

GSD Grater

Operating Manual



MODEL GSD

GB GRATER

OPERATING MANUAL



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GUARANTEE

The machine is guaranteed 12 (twelve) months from the sale date.

The guarantee covers the machines reparations acquired c/o the authorized sale points, if it is demonstrated that they are faulty in the materials or in the assembly, to the conditions here follow described:

1. For guarantee gets on the free change of all parts that are resulted manufacturing defect. The guarantee decades if not coupled from fiscal ticket or invoice certifying the purchase and for the following cases:
 - a) Machine tampering or damaging due to negligence;
 - b) Machine use with non conformance modalities to the warnings described in the instructions handbook;
 - c) Damages caused from the non environment suitability in which the device works and from phenomenon not dependent from the machine normal functioning (voltage values irregularities and frequency in the net plant);
 - d) Reparations interventions performed from people or centers not authorized from the manufacturer,
2. The intervention request in guarantee will have to be performed only in the sale points or authorized laboratories;
3. The machine will have to be free port returned to the manufacturer for the reparation and the transportation expenses are always charged to the receiver,
4. It is excluded the machine change nor the guarantee prolongation following the intervention for damage;
5. The manufacturer doesn't answer for direct or indirect damages of any nature to people or things for the improper use of the machine or for lacked use during the time occurring for the reparations.

MODEL	GS / GSD / GSM / GD / GG
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Use Instructions manual	
Issue	November 2014

CHAP. 1. CONTENT ORGANIZATION AND CONSULTATION MODALITY

MANUAL PURPOSE

MANUAL IMPORTANCE

The present instruction manual for the use is to be considered as **integral part of the machine**:

1. Must be kept for all the machine life.
2. Must be coupled with the machine in case of its ceasing.
3. Besides to show all useful notices for the operators, contains (collected in specific chapters) the electric diagrams that will be used for the possible maintenance interventions and repairation.

SCOPE / MANUAL PURPOSE

The instructions manual for the use **has the purpose** to furnish to the commitment all necessary information so that, except of an adequate supplied machine use, is able to manage the same in the more autonomous way and possibly safe.

Besides the present manual has been written with the purpose to supply **indications and warnings** to know the supplied machine, to understand its principles and functioning limits. For possible doubts you can call the Authorized Assistance Center.

RECEIVERS

The present instruction manual for the use, delivered in number of 1 copy together with the machine, is supplied as integral part of the machine, is turned both to the operators both to the skilled technicians qualified to the installation, use and maintenance.

The prevention and protection service responsible of the commitment and **the additional employees**, to whom is assigned the machine, must take vision of the present instructions manual for the use, with the aim to adopt all technical and organizational measures

RESPONSIBILITY



- If the present manual endures damages or is lost, it is possible to request a copy to the Authorized Assistance Center.
 - The present manual **reflects the technical state** during the machine manufacturing; the manufacturer reserves the right to update the production and of consequence other manual issues, without the obligation to update productions or previous manuals, if not in particular cases regarding the health and the people safety.
 - Pay particularly attention to the **residual risks content** present on the machine and the prescriptions to which the operators must keep.
 - The manufacturer **is the responsible** for the machine in its original configuration.
 - The manufacturer **isn't the responsible** for damages caused from the improper use or not correct of the machine and documentation or for damages caused from the imperative standards violation, negligence, lack of experience, imprudence and the not respect of regulation standards on behalf of the employer, of the operator or the maintenance man and for **every possible damage**, caused from an irrational, improper and/or wrong use
 - The manufacturer isn't the responsible for the consequences caused from the not original spare parts use or of equal characteristics.
 - The manufacturer is the responsible only for the information showed in the manual original version in Italian language.
 - The prescriptions non-fulfillment contained in this manual will cause the guarantee immediate decay.
- The factory responsible, that supervision to the working activities, in the field of the foreseen respective attributions and competence, must:
- Carry out the foreseen safety measures;
 - Make informed the operators about the specific risks whom are exposed and bring to their knowledge the prevention essential standards;
 - Prepare and require that the single operators observe the safety standards and use the protection means put at their disposal;
 - Work an operator, contemporary, on this product.

SIMBOLOGY MEANING

Here follow it is clearly specified the symbols and definitions meaning, which will be used in the present document.

ENGLISH



DANGER

Show the danger presence for who works on the machine and for who is in the vicinity, so the indicated activity must be performed in accordance with the actual accident prevention standards and with the indications showed in the present manual.



PRECAUTION

Show a warning on useful information and/or further recommendations and/or shrewdness about the actual operation.



ATTENTION

Show an operation to perform with attention to avoid damage to the machine.

