they are therefore considered wear parts and are not covered by warranty, except for evident defects on the part or machinery.

Parts subject to wear: transmission belts, chain and bearings.

4. General safety standards

The safe and systematic use of the machine is subject to compliance with the below listed standards and behaviours.

4.1. Safety standards.

- Personnel must be in good physical and psychological conditions, and appropriately instructed on how to use the mixer by reading this document.
- Only professional use of the machine is allowed in places where access to the public, to profane, to children and to anyone not expressly authorised is forbidden.
- It is forbidden to use the machine: for operations and / or with different product(s) to those specified; if the connections to the service facilities from the site are not run as expected in this manual; in places with risk of fire and / or explosion and major incidents, high humidity or wet, excess water vapour, oily vapour, dust, presence of corrosive substances / gases, adverse weather conditions; in the vicinity of naked flame, zones with projection of sparks and heat sources; in conditions of abnormal vibration or shock.
- The safety officer, and / or the employer, and / or the owner of the company, in choosing the person who will be authorised to use the machine (suitable person to work according to applicable laws), must check the same on the basis of attitudes and skills encountered and provide training of the same, with the reading of this publication, in order to provide comprehensive knowledge of the machine and of the rules of conduct applicable to it.
- The space around the machine must be well-lit, uncluttered and clean. Leave about 1000mm of free space around the machine,.
- Personnel in charge of running, cleaning and servicing the machine must wear the prescribed P.P.E. (personal protective equipment): gloves, shoes with reinforced tip, goggles, masks and helmet.
- Do not wear loose clothing or with fluttering hems (ties, torn clothes, open jackets, etc.) to avoid the risk of entanglement.
- During maintenance and cleaning operations, the operator must release the master switch (OFF) and secure the system (for example, by removing the plug and leaving it in a clearly visible position).
- Never leave the machine unattended during operation, pay attention to unusual sounds or behaviour and keep away from rotating parts. Never open the guard unless the tool has completely stopped.
- In order to empty the machine completely, release the master switch (OFF), disconnect power by removing the plug and leaving it clearly visible, secure it and clean with water.

4.2. Safety devices.

The machine is equipped with some devices to protect its operation and the operator's safety; they must never be removed and modified and their operation must be periodically verified.

- Master switch: disconnects power to the machine, for safe maintenance.
- Circuit breaker: it interrupts power supply in case of overheating of the electric motor that moves the spiral.
- Fixed guards: all casings and protections fixed with screws or mechanical blocks can only be removed for maintenance, by qualified personnel and as prescribed. Once the work is completed, they must be immediately reassembled.
- Mobile guards: properly closed mobile guards allow the machine to be used.

A lack of these conditions prevents operation.

4.3. Educating and training of machine operators

As repeatedly stated in this manual, the employer must provide workers with adequate information and training, also practical, on the correct and safe use of the machine (must be simple and understandable in relation to the acumen that can reasonably be expected by those concerned).

The following table provides a minimum list of topics to be covered as information, training and educating of personnel; for clarity we provide the following definitions:

information: transfer of information, knowledge, etc..., without verification of learning;

training: transfer of information, knowledge, etc ..., on special and specific topics, with verification of understanding of the topics covered, but without practical demonstration;

training: transfer of information, knowledge, etc ..., with practical demonstration of their implementing on special and specific topics, and verification of understanding by application to practical cases of the topics.

Topics	Information	Educating	Training	Chapter
Hazard characterising the machine and related risks. Use of PPE. Machine limits and destination. Intended and/or prohibited uses.	X	X	X	4
Safe operating method and procedures	X	X		6
Safety signs	X	X		6.1
Residual risks and measures to take to limit them	X	X		6.2
Organisation of the manual and how to consult it	X	X		7
Machine description	X			8
Control panel description	X	X		10.2
Storage and conservation of the machine	X			10.4
Noise emitted by the machine	X			10.6
Machine handling and transportation	X		X	11.1
Description of the adjustment and commissioning operations	X	X		11.2
Adopted safety devices	X	X	X	12
Instructions on using and loading the ingredients (machine use and how to insert the ingredients)	X	X	X	13
Replacements and/or scheduled maintenance (routine and extraordinary maintenance)		X	X	14
Electrical maintenance	X	X		14.6
Cleaning the machine		X	X	14.7
Troubleshooting	X			15

5. Customer set-ups

The environmental conditions of the location where the machine is installed must have the following features:

- Humidity-free.
- Water and heat sources at an appropriate distance.
- Appropriate ventilation and lighting that is compliant with the hygiene and safety standards required by the laws in force. The floor must be level and compact in order to favour proper cleaning.
- Do not place in the immediate vicinity of the machine, obstacles of any nature that may affect the normal operation and ventilation of the machine in question (leave about 1000 mm free around the machine).
- Upon machine arrival, ensure it is intact. Any damages incurred during transport or delivery must be immediately reported.
- Ensure that the power supply matches that of the machine: check the plate on the machine and on the wiring diagram (chap. 18). Connection to the line **MUST** be done via a CE standard blocked socket, fitted with three valves adequate to the amount of current absorbed during machine operation.



The electrical mains must have an automatic circuit breaker with adequate features to those of the machine, where the opening distance between contacts is at least 3 mm. In particular, an earthing system compliant with current regulations is essential.



Check that the system power supply voltage and frequency are compatible with the values indicated in the technical features and on the plate affixed to the machine.

5.1. Instructions for ordering spare parts

SIGMA S.r.l., reserves to make all changes it deems necessary to its machine models.

It is, therefore, always necessary to specify:

- Type of machine
- Year of manufacture
- Position
- Description
- Serial no.
- Required number of parts.

Address your request to:

Sigma S.r.l.

via Artigianato 85,

25030 Torbole Casaglia (BS) Italy

Tel 030 265 04 88 - Fax 030 265 01 43

www.sigmasrl.info - Email: info@sigmasrl.info

6. Safe work methods and procedures



READ THESE INSTRUCTIONS CAREFULLY BEFORE USING THE MACHINE

In order to prevent hazardous conditions and/or possible injuries caused by: electric current, mechanical parts, fire, or of hygienic nature, the following safety warnings must be observed:

- Keep your work station tidy. Clutter can cause accidents.
- Assess the environmental conditions. Do not use or leave the machine in a wet, damp or poorly lit environment, or in the vicinity of flammable liquids or gases.
- Keep children and unauthorised personnel away. Do not allow these people to approach the machines or work station.
- Use the machine within its operating range and for the purpose for which it was designed. It works best and at its safest when it is not overloaded.
- Wear appropriate clothing. Do not wear dangling clothes or accessories that may get entangled in moving parts. Use the shoes with reinforced tip and non-slip sole. For health and safety reasons, long hair should be gathered in the appropriate net and gloves should be worn.
- Protect the power supply cable. Do not pull the cable to disconnect the plug. Do not expose the cable to high temperatures, in contact with sharp edges, water or solvents.
- Avoid unsafe positions. Find the most suitable position that ensures absolute stability.
- Always exercise extreme caution.
- Always take the plug out of the socket after use and before cleaning and maintenance and before moving the machine, and leave it in a clearly visible place.
- Never use extension cables outdoors.
- Make sure that the machine is not damaged. Carefully check the effectiveness of the safety devices before using the machine. Make sure that: the mobile parts are locked in place, there are no damaged components, all the parts have been assembled correctly and the machine can be run normally in optimal conditions. (See chapter 14)
- Entrust repairs to qualified personnel. Repairs must only be performed by qualified personnel using original spare parts.

FAILURE TO OBSERVE THESE REQUIREMENTS MAY BE CAUSE OF HAZARD FOR THE USER.

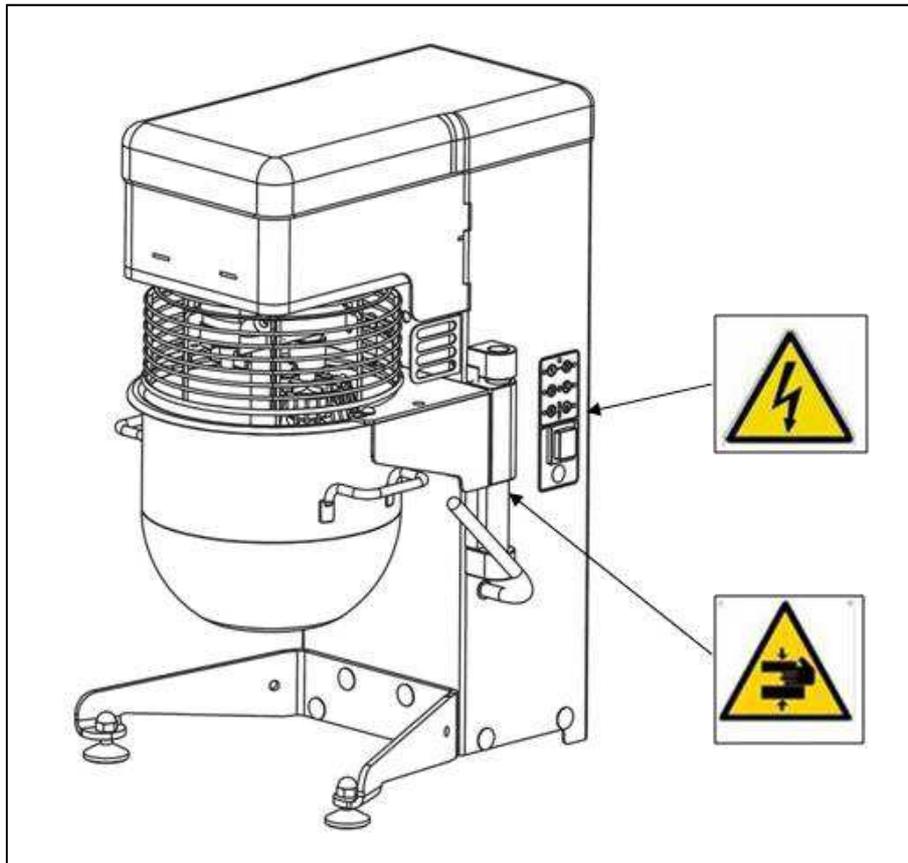
6.1. Risks for the operator



Pericolo di schiacciamento: è presente tra l'arco di sollevamento e palo guida scorrimento, tra vasca e riparo, durante la fase di sollevamento / discesa vasca.



Pericolo di fulminazione: la macchina non deve funzionare senza un'adeguata messa a terra, e va collegata ad un impianto costruito secondo le norme costruttive vigenti nel paese di installazione.



Earthing obligation



Prohibition to clean and lubricate moving parts



Prohibition to remove the safety devices and guards

ATTENTION!