CHAP. 2. GENERAL INFORMATION AND CHARACTERISTICS

USE DESTINATION AND MANUFACTURE PARTS

The grater here follow called "machine", is designed to:

1. **Grate tough cheese, bread and biscuits.**

The machine is constituted from an electric motor inserted in a unique fusion (basic machine body). In any versions the fusion can be recovered from a bonnet (hulled machine body).

The product to grate is loaded manually inside the grater mouth placed in the superior side of the machine and always manually, acting the pressure through its handle, the product is pushed against the grater roll.

The product load must happen in moderate quantity to avoid that lowering the pressure the machine doesn't start, due to the safety micro switch placed in the pressure block.

The grater roll, which can be stamped or milled, cannot be removed from the machine.

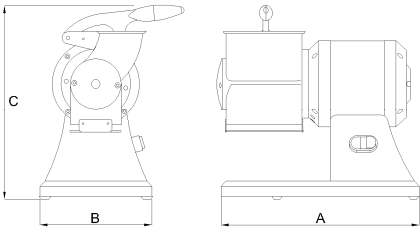
In accordance with the functioning requirements and production, the machine can be constituted with different optional parts.

The machine is supplied with the identification plate on which the following data are showed:

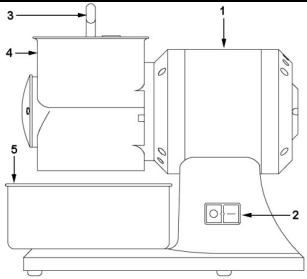
Mod.		Hp	
Nr.		kW	
1N PE AC. 230V 50Hz		A	
Kg.	2011	kA	

[fac simile]

TECHNICAL AND MANUFACTURING DATA

TECHNICAL DATA	MODEL				
	GS	GSD	GSM	GD	GG
Motor power (kW) / (Hp)	0.75 / 1	0.75 / 1	1.1/ 1,5	0.75/ 1	3/ 4
Grater mouth internal size (mm)	140x75	140x75	140x75	140x75x2	285x150
Grater timetable production (kg/h)	50	50	50	50	100
Mass (kg)	17	17	20	20	40
Maximum sizes: A x B x C (mm)	380 x 220 x 380	380 x 220 x 380	420 x 220 x 380	540 x 220 x 380	700 x 400 x 600
					
Continue acoustic power level considered equal to A	Minor of 70dBA				
Current nature – frequency	Cfr. Machine plate				
Full charge current	Cfr. Machine plate				
Use nominal voltage	Cfr. Machine plate				
Auxiliary circuits voltage	AC 24V – DC 24V				
Mass and neutral	TT e TN				
Protection degree	IP X3				
Use place	Inside				
Machine positioning	Working ground used in the food field of height included between 900/1100mm from the trampling level of adequate capacity, with a free circulation space of at least 800mm				
Max environment air temperature	+40°C				
Requested minimum illumination	500 lux				
Product directive conformance	2006/42/CE, 2006/95/CE and successive modifications and integration, Reg. 1935/2004				

GROUP	MODEL				
	GS	GSD	GSM	GD	GG
Basic machine body, grater on the left	●		●	●	
Basic machine body, grater on the right		●		●	●
Increased motor			●		
Motor from 3 kW					●
Stamped grater roll	●	●	●	●	●
Milled grater roll	●	●	●	●	

GROUP	EXAMPLE
1. Machine body 2. Control switch ON / OFF 3. Pressure handle 4. Grater mouth 5. Collect container	 <p>Basic machine body</p>

NORMAL USE, IMPROPER USE, NOT CORRECT USE OR FORBIDDEN

The machine described in the present instructions manual for the use is foreseen to be driven **from an only operator** skilled and prepared on residual risks, but with the competence, in safety matter, of maintenance employees.



In its **NORMAL USE**, and reasonably foreseeable, the machine can be used only to:

1. **Grate tough cheese, bread and biscuits.**



The machine must not be used **IN IMPROPER WAY**; in particular:

1. It must not be used for domestic uses,
2. It must not functioned with parameters different from those showed in the technical characteristics table,
3. For every use of the machine with modalities different from those showed in the present manual, the manufacturer declines every responsibility,
4. The user is responsible of the damages resulting from the lacked exercise conditions observance in accordance with the greed technical specifications and order confirmation,
5. Not tamper or damage intentionally nor remove or hide the labels.



The machine must not be used **IN NOT CORRECT WAY or FORBIDDEN** so some damages or injuries could be caused for the operator; in particular:

1. It is forbidden **to move the machine** when it is connected to the electric feeding;
2. It is forbidden **to draw the electric feeding cable or the machine** to disconnect the feeding plug,
3. It is forbidden to **put weights** on the machine or on the electric feeding cable,
4. It is forbidden to **put the electric feeding cable** on sharp parts or with burn danger,
5. It is forbidden the machine use with the damaged and not integer **electric feeding cable or with the control devices**;
6. It is forbidden to **leave the machine off** with the electric feeding cable connected with the feeding plug,
7. It is forbidden to **leave the loaded machine unguarded**;
8. It is forbidden to **insert any type of object** inside the motor ventilation cap;
9. It is forbidden to **put the machine above different objects from the working ground** used in the food field of height included between 900 - 1100mm from the **trampling level**,
10. It is forbidden **insert every type of object** under the machine base or place clothes or other things between the machine support pressure feet and the working ground,
11. It is forbidden the **use of inflammable substances, corrosive or harmful for the cleaning**,
12. It is forbidden to **plunge the machine** in water or in other liquids;
13. It is forbidden the **not authorized personnel use** and with clothes different from that showed for the use,
14. It is forbidden to **introduce in the grinding neck and in the grater mouth, products or objects having characteristics** different from those showed in the normal use, such as for example bones, frozen meat, not food products, or other objects as scarves, etc...,
15. It is forbidden to **introduce in the grated product exit zone, every object**, as for example knives blades, etc...,
16. It is forbidden the functioning **with the protection shelters and fixes not blocked correctly or removed**;
17. It is forbidden the **partial removal** of the protections and of the danger signals.
18. It is forbidden the functioning without that all the **precautions about the residual risks elimination** have been adopted on behalf of the user,
19. It is forbidden to **smoke or use free flame devices** and manipulate incandescent materials, unless some suitable safety measures aren't adopted
20. **It is forbidden to activate the starting button "I" when the pressure handle is raised.**



The user is however responsible of the damages resulting from the lacked observance of the specified normal use conditions. For possible doubts you can enquire at the Authorized Assistance Center.

CHAP. 3. SAFETY INSTRUCTIONS

INTRODUCTION



The lacked standards and safety procedures applications can be danger and damage sources.

The machine means bound in the use for the respect, on behalf of the final user, of:

1. all rules, of insertion in the environment and of people behaviour, fixed from the laws and/or applicable standards; with particular reference to the fixed plant upstream of the supplied machine and for its connection / functioning;
2. All further instructions and use warnings making part of the technical / graphic documentation annexed to the same machine.



Except where differently specified, the **personnel which performs the installation interventions, connection, maintenance, reassembly, and reuse, damages or breakdowns, demolition and dismantling** must be a **skilled personnel** qualified in safety matter and educated on the residual risks, with the competencies, in safety matter, of the maintenance employees.

ENVIRONMENTS, WORKING AND PASSING PLACES

The work environment must answer to the directive 89/654/CEE requirements. In the working area foreign object must not be present. **The employer**, in the directive 89/391/CEE respect, concerning the measures realization turned to promote the safety and workers health improvement during the work, must provide to eliminate or reduce the showed residual risks as foreseen in the present manual.

WARNINGS ON THE RESIDUAL RISKS

RESIDUAL RISK DUE TO THE FIXED PROTECTIONS REMOVAL, INTERVENTIONS ON BROKEN/WORN PARTS



For any evenience **the operator must not try to open or remove a fixed protection or tamper a safety device.**

In the phase of equipment, maintenance and cleaning, and **during all further manual operations** that happens introducing the hands or other body parts in the machine dangerous areas, a residual risk remains due above all to:

1. **Knocks with machine manufacturing parts,**
2. **Grazing and/or abrasion with machine rough parts,**
3. **Sharp pain with the sharpened parts,**
4. **Cut with tools sharpened parts.**

Besides, the operator and the maintenance man **must be skilled for the intervention connected to the manual operations with open protections,** must be trained on the joined consequent risks and must be authorised from a responsible person.

PROTECTION DEVICES ON THE MACHINE



The machine protections and safety devices must not be removed.

If they must be removed for extraordinary maintenance requirements **some measures will have to be immediately adopted ready to put in evidence and to reduce at the possible minimum limit the danger.**

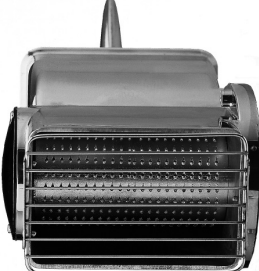

The putting back in its place of the protection or of the safety device must happen as soon as the reasons, that have made necessary their temporary removal, are stopped.

The machine transmission parts are completely isolated by means of fixed protections which don't allow the access for none kinematical chain.

For all **safety functions** including the control and check systems parts joined to the safety, some well-tested components and safety principles have been used.