Wear the provided PPE during operation (e.g. shoes with reinforced tip, gloves, goggles and masks).

Clean the machine thoroughly after use.

Do not remove the safety devices or protective casings.

Do not put any objects through the bowl guard with the parts in motion.

Before any manoeuvre wait for the machine to completely stop, turn it off and disconnect it from the mains.



6.2. Residual risks

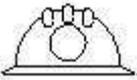
The residual risks, deemed to be low or acceptable, are substantially the following:

- **crushing between the raising bowl and the bowl guard or other fixed parts and between the lowering bowl and the floor or other fixed parts:** one can reasonably assume that this risk exists only for machines fitted with a bowl lifting/lowering motor if, for example, a person places their hand between the bowl as it is being raised and the guard or other fixed parts, a foot beneath a trolley bowl as it is lowered, a hand or foot between the bowl as it is lowered and the carrying trolley or other parts, while the person at the corresponding controls that require continuous action (man present) did not realise; in the case of machines on which the raising and lowering movements of the bowl is controlled by a manual lever, this risk, which is nevertheless low as it is presumed that the operator is careful where he places his hands, depends exclusively on the diligence of the operator controlling the manoeuvre
- **crushing, shearing, dragging, impact in the event of contact with the moving tool or rod wiper:** the risk may exist is a person reaches their hand towards the tool through the gap between the guard and the bowl without activating the relative safety device, or, after the machine has been used attempts to reach for the tool before it has come to a complete stop (UNI EN 454 prescribes a maximum of 4 seconds for the machine to come to a stop).
- **health risk** due to the inhalation of flour dust, due to inadequate cleaning of the machine
- **risk of muscular-skeletal lesions** due mostly to the manual movements of the containers (sacks of flour, water vessels, etc.) blocks of dough, the bowl, etc., and thus to factors not pertaining to the machine

As far as possible and relevant, adequate safety signs have been affixed on the machine; the affixed signs and their position on the machine are described in the instruction manual.

7. Organisation of the manual and how to consult it

7.1. Glossary

Symbol	Description	Features
	OPERATOR	Person informed on machine operation, adjustment and programming, on the safety and protection systems, who knows the possible manufacturing cycles and the ingredients to be used with related maximum quantities allowed, and has read and understood the operating and maintenance manual.
	ELECTRICAL MAINTENANCE TECHNICIAN	Person in good health conditions who is qualified by title, appointment and/or experience as an electrical maintenance operator and has read and understood the operating and maintenance manual.
	MECHANICAL MAINTENANCE TECHNICIAN	Person in good health conditions who is qualified by title, appointment and/or experience as a mechanical maintenance operator and has read and understood this operating and maintenance manual.
	HANDLING OPERATOR	Person in good health conditions who is qualified by title, appointment and/or experience to handle loads and has read and understood this operating and maintenance manual.
	ASSISTANCE Tel.+39030.265.04.88 Fax+39030.265.10.82 www.sigmasrl.info Email: info@sigmasrl.info	Requests for manual updates. Telephone assistance on the operation, commissioning or failure of the machinery. Requests for spare parts, product repairs, system revisions, on-site interventions. Training courses.
	ATTENTION	This type of signal urges to pay particular attention in the indicated operations. Failure to comply may cause injury to people in charge or damage the machine.

8. Machine description

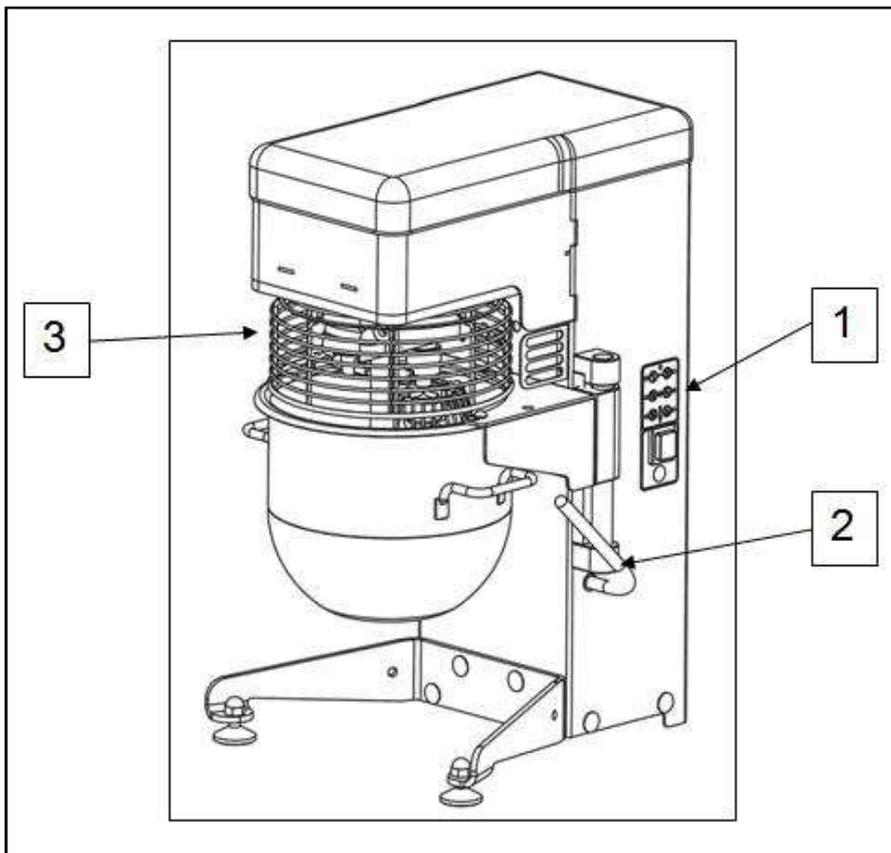
MACHINE DESCRIPTION AND USE:

The CHR "CHEF" series planetary mixers are designed for professional use only in pastry making. Driven by a high-power motor, they use a belt regulator with a high transmission ratio that allows for optimal range between minimum and maximum planetary speed and proportional tool speed. The machine was built to process, beat, whip and knead edible mixtures made of flour, water, yeast, salt, butter or margarine, eggs, sugar, cream, puree and additives, provided that they are allowed by the laws and hygiene standards.

Using ingredients that have been hardened by freezing or other methods is absolutely not permitted.

As specified above, the machines are for professional use only, by educated, trained and authorised personnel. Any other use is forbidden, any particular needs and specifications must be examined by the SELLER on request.

Once the machine has been filled with the ingredients in the order and in the maximum quantities described later, the operator uses the control panel to start rotating the tools and mixing the ingredients. To empty the bowl, first stop the machine with the stop button, rotate the mobile guard, lower the bowl using the lever, release the tool from the holding pin and extract the bowl from the handles. At this point, the bowl can be removed and the mixture can be turned out. Use a spatula to make this easier (made of plastic, aluminium or wood so as not to scratch the bowl).



- 1) CONTROL PANEL
- 2) LIFTING/LOWERING LEVER
BOWL
- 3) PROTECTION GRID

9. Machine identification

There is a plate on the machine casing, like the one illustrated, which carries indications concerning the manufacturer, type of machine, serial number, electrical features, frequency, rated power, number of phases, year of manufacture and mass.



9.1. Main components

- Raw materials used: the machine is almost completely made of steel, cast iron, brass and plastic. All of these components can be easily disposed of and are not dangerous to the environment and/or a hazard to personal safety. Adequately separate the different materials for subsequent reuse or separate disposal.
- Surface treatment: paint, electrolytic galvanising, chemical nickel-plating, Teflon coating, electro polishing, to ensure high technical performance, hygiene and durability.
- The Sigma packages fully meet the requirements of Directive 94/62/EC and Legislative Decree 05/02/97 no. 22 (and subsequent amendments and additions) and so become waste similar to urban, that can be easily inserted in any separate collection program.

10. Technical data and features

10.1. Units of measurement

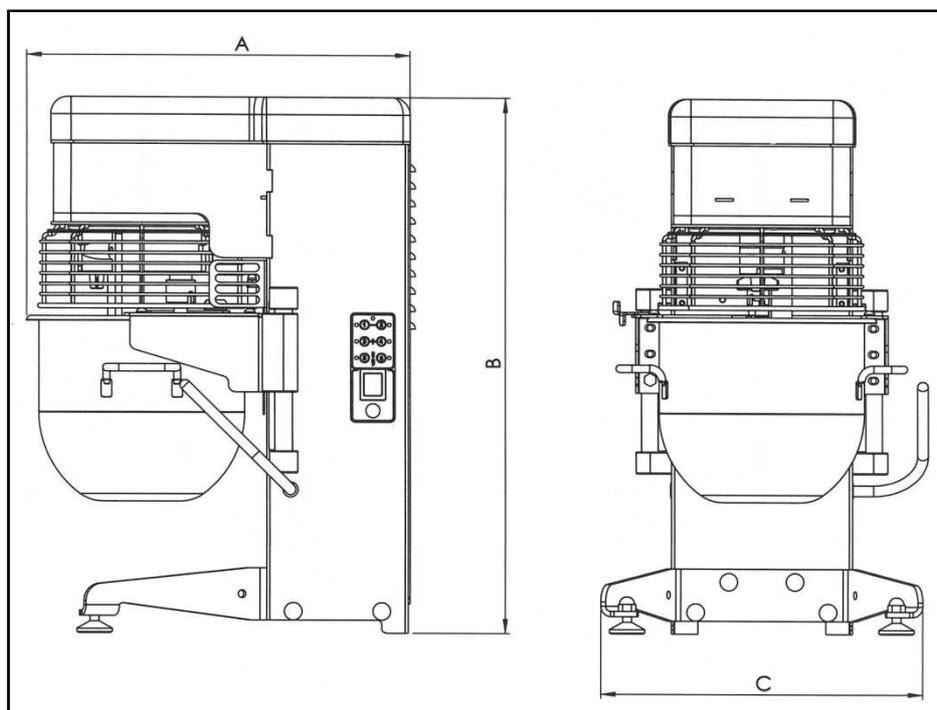
The units of measurement used in the manual are:

- Millimetres [mm]
- Kilograms [kg]
- Kilowatts [kW]
- Litres [l]