Grater group:

1. Taking into account of the machine use modality and its use destination, the moving elements aren't isolated from fixed protections, moving protections or other safety devices.
2. On handle and pressure group a micro switch is placed, which stops the grater roll rotation when it is possible to access through the grater mouth;
3. In the inferior zone of the grater group in correspondence of the grated product exile a grating form fixed protection is present, which prevent the fingers access towards the grater roll.
4. The machine is equipped with electronic motor brake that allows to the grater roll to stop within 2 sec.

Grating form Fixed protection		Pressure handle with micro switch	
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CHAP. 4. TRANSPORTATION, PUT ON SERVICE AND USE



The machine management is allowed only to the authorized personnel and opportunely educated and endowed of a sufficient technical experience.

Before to switch on the machine perform the following operations:

- Read with attention the technical documentation,
- Know what protections and emergency devices are available on the machine, their location and functioning.

The not authorized use of commercial parts and accessories making part of the protections and safety devices can cause some malfunctions and the ranger situation beginning for the operators. **The operator must besides** have received an adequate training.

WORKING POSITIONS AND OPERATORS TASKS

As described in the instructions manual for the use, the machine is designed to be driven from an **operator** skilled and informed on the residual risks, but with the competences, in safety matter, of the maintenance employees.

The normal working zone of the operator is:

1. The machine anterior zone near to the grater mouth (defined loading zone) in normal conditions of functioning for the manual loading operations of the food product, with the fixed covers closed and blocked;
2. The machine anterior zone near to the grater group inferior zone in normal conditions of functioning for the manual withdrawal operations of the food product stored in the collect container, with the fixed covers in closed and blocked position

TRANSPORTATION, HANDLING AND STORING

All transportation and handling operations must be performed from **informed and trained personnel** and **must have read and understood** the safety prescriptions showed in the present instructions manual for the use. Occur:



1. Perform the machine handling and transportation always when you find it uncharged;
2. Verify that the lifting means are able to support the loading weight and overall dimensions in safety conditions and that are approved and subjected to a regular maintenance,
3. Adopt all necessary measures to assure the means and loads maximum stability in relation to their masses and barycentre,
4. Avoid to make suffer to the machine rude shaker or accidental collisions during the moving and the loading,
5. Perform the handling with continue movements, without pulls or repeated impulses.

PACKING REMOVAL – OPENING MODALITY

PACKING DECRPTION – HOW GET RID OF THE PACKING MATERIAL

The machines, are packaged so that the seepage / liquids insight, organic matters or alive beings is avoided: it is represented from a covering in polyethylene around the machine, and all inserted in a cardboard box of adequate size. The empty spaces within the box are occupied from the fill material.

Don't waste the packaging in the environment, but restore it for possible transportations or to address it to the recycling agencies.

The evaluation and the management with the aims of the biological compatibility of the products used in the packaging are of the user competence and responsibility.

It is an employer obligation **to be acquainted of the actual laws in own country and work so that to observe these legislations.**

It is forbidden and besides liable to fines, leave the machine and the electric equipment in the environment.

PREPARATION PRELIMINARY OPERATIONS

STABILITY

The machine stability is designed so that, in the foreseen functioning conditions, taking into account of the climatic conditions, is such as to allow the use **without reversal risk, fall, or inopportune movement**.

Taking into account of the conformation and its position, the machine results to be intrinsically steady without fastening needs to the working ground.

ELECTRIC FEEDING

The electric feeding connection must be in conformance with the country legislation in which is used. **The electric feeding** so must be maintained in conformance with the following technical prescriptions:

1. **The electric feeding** must be always of type and have an intensity corresponding to the specifications indicated in the machine plate. If excessive voltages are applied, some components will be damaged irreparably,
2. **A differential device must be foreseen** coordinated with the protection circuit, respecting the legislation, the legislative and regulation disposals in force in the installation country;
3. **The electric feeding cable outside the machine cover** must be made pass in the spaces prepared from You and **adequately protected**;
4. If present **the neutral conductor (N)** before feeding the electric equipment, as for You its continuity must be guaranteed (connected and available).
5. Before to feed the electric equipment, as for You must be guaranteed the continuity of the green yellow conductor of the protection equipotential circuit.

ELECTRIC FEEDING SECTIONING DEVICE

The feeding sectioning device, as comparable from what described in the power circuits diagram delivered with the electric equipment, is supplied for the **machine feeding** unique source.

In case of incompatibility between the net socket and the device plug **change the socket with another type suitable from maintenance personnel**.

The feeding sectioning device allows to **separate (insulate) the machine electric equipment** from the feeding, with the aim to make possible the interventions fulfillment without electric shocks risks.

The sectioning device presents two possible positions:



OFF o "disconnected", the electric equipment results sectioned from the electric feeding



ON o "connected", the electric equipment results connected to the electric feeding

GRATER ROLL ROTATION



The operations here follow indicated must be performed from the machine maintenance man (**skilled personnel in the electric maintenance field of the industrial machines**).

For machines fed with three phase voltage (3 PE AC 400V 50Hz), slacken lightly the blockage wheel so as don't make a strong pressure on the drilled plate as for the cutting knife. During the switching on verify that the Archimedean screw / grater roll **rotates in anticlockwise sense**.

If there is an clockwise rotation, switch off the machine disconnecting the plug, disassembly it, disconnect two phase conductors and invert them of position.

FUNCTIONING DESCRIPTION

The control devices are designed and manufactured so as much sure and reliable and resistant to the service normal stresses, to the foreseeable strains and to the external agents. Besides they are clearly visible, locatable and marked from a suitable marking. Here follow the main **control devices** are showed:

TYPE / COLOR	REFERENCE / DESCRIPTION
Button / black	"0" / button for the machine stop control
Button / white	"I" / button for the machine start control
Bright indicating light / white	Signals the machine condition start/switch on stop/switch off

STARTING

The machine starting is possible only **with a voluntary action on the control device foreseen for this aim**: white button "I" for the machine starting control (bright indicating light switched on).

STOP

For the stop control push the black button "0". In case of **momentary or extended stop**, before to get in function the machine, all food products must be removed within the machine (bright indicating light switched off).

FUNCTIONING SAFETY

If the machine is under stress, or is submitted to too long functioning times or submitted at overloaded, the same stops immediately for the thermal protection functioning. In this case **wait that it is completely cooled** before proceeding to the starting function.

VOLTAGE LACKING

In case of electric feeding breaking or if the machine is disconnected from the electric net, this last one will be able to be restarted only following the starting function, **after the electric feeding back or the reconnection to the electric net.**

PRESSURE OPENING

Raising for the handle the grater group pressure, the machine stops immediately for the entry in function of the safeties, motor brake and micro switch. The machine can be restarted lowering the pressure up to the height that doesn't allow the fingers introduction towards the grater roll. If the pressure handle is kept raised for more 30 seconds the machine stops automatically and the bright indicating light switches off. To perform again the work, restart the starting procedure.

CONTROLS AND VERIFICATIONS BEFORE STARTING

VERIFICATION / CONTROL	MODALITY AND CHECKS
Check that: Extraneous objects aren't on the machine, inside the grater mouth and in correspondence of the exile zone of the grated product	Sight control of the indicated parts, to check of objects or extraneous bodies lacking as for example different tools, clothes, etc... and that there isn't however the food product. In case of presence, provide with their removal.
Check the cleaning: ➤ of the grater mouth, of the pressure and the grater roll ➤ of the machine external surface	All indicated parts surfaces, before the machine use must be checked visually to verify their cleaning. For the sight check of the grinding group internal parts, provide with its disassembly. In case of molds presence or other type of dirtiness, provide with the cleaning procedure in accordance with the chapter 5 indications
Check the integrity: ➤ of the fixed protections, ➤ of the machine body, of the grater mouth, of the pressure and the grater roll	All fixed protections, etc., must perform the function for which have been foreseen. Indicated parts sight check to verify their integrity in their surface external part. The parts must be however changed at the first erosion signals or breaking.
Check the functionality: ➤ of the control system parts / control about the safety; ➤ of the control devices.	All devices must perform the function for which have been foreseen. Control directly the devices so that these ones determine the waiting function. The actuators and all parts must be however changed to the first erosion signals or breaking.
Check the absence: ➤ of strange noises after the starting	During the functionality checking of the control devices, if there are strange noises, due for example to a seizing or mechanical breaks, stop immediately the machine and activate the maintenance service.
Check the absence: ➤ Of oil trails both on the machine support ground both in the Archimedean screw	Both during the working, both at the end of every work, both in the assembly moment of the grinding group, check the oil trails absence in the indicated parts. If there are some fluid drops stop immediately the machine and activate the maintenance service.

For any intervention type or for the parts change that are damaged, **activate the maintenance service.** The possible change must happen with manufacturer original products or at least of quality, safety and equivalent characteristics. For analysis contact the Authorized Assistance Center.

PUT IN FUNCTION

The machine operator can put in function the machine following in order the under reported indications:

1. Controls positive result for the preparation preliminary operations.
2. Controls positive result for the electric feeding.
3. Plug connection in opportune current socket,
4. For the functioning of the **GRATER GROUP**:
 - a. Checks positive result for the grater roll correct rotation.
 - b. Checks positive result / verifications before the starting.
 - c. Finalized checks positive result and verify the all safety conditions respect.
 - d. Place a gathering basin in the machine anterior zone in correspondence of the grated product exit zone,
 - e. Put in the machine left side and start the machine acting the control device of start "I",
 - f. Introduce manually the food product within the grater mouth and drive it towards the grater roll lowering the pressure roll,
 - g. At the end of the food product introduction, or when in the basins the product is not more left, stop the machine acting the control device of stop "O".