10.1.1. Technical data

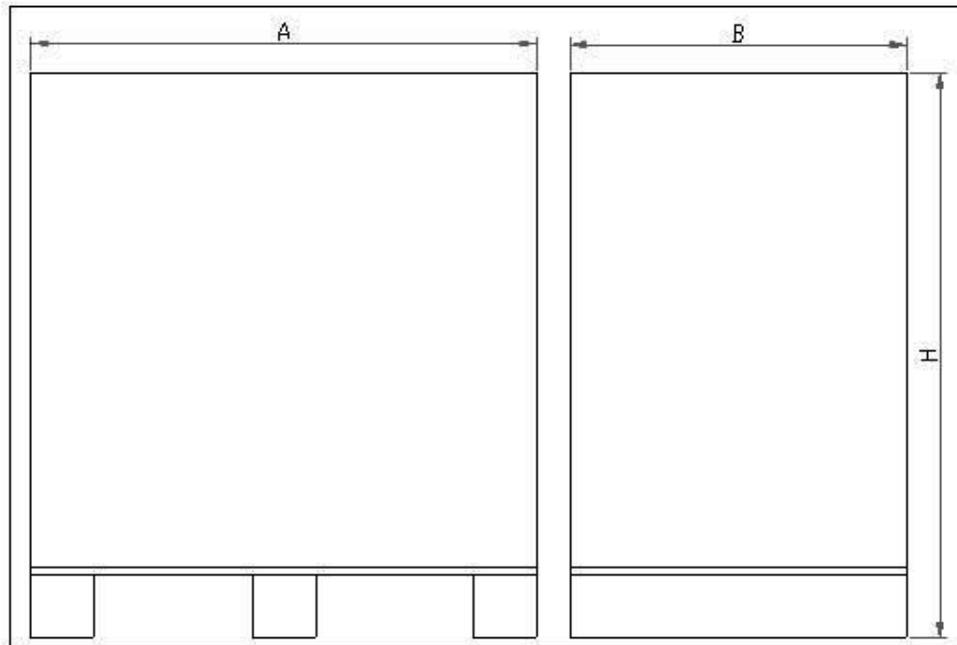
MODEL	MACHINE MASS [kg]	POWER [kW]	BOWL [litri]	BOWL diameter x H [mm]	ELECTRICAL POWER SUPPLY
CHR 7.5	33	0.25	7.5	Ø230x210	230V 50Hz 1 fasi + PE

10.1.2. Dimensions



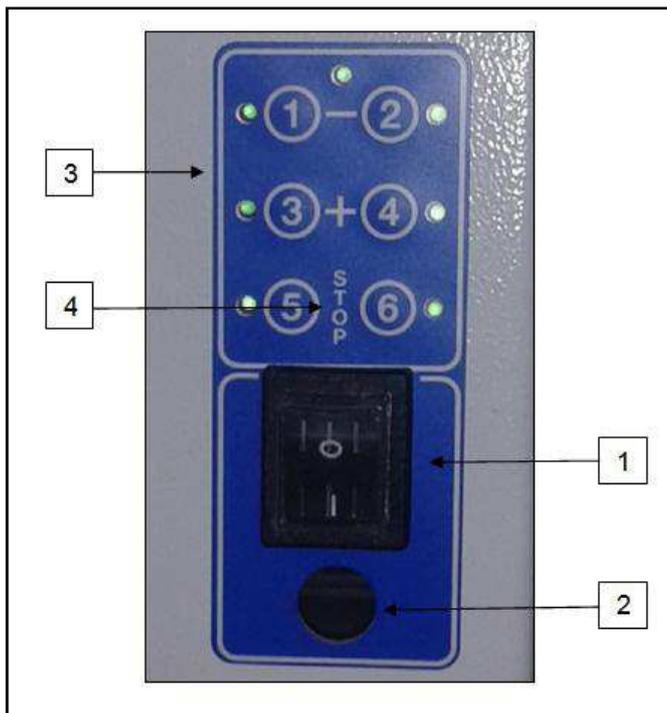
MODEL	A	B	C
CHR 7.5	440	613	365

10.1.3. Packaging



MODEL	A	B	H
CHR 7.5	620	450	620

10.2. Control panel



- 1) ON/OFF SWITCH
- 2) AMPERAGE CONTROL
- 3) SPEED CONTROL PLATE
- 4) STOP: to stop the machine, press buttons 5 and 6 at the same time.

OPERATION OPERATING :

Press the switch to ON . The machine is in power and the LED switch lights . Press 1 (or another number button if you already know the speed of work) the tool will start turning at the minimum speed ; continuing to press the buttons 2 , 3 and following up to 6 speed will rise up to the maximum . By simultaneously pressing the pair of buttons on the top (1 + 2) , the speed gradually decreases until the minimum . By simultaneously pressing the pair of buttons intermediate (3 + 4) , the speed increases gradually up to the maximum . Pressing the pair of buttons on the bottom (5 + 6) the machine stops . Place the timer ON to have a continuous motion machine , or select the desired mixing time

10.3. Type of drive, motors.

TYPE OF DRIVE: MECHANICAL

T71 MOTOR: 230-400V 50Hz 0.25kW 1390 RPM 1.3-0.75A



ATTENZIONE: prima di allacciare la macchina, controllare la targhetta identificativa applicata sulla macchina, e consultare lo schema elettrico (cap.18)

10.4. Storage and conservation of the machine

10.4.1. Storing the packaged machine:

The machine must be stored in a closed and covered place, on a smooth and solid surface protected from dust and dirt, from atmospheric agents and in a hygienically safe place.

The temperature must be between 5 and 40°C, humidity must not exceed 90%.

10.4.2. Storing the unpackaged machine.

If the machine has already been unpackaged, in addition to the above, it should be lifted off the ground with a pallet or other and covered to protect it from damp, dust and dirt. If it is wrapped with cellophane or another type of plastic, do not hermetically seal underneath the machine to avoid corrosion due to condensation.



ATTENTION

Storing the machine outdoors is not allowed.

10.4.3. Storing the machine

Storage before a long period of inactivity:

- Clean the machine thoroughly.
- Disconnect it from the electrical system.
- If possible, put it back in its original packaging.

10.5. Types and features of the product and of the treated materials

CONDITIONS OF USE:

- Environmental conditions: the machine must be installed inside a lit, ventilated building, on a solid level support. Temperature from 5 to 40°C with humidity not exceeding 90%.

- Lighting: the light available to the operator must comply with the type of work performed, in relation to general lighting, according to current regulations and, however, sufficient to read the controls, the hazard signals and such not to blind the operator.

10.6. Type and features of machine emissions

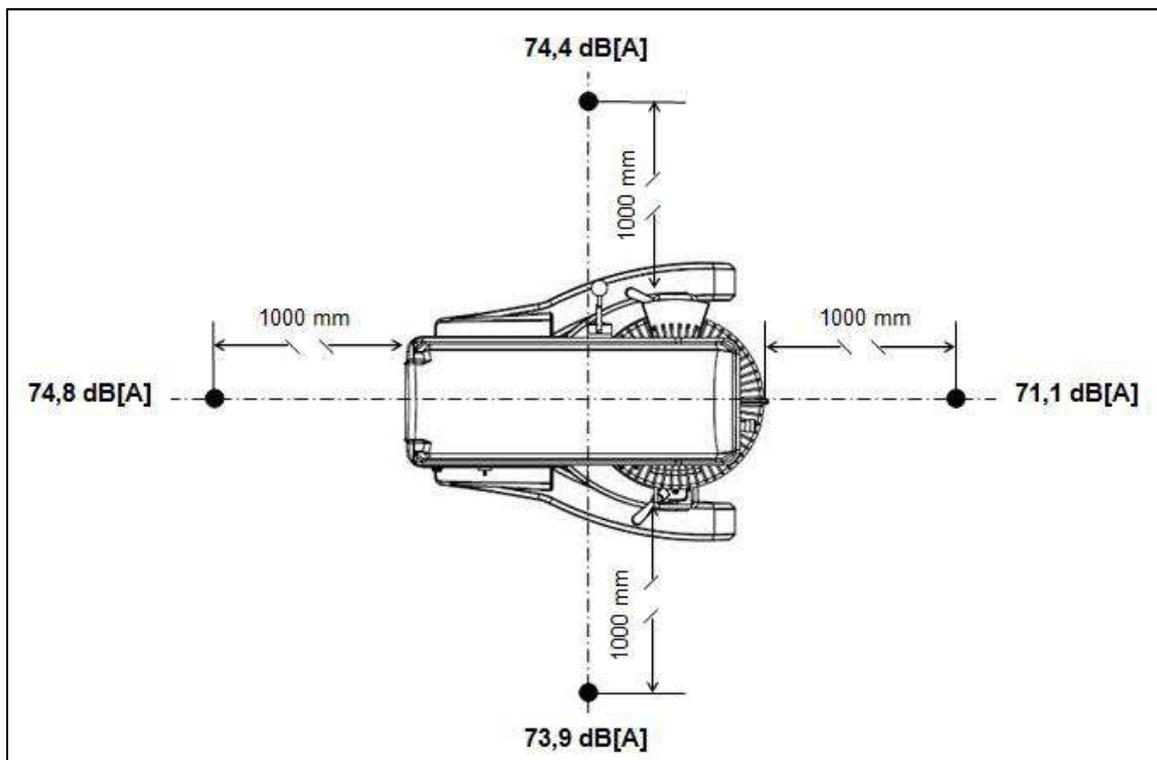
- Vibrations: in correct working conditions, vibrations do not create dangerous situations.
- Electromagnetic compatibility: all components are assembled in compliance with the instructions of the respective manufacturers; it has been deemed that the machine does not generate electromagnetic disturbances in excess of the appropriate level for use in the specified location and that it has a level of immunity to electromagnetic disturbances suitable to allow it to function correctly in this environment; we are currently evaluating the possibility of subjecting a sample machine to a compatibility test at a certified laboratory.
- Sound emission: the figure below shows the LAeq values (equivalent sound level) measured for a planetary mixer mod. BMR40, and the location of the corresponding reading points; the LAeq values indicated can be considered valid for all planetary mixer models referred to in this manual.

The readings were taken with a class 1 sound level meter.

The maximum reading error is 2 dB[A].

Reading conditions (in accordance with the harmonised standard EN 454:2010, Annex C):

- machine operating empty at maximum tool speed (screw)
- microphone positioned 1600 mm from the ground and 1000 mm from the machine
- background noise characterised by LAeq = 43.3 dB[A].
- duration of each reading: > 30 seconds (around 60 seconds)

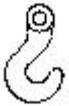


Sound level reading points inside the machine

11. Transport and installation

11.1. Transport and handling

11.1.1. Machine on pallet



Make sure that the lifting equipment capacity is adequate to the load.

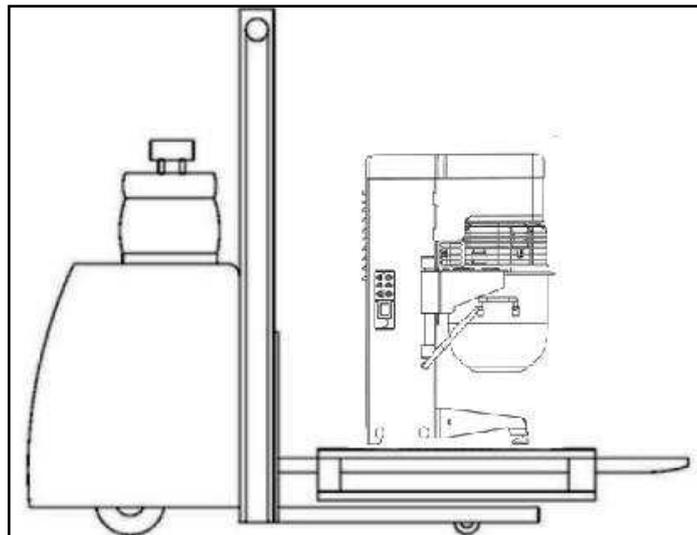
Widen the lifting forks as much as possible and make sure they stick out from the pallet.

Work in an area free from persons and animals.

During movement, always keep the load as close to the ground as possible.

Use the required P.P.E. (e.g. shoes with reinforced tip).

Standards on lifting using a forklift truck: always use a pallet to move the machine.



11.1.2. Machine without pallet

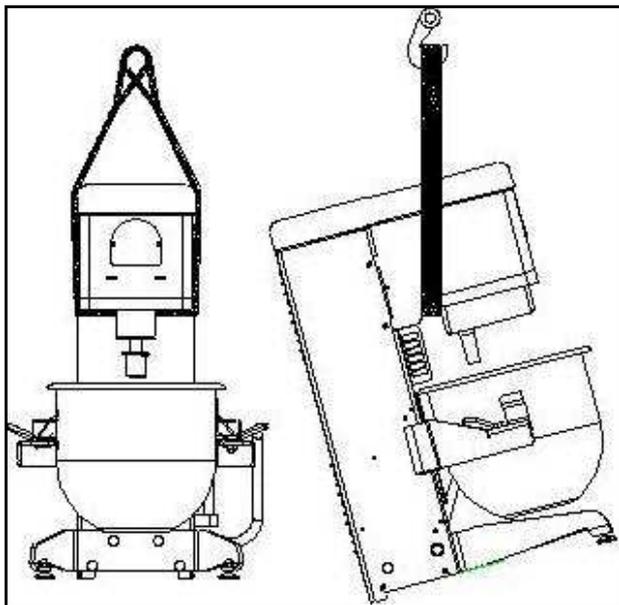


To remove the machine from the pallet, lift it as shown in the figure below, with appropriately robust straps.

Make sure that the lifting equipment is adequate to the load, work in an uncluttered area and, during movements, always keep the load as close to the ground as possible.

Use the required P.P.E. (e.g. shoes with reinforced tip and non-slip sole, gloves and helmet).

During lifting the machine may be slightly tilted (10-15 degrees)



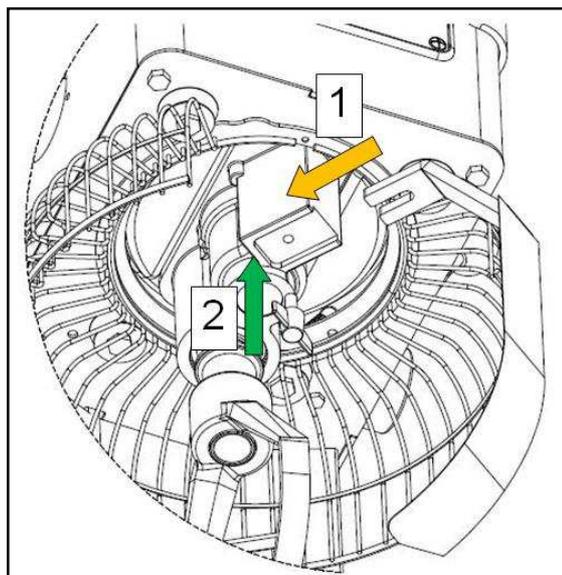
11.2. Description of the adjustment and commissioning operations

11.2.1. Installation



The machine must be positioned vertically on a smooth surface and able to support the weight (floor with resistance above 20 kgcm²). The walls and the floor must be in good condition and easy to clean.

If there is a risk of overturning, anchor the machine to the floor using 4 wedges or bolts with tensile strength greater than 300 kg (M8) with the specific anchors that can be supplied on request.



ROD WIPER (OPTIONAL)

- 1) Insert the rod wiper into the planetary mixer, as shown in the figure;
- 2) Use the handwheel to fasten the rod wiper to the mixer.

11.2.2. Electric line connection



The electrical connection must be done by a qualified electrician, according to the methods and regulations in force in the country of installation.

The machine is supplied with power cable without plug. The cable must be kept away from hot and/or moving parts and must not obstruct the movement or transiting of people and things. The socket into which the plug will be inserted must have adequate features to the maximum current of absorption of the load and comply with the laws and regulations in force (including being correctly connected to the earthing system, which must be periodically checked by an authorised and competent technician).



Make sure that the system voltage and frequency match those on the machine identification plate, incorrect connection voids the warranty.

12. Adopted safety devices

The device adopted for this machine is : PROTECTION GRID



GRID MICRO SWITCH



ATTENTION: Do not use the safety device as STOP

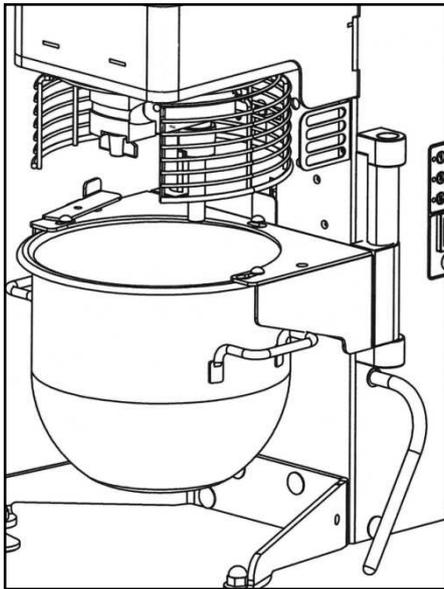
13. Work load and operating instructions

13.1. Operating instructions



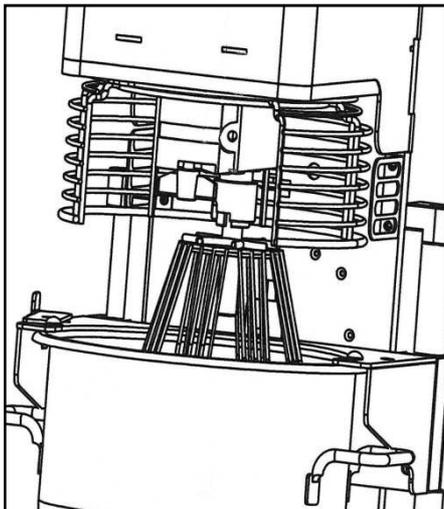
In order to work, the machine needs the bowl to be assembled and the bowl protection grid to be closed, otherwise the safety systems prevent it from operating.

DO NOT REMOVE OR TAMPER WITH THE PROTECTIONS AND ELECTRICAL OR MECHANICAL SAFETY DEVICES FITTED ON THE MACHINE.

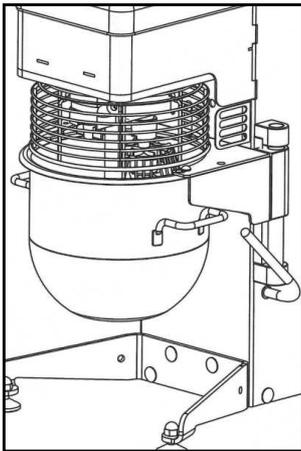


The bowl must be positioned in the machine BEFORE the tools, TILTING IT BY APPROXIMATELY 30°. It must be inserted with the bowl lifting lever lowered, inserting the three bowl reference pins in the specific slots located on the lifting arch. Rotate the bowl clockwise to completely insert it into the slot.

Complete the operation by locking the bowl with the specific handle.

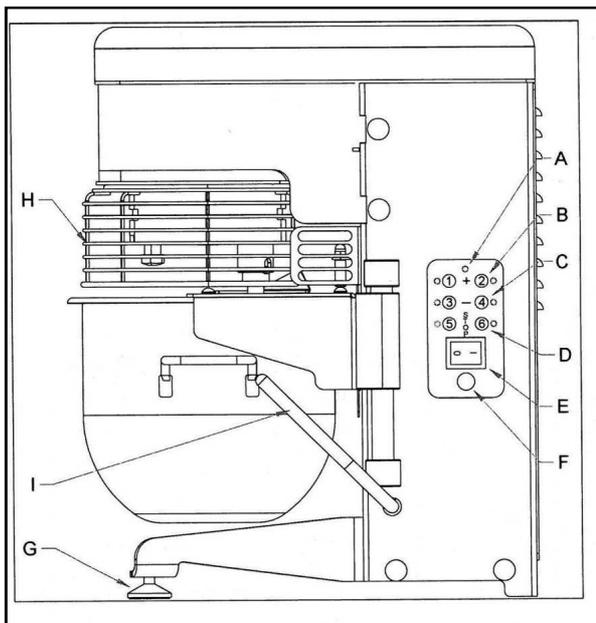


If you have not already done so, rotate the bowl protection grid to the open position and, after having chosen the tool, insert it into the tool carrier shaft. Rotate the tool clockwise, bringing the drive pin into the work position as shown in the figure.



Use the lifting lever to raise the bowl to the working position and close the bowl protection grid.

13.2. Machine operation



A) Master switch LED. Pressing the numbered buttons makes the tool rotate at the speed corresponding to the selected number: speed 1 is the lowest, 6 is the highest.

B) Pair of upper buttons: pressing them at the same time increases the selected speed even up to the maximum RPM.

C) Pair of intermediate buttons: pressing them at the same time decreases the selected speed even up to the minimum RPM.

D) Pair of lower buttons: pressing them at the same time stops the machine

E) Master switch

F) Use status indicator. Indicates the power consumed by the machine.

G) Adjustment feet.

H) Protection grid with safety micro-switch.

I) Bowl lifting lever with safety micro-switch.

To activate the machine, you must:

- Press the master switch in position I.
- Insert the tool.
- Insert the bowl.
- Raise the bowl to the high position
- Rotate the protection grid to the closed position.
- Press one of the numbered speed selection buttons. The machine begins mixing.