It is recommended to make not work the machine in vain, without the food product.

SWITCHING OFF

In succession, the switching off must follow what here under indicated:

1. Before the switching off wait the food product exile conclusion from the grater mouth inferior zone;
2. Stop the machine acting the stop control device "O";
3. Disconnect the machine plug from the feeding socket,

4. Perform the cleaning interventions.

UNBLOCK IN CASE OF OBSTACLE

During the working, or during the grater group rotation, due to the introduction of products excessively hard and dry, the machine could block.

The same situation can determine after an electric feeding break, or when the machine is stopped with inside the food product.

To be able to resume normally the working, the blocked food product must be removed manually.

CHAP. 5. MAINTENANCE, BREAKS RESEARCH AND CLEANING

MAINTENANCE MAN REQUIREMENTS

With the term “**maintenance**” must not be understood only the periodical check of the machine normal functioning but also the analysis and the consequent remedy of all causes that for any matter put it out of service. It is absolutely necessary that for the **maintenance, cleaning, parts change and breaks research** activities performed from the user, **this work is entrusted to skilled personnel**, competence and authorized from the employer.

All operations of **maintenance, cleaning and parts change**, none excluded, must be definitely performed with the machine completely stopped and insulated from the external feeding sources.

MAINTENANCE PRESCRIPTIONS

PROTECTIONS REMOVAL AND/OR PROTECTION DEVICES

For any interventions described in the present chapter, **it is necessary to remove from their position some fixed protections**. The removal can happen only from the maintenance man.

At the end of the interventions, these protections must be replaced and blocked in their original position, with the fastening systems, which were foreseen before the intervention.

The maintenance responsible must disconnect completely the machine, as here follow reported, before to proceed with the removal of a fixed protection and/or with the element change.

INSULATION FROM THE EXTERNAL FEEDING SOURCES

Before to perform any operation of **maintenance, cleaning and parts change**, the external feeding sources must be sectioned and insulated.



Position on “zero” the protection device placed upstream of the electric equipment feeding line.



Disconnect the general sectioning device and provide to protect the plug with proper systems

BREAKS OR DAMAGES RESEARCH AND MOVING ELEMENTS UNBLOCKING

Here follow are indicate the interventions for the **breaks or damages research and moving elements unblocking** which can be **performed from maintenance men**.

TYPE	POTENTIAL CAUSE/S	MODALITY AND COMPARISONS
Net voltage lacking	General Blackout	Contact the electric energy distributor
	Fuses or magneto thermals intervention place upstream of the machine feeding line	After having eliminated the causes that have determined the protection device intervention, restore it. In case of problem persistency contact an electrician technician.
Functioning intervention	Protection device intervention inside the machine	Contact an electrician technician: after having eliminated the causes that have determined the protection device intervention, restore it. In case of fuses intervention , change them with types of the same model, calibration and intervention curve.
	Grater group handle lifting	Lifting the grater group pressure handle, the machine stops immediately for the entry in function of the safety micro switch. Low the pressure up to the height that doesn't allow the fingers introduction towards the grater roll to start the machine. If the pressure handle is kept raised for more 30 seconds the machine switches off automatically to restart the work lower the handle and push the white button “I” for the machine start control.
	Cause/s not identifiable	Contact directly the <u>Authorized Assistance Center</u>

The machine doesn't function: the Archimedean screw or the grater roll don't rotate	Feeding voltage lacking.	Check and restore the electric energy.
	Sectioning devices set on "OFF".	Turn the sectioning devices in the position "ON"
	Intervened fuses or not functioning magneto thermals.	Change the intervened fuses, check the magneto thermal switches state.
	Lacked running button functioning	Check the START button efficiency and eventually contact directly the <u>Authorized Assistance Center</u> .
	Thermal intervention due to the overheating	Wait the complete cooling before the machine restarting
	Damaged micro switch	Contact directly the <u>Authorized Assistance Center</u>
	Control electronic card block	Disconnect the machine from the net for some minutes.

EXTRAORDINARY MAINTENANCE

For the intervention of **extraordinary maintenance**, consequent to breaks or revisions or mechanical and electric damages, it is necessary an intervention request directly to the Authorized Assistance Center.

The instructions about the extraordinary maintenance don't appear in the present instruction manual for the use and so must be explicitly requested to the manufacturer.

CLEANING



It is forbidden to clean by hand the organs and the elements in motion.

All cleaning interventions must be started only and exclusively, **after having unloaded the machine with the food product in working and having insulated from the electric feeding source and from external energy.**

The machine, the electric equipment and the machine board components **must not be ever washed utilizing water, and not in any kind of jets form and quantity; so, without "secchio" nor "rubber" nor "towel".**

Don't put ever directly the machine in the sink or under the tap.

The machine hygiene level classification and the associated equipment, for the foreseen use, is 2 (two): machine that, after an hygiene risk evaluation, is in conformance with applicable international standards requirements, but requests a programmed disassembly for the cleaning.

FREQUENCY	PERSONNEL	MODALITY
At the end of every shift work and however before the daily use	Operator	<p>All the surface and the machine parts destined to come in contact with the food product or with the food zones (hopper internal surface, machine neck and the grinding group, the pestle, the pressure, the grater mouth and the grater roll) and the jets zones (machine external surface) must be cleaned and disinfected with the under reported modalities. For the grinding group disassembly activities see the previous descriptions.</p> <ul style="list-style-type: none"> ➤ Scrape the surfaces from the possible food product residuals (for example with plastic scrapers); ➤ Clean all the food zone surfaces and jets zone with a morbid dampened clothes (not draining) with detergent diluted in hot water (also common soap for dishes is good). Don't soak them. With a towel clean inside the grinding mouth. Use specific products for steel, which must be liquids (not in cream or pastries however abrasive) and above all must not contain chlorine. Against the fat substances the denatured alcohol. ➤ Rinse with cleaned hot water and successively dry all food zone surfaces and jets zone with soft clothes that don't lose coats. <p>PERIODS OF LONG INACTIVITY</p> <ul style="list-style-type: none"> ➤ During the machine long inactivity periods provide to pass vigorously on all steel surfaces (especially if stainless) a clothes soaked of Vaseline oil so that to spread a protective veil. <p>THINGS DA NON FARE BEFORE OR DURING THE CLEANING:</p> <ul style="list-style-type: none"> ➤ Enter towards the moving elements without to <u>be previously checked of their stop</u>; ➤ Enter towards the moving elements without have stopped it <u>in safety stop</u> (blockage in zero position of the electric feeding sectioning devices) <p>PRODUCTS NOT TO USE:</p> <ul style="list-style-type: none"> ➤ <u>Compressed air with jets towards the zones with flour warehouses</u> and in general towards the machine; ➤ <u>Vapor equipment</u>; ➤ <u>Detergent that contains CLORO (also if diluted)</u> or its compounds as: the bleach, the muriatic acid, products to clear the drain, products for the marble cleaning, in general decalcifying, etc ... can attack the steel composition, staining and oxidizing it unavoidable. The only above described products fumes can oxidize and in any case corrode the steel; ➤ <u>Steel wool, brushes or abrasive discs</u> produced with other metals or alloys (ex. Common steel, aluminum, brass, etc...) or tools that have previously cleaned other metals or alloys, that except to scratch the surface. ➤ <u>Detergents in abrasive dust</u>; ➤ <u>Fuel, solvents or inflammable and/or corrosive fluids</u>; ➤ <u>Substances used to clean the silver.</u>

CHAP. 6. SELLING



The crossed container symbol on the machine shows that the product at the end of its useful life must be collected separately from other refusals



If we decide to not use ever the machine because it is obsolete, damaged or worn, its out of service must be entrusted to specialized and trained personnel. At the end of the dismantling activities all identification plates and other document must be destroyed. The machine can be sold without the possibility to reduce it in small pieces; it is sufficient to disconnect the main groups that compose it and to send them for the scrapping.

Don't sell the machine like mixed urban refusal, perform the waste separation.

The machine collection or harvest systems are:

- Collection through distributor consortium
- Delivery possibility to the machine distributor equivalent to the purchasing certificate of a new machine.

In the machine there aren't dangerous substances with potentially negative effects on the ambient and on the human health. It is fundamental that the purchasers contribute to the reuse, to the recycling and to the other forms of machine restoring. It is the employer obligation to be aware of the actual laws of own country and work so to be comply with these legislations.



It is forbidden and besides liable of penalties to leave the machine and the electric equipment in the ambient.

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CHAP. 7. MANUFACTURING MATERIALS

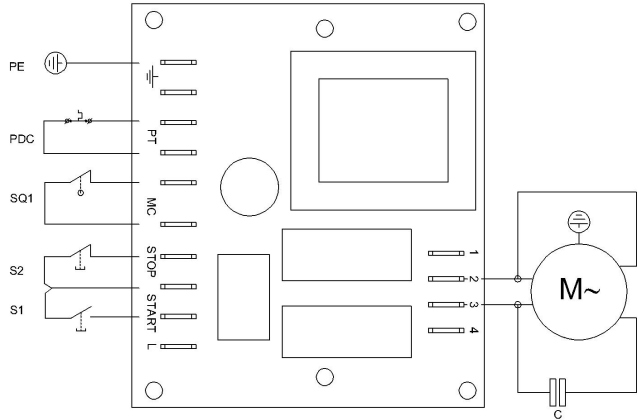
In accordance with the functioning and production requirements, the machine can be constituted with different typology of manufacturing materials.