13.2.1. Operational Functioning

Press the master switch F (see the illustration above) from the O position to the I position. The machine is powered and the indicator light A comes on. Press button 1 (or another numbered button if you already know the work speed). The tool begins turning at minimum speed. Continuing to press buttons 2-3 up to 6, the speed increases to the maximum.

Pressing the pair of upper buttons (B) at the same time increases the speed gradually up to the maximum. Pressing the pair of intermediate buttons (C) at the same time decreases the speed gradually up to the minimum. Looking through the window (F), you can see the power consumed by the machine.



Attention: do not exceed the consumption engraved on the identification plate. Drive is programmed to supply up to 150% of nominal absorption but after a short time (about 1 minute), it protects itself by switching off, as operating in these conditions is damaging to the machine.

13.2.2. End of processing

To remove the mixture, after having waited for the tool to stop, rotate the grid; use the lifting lever to lower the bowl and rotate the tool anticlockwise to release it, letting it rest on the bottom of the bowl. Free the bowl from the safety handles and remove the whole thing.

Before leaving the machine unattended, remember to switch off the machine master switch and disarm the power supply electrical panel switch.

13.3. Work load

Planetary mixer work load is established by the customer. However, many problems arise by subjecting the mixer to improper use. Exceeding the recommended quantities compromises product quality and the duration of the machine's mechanical parts.



This table is to be considered a general factory recommendation.

The user will establish the actual quantities based on its own recipe.

Contact the manufacturer to request confirmation on your own recipe.

RESPECT THE SPEEDS SHOWN.

As a recommendation on the maximum quantities, compare with the following table:

APPLICATIONS	UNIT OF MEASUREMENT	CHR 7.5	CHR 10	CHR 20	CHR 30	TYPE OF TOOL	SPEED
Bread, pizza and focaccia dough (60% water)	[kg]	0.5/2.5	0.5/3.0	1.0/7.0	1.5/10.0	Spiral	1 - 2
Shortcrust pastry	[kg]	0.5/2.0	0.5/3.0	1.0/7.0	1.5/10.0	Spiral/blade	1 - 2
Meat filling	[kg]	0.5/3.0	0.5/5.0	1.0/10.0	1.5/15.0	Spiral/blade	1 - 2
Russian salad	[kg]	0.5/3.0	0.5/5.0	1.0/10.0	1.5/15.0	Blade + scraper	1 - 2
Whipped egg whites (medium eggs of 60[g])	Number of eggs	6/20	10/30	15/40	15/50	Whisk	MAX
Whipped cream (total litres of liquid)	Liters	0.5/1.8	1.0/2.5	2.0/5.0	3.0/6.0	Whisk	MAX

14. Scheduled maintenance and/or replacement interventions

14.1. Master switch



FOR ANY MAINTENANCE AND CLEANING OPERATIONS, THE MACHINE MUST BE OFF AND DISCONNECTED FROM THE ELECTRIC LINE.

Scheduled maintenance and/or replacement interventions of high wear parts with instructions for the MAINTENANCE AND CLEANING OPERATIONS to be performed.

Scheduled replacement interventions relating to high wear parts with instructions for the MAINTENANCE AND CLEANING OPERATIONS to be performed.

	<p>CHECKING THE INSTALLED SAFETY SYSTEMS AND ELECTRICAL SYSTEM</p> <p>The installed safety systems and the electrical system are subject to periodical checks carried out by a specialised electrician.</p>
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Key of the inspection intervals:INTERVALS	Key of the method of execution of the checks:METHODS
g = daily. m = monthly. s = six-monthly a = annually.	O = Observation: requires simple visual check (e.g. alarm light) F = Function: requires a physical check of the action (e.g. the machine should stop by pressing the emergency button) M = Measurements: a check with specific instrument is required (e.g. check of earthing values).

14.2. Master switch

Purpose: protection of the power supply line.

Function: They are used to connect-disconnect any type of electric circuit, this equipment separates the machinery from the mains, it is placed on one side of the machine.

VERIFICATION:

INTERVAL	METHOD
m	F

14.3. Stop circuit and grid safety micro-switch

Purpose: stop the machine.

Function: the machine stops by pressing the STOP button, ONLY in an emergency does the mobile guard lift. To restore machine operation, the operator must restart the cycle by pressing the START button, after having completely closed the guard. (In case of failure and/or malfunction, see par. 14.5).

VERIFICATION:

INTERVAL	METHOD
g	F

14.4. System checks

Periodically inspect the operation of machine automation and its earthing. Inspect the methods of operation, the safety functions, the contacts on the terminal board and the integrity of the cables, of the luminous indicators and of the earthing.

VERIFICATION:

INTERVAL	METHOD
s	F, M

14.5. Routine maintenance



Check the external components of the machine: tools, bowl, protection grid.

Check the belt wear after the first few months of processing.

Check bolt tightening of the entire machine.

INTERVAL	METHOD
s	F, M

14.5.1. Tensioning of belts and chains



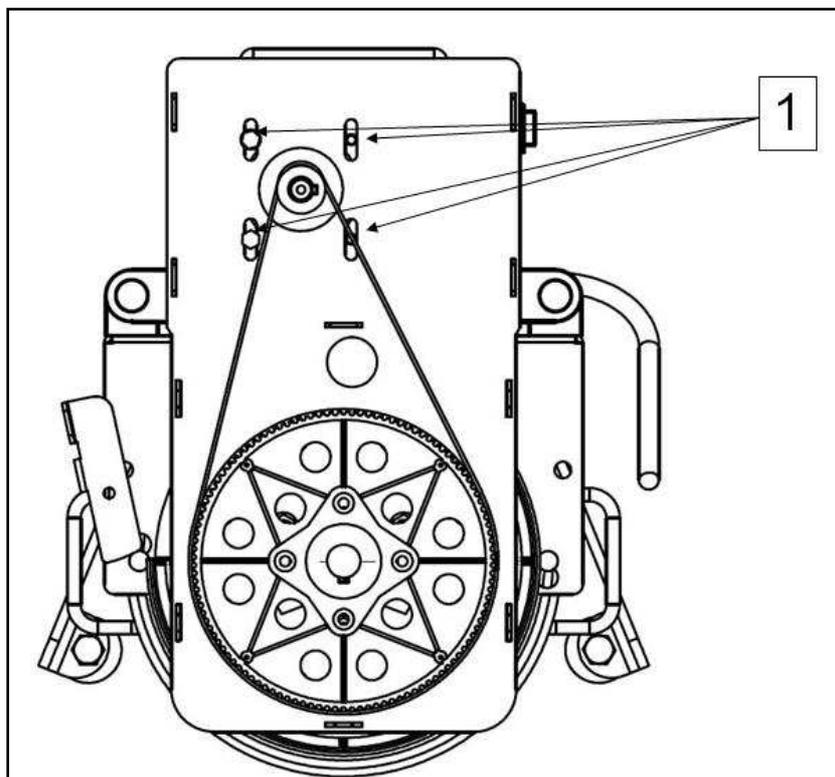
FOR ANY MAINTENANCE AND CLEANING AND ' MUST HAVE THE MACHINE OFF AND DISCONNECTED FROM POWER LINE .

Before any operation below shows , wear PPE such as: shoes with reinforced toe and non-slip soles , gloves



To replace and / or tension the belt motor , remove the screws which hold the upper casing with the structure , support the upper cover on a flat surface . Loosen the screws (1) of the support plate . Leveraging on plate loosens or tightens the belt . Once assured the right tension , tighten the screws (1) and reposition and secure the rear cover and then the upper and turn on the machine for a test .

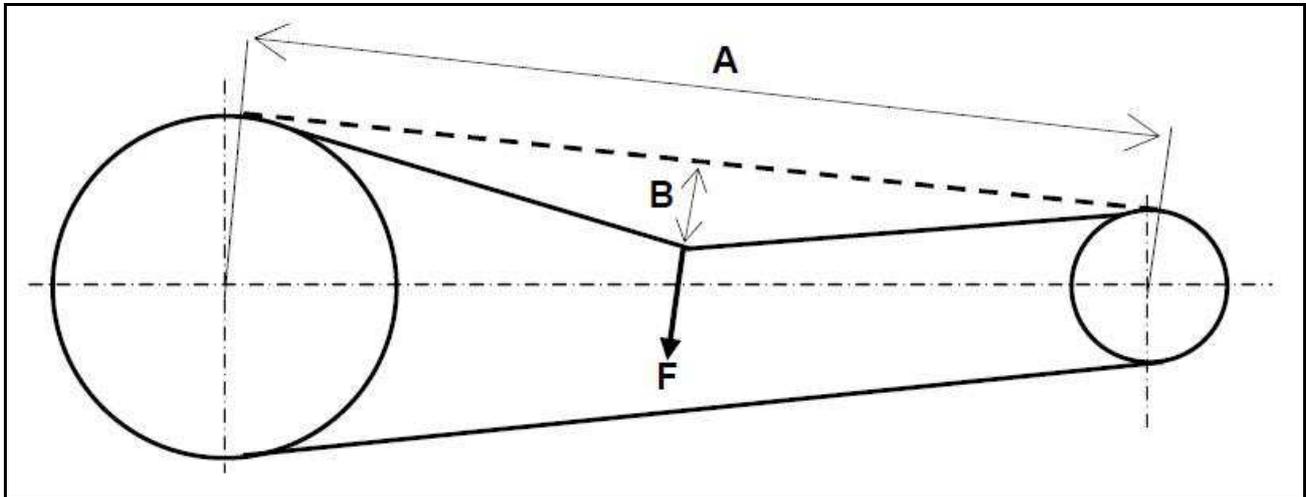
To ensure the right tension see Chap . 14.4.2 .



INTERVAL	METHOD
s	F, M

14.5.2. How to tension belts and chains

-) Describe how to properly tension a drive belt is very complicated



- measure the length of free section *A* in mm
- halfway on free section *A* and perpendicularly to the same, apply force *F* required to bend the belt (arrow *B* (mm) equal to $A/100$ (e.g. if $A=500$ mm, $B=5,0$ mm), use a millimetric reference to measure arrow *B*;
- the belt tension is correct if the force *F* applied for arrow *B* is between 12 and 18 N; measure the force using a dynamometer or, even better, a tensiometer, which normally allows detecting arrow *B*; both are readily available on the market.

For further information contact the seller or consult these sites: http://www.sitspa.it/it-IT/Trasmissioni_a_cinghia_Poly-V.html e <http://www.megadyneveneto.it/index.php/it/component/k2/item/223-pluriband>.

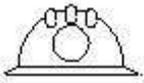
-) Describe how to properly tension a drive chain is also very complicated.

The chain tension is correct when, by pushing it with your thumb halfway on the free section, it is not rigid (otherwise it could break), but gives slightly and when released it goes back as it was; the chain meshes must be free enough to rotate on the pins but not sag (otherwise they might come out of the gears).

If the user reasonably doubts his ability to to adjust the chain tension, do not use the machine and contact the manufacturer as soon as possible for instructions.

<http://www.ognibenechaintech.it/>.

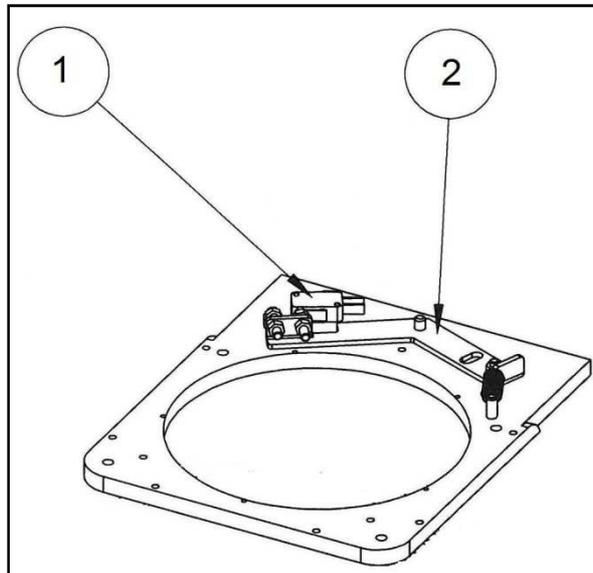
14.6. Special maintenance



For operations that are not specifically mentioned in the manual, you must refer to personnel authorised by the seller. To replace the motor and electronic boards or following a machine fall, contact our customer service (for on-site assistance or an in-factory inspection).



Abnormalities - replacing microswitch shelter : you must remove the casing protection gear (see No. 15 of the table in chap. 15) , loosen the screws and lower it .
Check the microswitch (1) , in case of failure and / or failure to change . During the disassembly / assembly of micro control the safe distance with the micro plate (2) . To wire the switch with the card , see wiring diagram (chap . 18) . Redo operations backwards written above to reassemble the car . Try the machine .



It is noted that both the screws of the cam which ones are blocked by means of the micro Bblock230 product, which is a product suitable to the braking of screws and / or nuts to come loose due to vibration, (the Bblock230 is a product high strength, It can only be removed by heating the article to 250 ° C (with flame or oven); obviously verify that the article does not contain flammable material at this temperature). Before using this Bblock230 make sure the micro is in the correct position lock, put the horn on the head and tighten, replace the top cover and tighten the screws. Turn on the machine, if it works properly must stop FOUR seconds dall'alzata the safety gate. Ensured that the machine works correctly, release the switch, remove the top cover, unscrew a nut of micro, put thread locker and tighten the nut and do the same for the other screw. Replace the cover and tighten the screws



In case of damage to the power cable , replace it with a H07RN / F with section 3x1.5 mm² .
Electrical work : must be performed by a qualified electrician , making reference to the enclosed diagrams at the end of the manual .

14.6.1. Replacing the bowl lift micro-switch

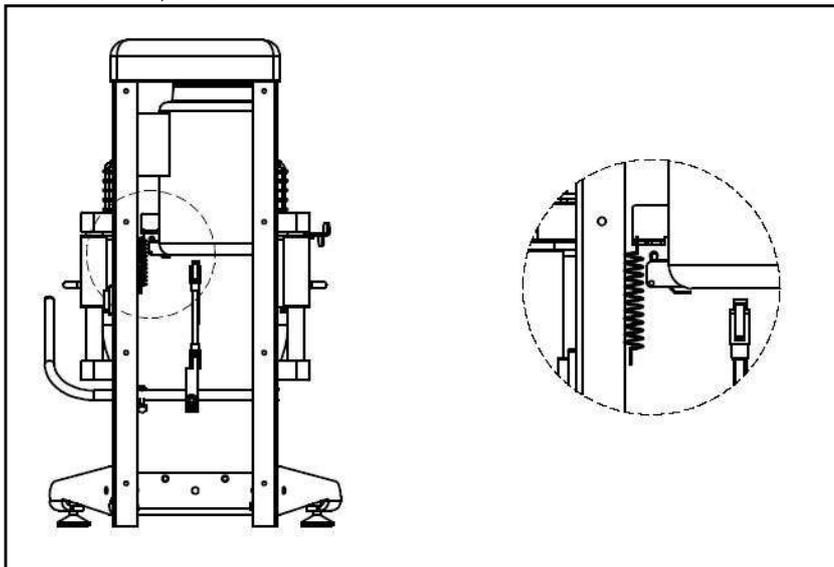


FOR ANY MAINTENANCE AND CLEANING OPERATION, IT IS COMPULSORY FOR THE MACHINE TO BE SWITCHES OFF AND DISCONNECTED FROM THE MAINS.



Abnormalities - replacing microswitch lifting bowl: you must remove the top cover and the rear casing.

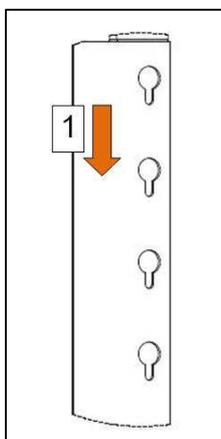
Check if the switch works , otherwise replace it by loosening the screws . Replace the cover and tighten them to the structure , and test the car



14.6.2. Replacing the rod wiper (optional)



To replace the rod wiper, first remove the rod wiper rod from the holding block by losing the handwheel (see chapter 11.2.1). Once removed, as shown in the figure, push the rod wiper down (1) and remove it, insert the new rod wiper and push upwards to lock it in place.



14.7. Electrical maintenance



The machine is designed and constructed so as to avoid the formation of electrostatic charges , including through an effective grounding ; all ground conductors are connected to separate terminals disposed on the collector is in turn connected to earth (IEC 60204-1 , p.to 13.1.1) .As for the residual stresses that remain in the inverter after zeroing power supply, a special IED present on the inverter signals , remaining turned on, that the residual voltage to the capacitors is > 50 VDC and , dying , that this voltage has fallen below the above-mentioned 50 VDC ; after the indicator light is recommended to wait for further 5 to 10 minutes and make adequate instrumentation with a presence test terminal voltage of the DC - BUS before touching the terminals of the inverter and the parties thereto electrically connected (eg . terminal engine serviced by inverter ")

14.8. Machine cleaning

Daily Checks



Always keep the machine clean to prevent the formation of micro-organism colonies that can alter the end product and be harmful to health. It is also important that flour does not deposit on moving parts, thus creating annoying squeaks and abnormal wear.

FOR ANY MAINTENANCE AND CLEANING OPERATIONS, THE MACHINE MUST BE OFF AND DISCONNECTED FROM THE ELECTRIC LINE.



Cleaning: the machine is not spray-proof; it must not be cleaned with running water or compressed air, to minimise dust movement. To vacuum the dust, use a professional vacuum equipped with adequate filters depending on the grain size of the flour.

Cleaning the bowl: use a damp cloth and/or PLASTIC spatulas with water only.

N.B.: it is not advisable to use metal spatulas to clean the bowl.

Cleaning the tools: use a cloth damp with after to prevent contaminated areas from forming.

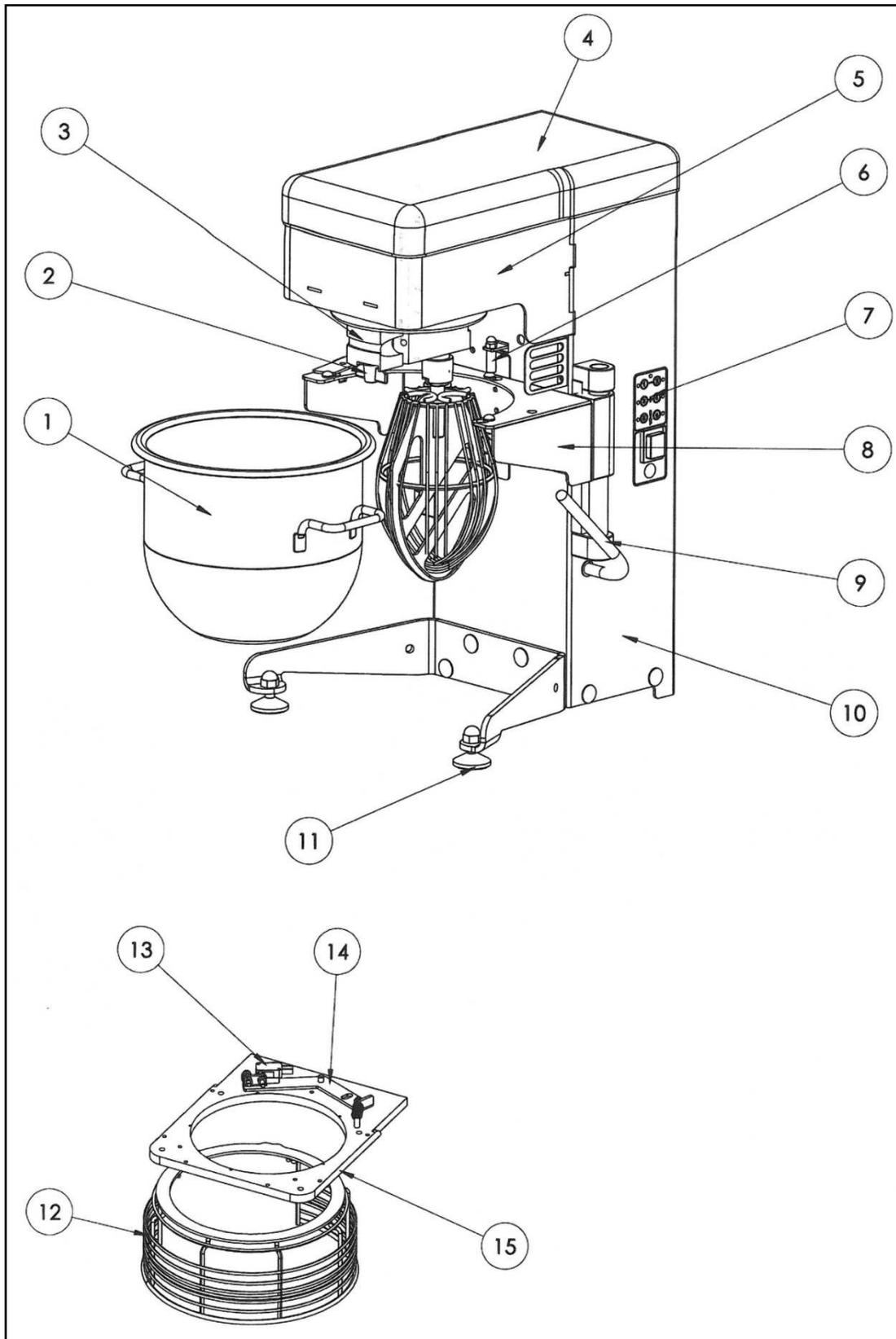
INTERVAL	METHOD
g	F, M

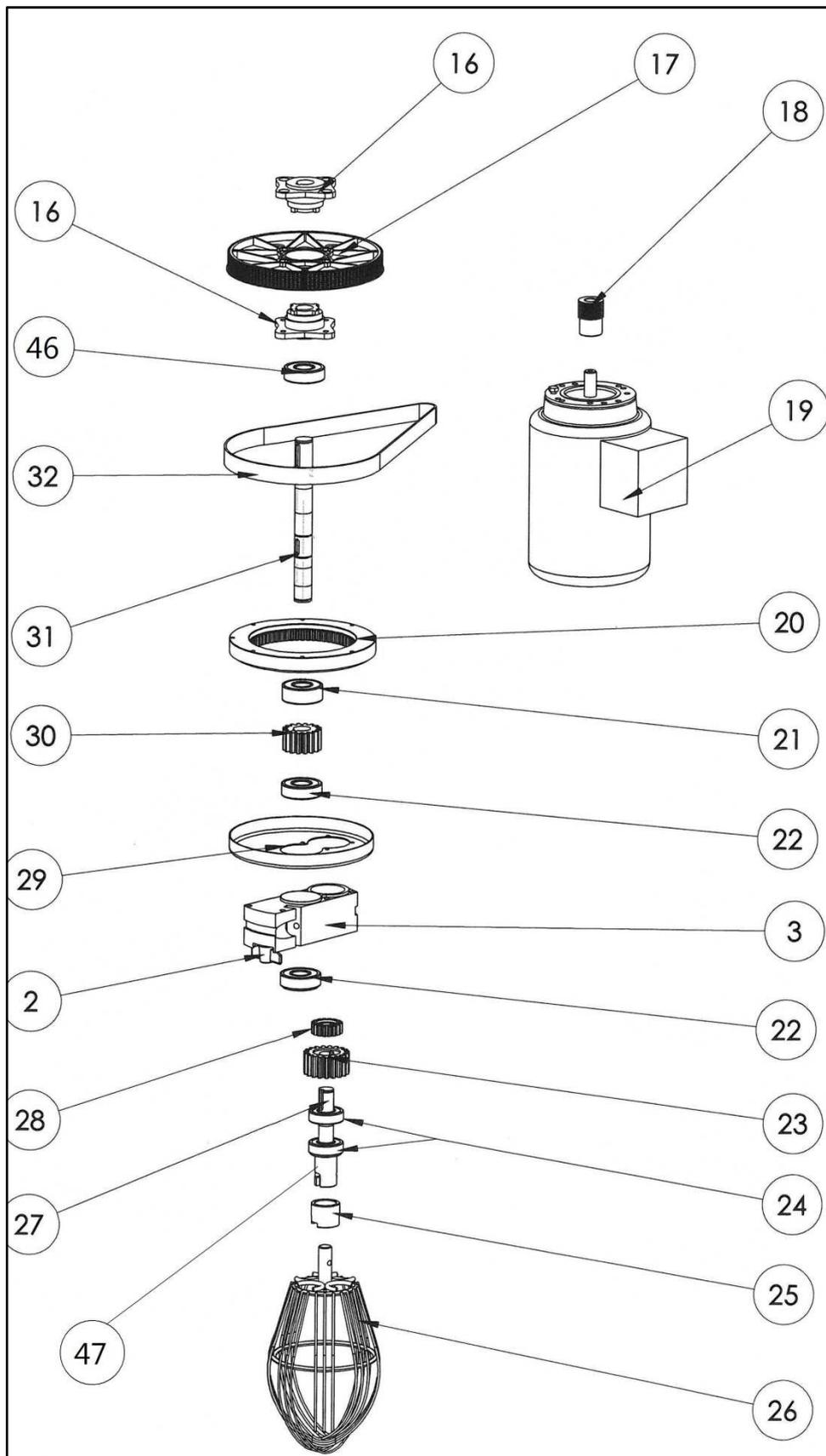
15. Troubleshooting

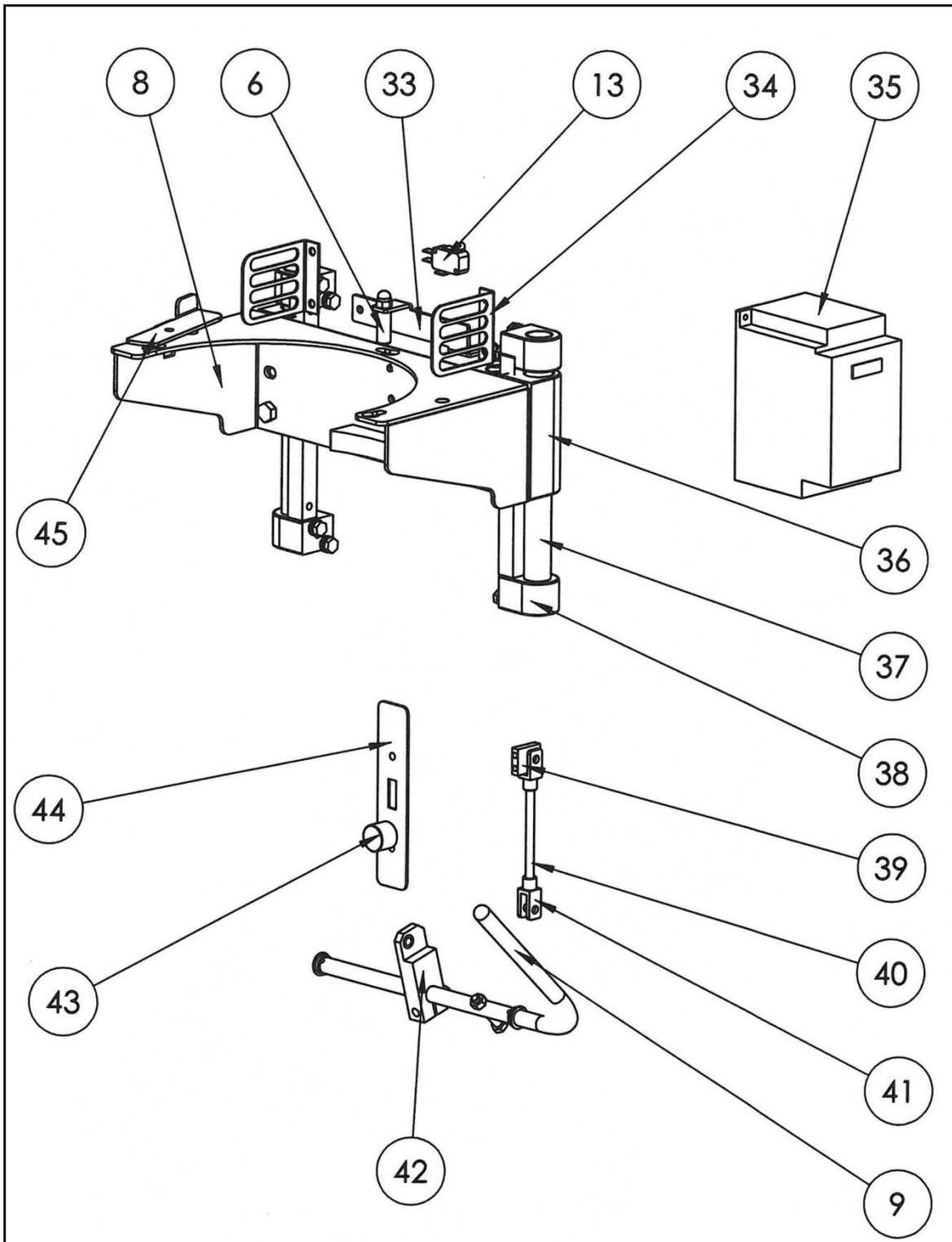
15.1. Machine lock-up and necessary solutions

Operating anomalies	Possible causes	Repairs	Performed by
Turning the master switch into position 1, the indicator light does not come on.	Plug not inserted correctly or wires detached	Check connection	Personnel authorised by the employer and/or qualified personnel in possession of the technical knowledge of the work.
Pressing the START button, the machine does not start.	1) The mobile guard open. 2) Faults with the magnetic safety sensor.	1) Return to the closed position. 2) Replace the magnetic sensor.	Personnel authorised by the employer and/or qualified personnel in possession of the technical knowledge of the work.
Resistance when lifting the bowl.	1) Lack of lubricant on sliding poles;	1) Grease the poles.	Personnel authorised by the employer and/or qualified personnel in possession of the technical knowledge of the work.
The spiral does not rotate smoothly	1) Loose belt . 2) Belt worn	1) Tighten the belt . 2) Replace the belt .	Personnel authorised by the employer and/or qualified personnel in possession of the technical knowledge of the work.

16. Machine exploded view



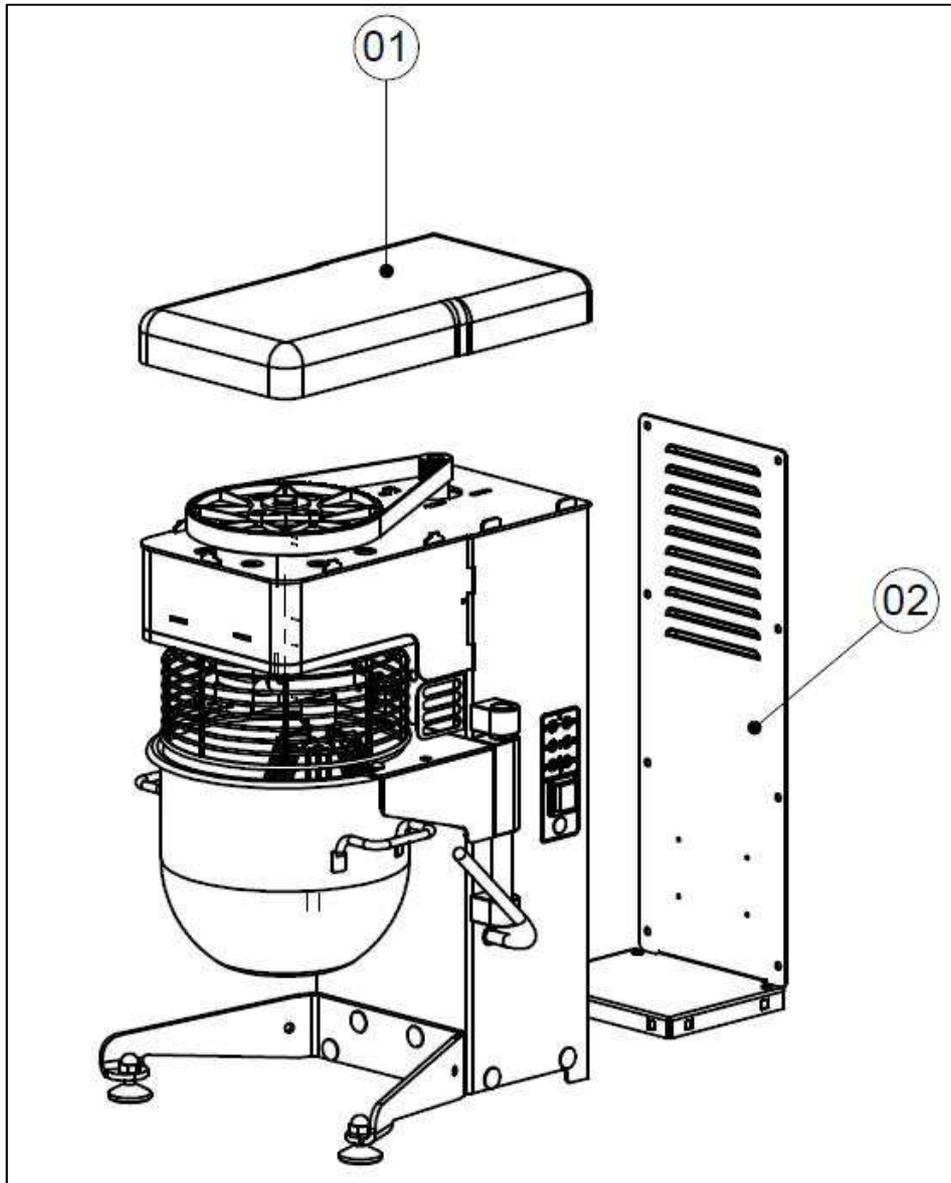




Pos	Q.ty	Description	Drawing
1	1	Chef 7.5 PLANETARY BOWL	04175018-1
2	1	M8x20 WING NUT	14002301
3	1	CHEF 7.5 PLANETARY	85175039-1
4	1	UPPER CASING	175045
5	1	HEAD METAL SHEET	01175083
6	1	BOWL PRESENCE PIN	01175101
7	1	CONTROL PANEL	175069-1
7	1	ELECTRONIC BOARD	25001480
8	1	BOWL CARRIER ARM	01175007-4
9	1	LIFTING BLADE	01175013-1
10	1	INCREASED COLUMN	01175113
11	2	M10 FOOT	14002801
12	1	PROTECTION GRID	87175019
13	2	CROUZET MICRO-SWITCH + LEVER	28001301/1302
14	1	BOWL MICRO-SWITCH PLATE	175023-1
15	1	GEAR PROTECTION CASING	175022-2
16	2	Φ 20 HUB	01175050
17	1	CONDUIT PULLEY	01175049
18	1	MOTOR PULLEY	01175014
19	1	HYDRAULIC MOTOR	11000514
20	1	INTERNAL RING GEAR	01175097-1
21	1	4024 20x47x18 BEARING	13000362
22	3	6204 20x47x14 BEARING	13000315
23	1	PLANETARY GEAR	01175096
24	2	6203 17x40x12 BEARING	13000314
25	1	TOOL LOCKING RING	85175036-1
26	1	BLADE	01175091
26	1	SPIRAL	01175092
26	1	WHISK	01175030-1
27	1	PIN FOR TOOLS	01175088
28	1	PLANETARY GEAR	01175095
29	1	PLANETARY COVERING	85175040-1
30	1	PLANETARY SHAFT GEAR	01175055
31	1	PLANETARY SHAFT	01175038-2
32	1	POLY-V 301J 8 BELT	12003960
33	1	MICRO-SWITCH PLATE	02175014
34	2	PROTECTION SHEET METAL	02175025

Pos	Q.ty	Description	Drawing
35	1	INVERTER	25005928
36	2	BOWL GUIDE BLOCK	01175009
37	2	BOWL GUIDE COLUMNS	175047
38	4	BOWL GUIDE COUPLING PROFILE	01175053
39	1	BOWL LIFTING BLOCK	01175011
40	1	M6 THREADED BAR	DIN
41	2	M6 FORK	23010203
42	1	BOWL MOVEMENT BLOCK	01175012
43	1	BOWL CONTRAST ROUND BAR	02175054
44	1	SHATTERPROOF COVERING SHEET METAL	02175054
45	1	BOWL LOCKING PLATE	02175008
46	1	6026 BEARING	13003106
47	1	TOOL CARRIER SHAFT	85175035-3

16.1. Casing exploded view



Pos.	Q.ty	Description	Drawing
1	1	UPPER CASING	03175045
2	1	LOWER CASING	86175117

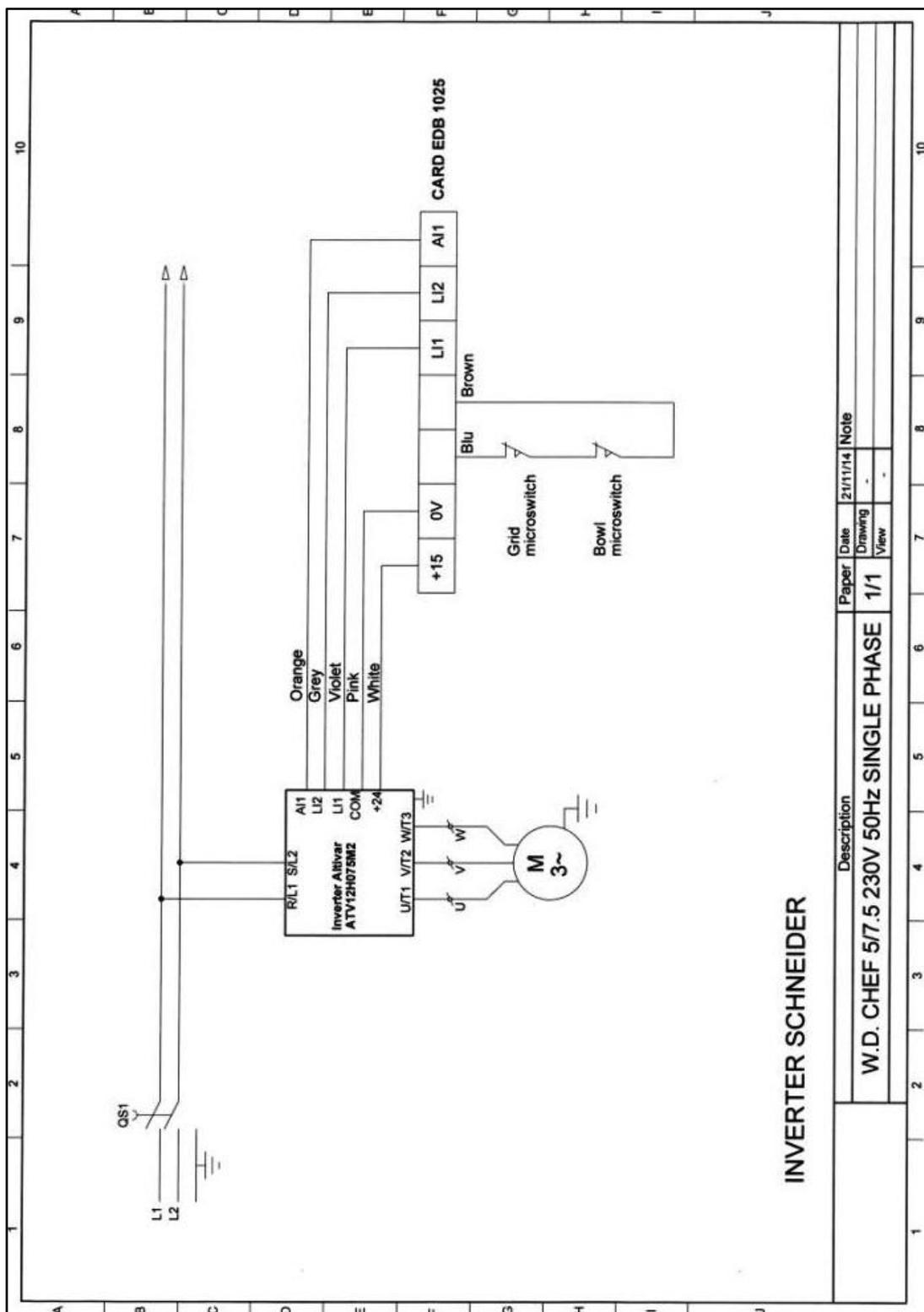
17. Recommended spare parts

Description	Q.ty	Drawing
TOOL CARRIER SHAFT	1	85175035-3
RING LOCK TOOLS	1	85175036-1
COMPLETE BLADE	1	01175091
COMPLETE SPIRAL	1	01175092
COMPLETE WHISK	1	01175030-1
POLY - V BELT	1	12003944
BEARING 4024	1	13000362
BEARING 626	1	13003106
BEARING 6203	2	13000314
BEARING 6204	3	13000315

17.1. Recommended spare electrical parts

Description	Q.ty	Drawing
ELECTRIC BOARD	1	25001480
MICRO SWITCH CROUZET	2	25001311
INVERTER	1	25005928
BIPOLAR SWITCH	1	25003060

18. Electrical Drawing



19. Demolition and disposal

Machine decommissioning is the direct responsibility of the purchaser, who must keep to the local standards and regulations. Mechanical and electrical parts disassembly must be entrusted to skilled personnel.

19.1. Obligations of informing users

Information form for "professional" type products users



INFORMATION FOR USERS

Pursuant to art.26 of Leg.Decree 14/03/2014, no. 49 "Implementation of Directives 2012/19/UE, on waste of electrical and electronic equipment (WEEE), as well as waste disposal"

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

The manufacturer plans and manages separate collection of this equipment at the end of its life. Users who wish to dispose of this equipment must, therefore, contact the manufacturer and follow its system for separate collection of the equipment at the ends of its life.

Proper separate collection to then send the equipment no longer in use to recycling, treatment and environmentally compatible disposal contributes to preventing possible negative effects on the environment and on health and favours reusing and/or recycling the materials that make up the equipment.

Illegal product disposal by the owner results in the application of the administrative sanctions required by the standard in force.