GROUP	MATERIALS TYPOLOGY			
	Stainless Steel 18/8	Stainless Steel AISI 304	Aluminum treated for foods	Stainless treated for foods
Machine body	•			
Stamped grater roll		•		•
Milled grater roll		•		
Pressure, handle, grater mouth			•	

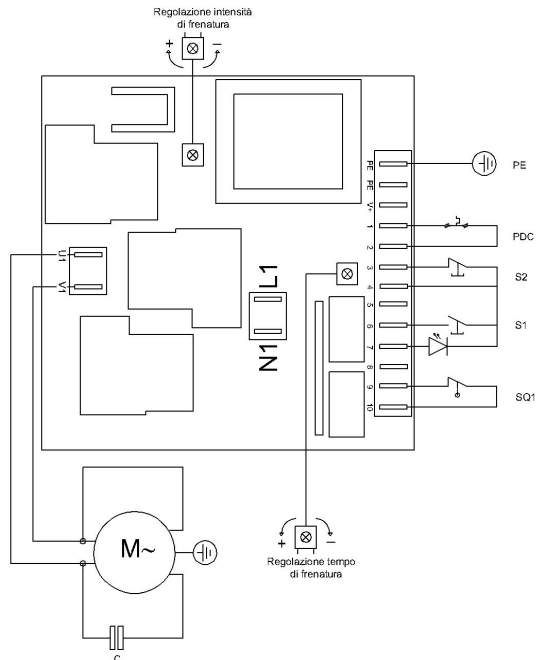
**SCHEDE ELETTRONICHE
ELECTRONIC CARDS
FICHAS ELECTRÓNICAS
FICHES ELECTRONIQUES
LEITERPLATTEN
ЭЛЕКТРОННЫЕ СХЕМЫ**

GS – GSD – GSM – GD (1 N PE AC 230V 50Hz)

AZP1208 – TGFM02LC

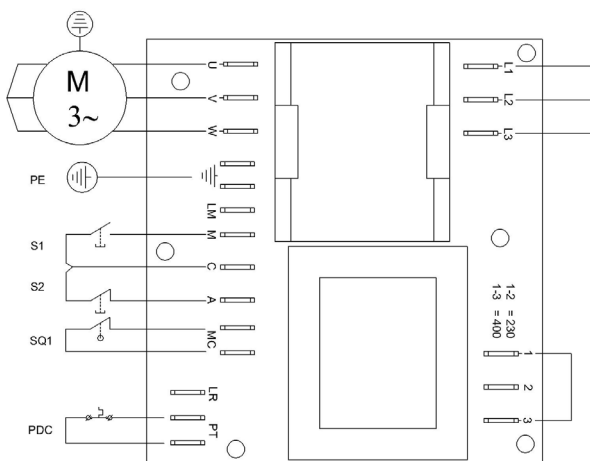


TGFR11



GS – GSD – GSM – GD (3 PE AC 400V 50Hz)

TGM8LS – SR1208



U -V-W = motore
PE = conduttore di terra
S1= pulsante di start
S2 = pulsante di stop
SQ1 = micro interruttore
PDC = protezione termica
L1-L2-L3 = 3 AC 400V 50Hz
1-3 = alimentazione 400V
1-2 = alimentazione 230V

U -V-W = motor
PE = ground conductor
S1= start button
S2 = stop button
SQ1 = micro switch
PDC = thermal protection
L1-L2-L3 = 3 AC 400V 50Hz
1-3 = feeding 400V
1-2 = feeding 230V

U -V-W = motor
PE = conductor de tierra
S1= botón de start
S2 = botón de stop
SQ1 = micro interruptor
PDC = protección térmica
L1-L2-L3 = 3 AC 400V 50Hz
1-3 = alimentación 400V
1-2 = alimentación 230V

U -V-W = moteur
PE = conducteur de terre
S1= poussoir de start
S2 = poussoir de stop
SQ1 = micro-interrupteur
PDC = protection thermique
L1-L2-L3 = 3 AC 400V 50Hz
1-3 = alimentation 400V
1-2 = alimentation 230V

U -V-W = motor
PE = erdungsleiter
S1= start-Taste
S2 = stopp-taste
SQ1 = mikroschalter
PDC = thermoschutzschalter
L1-L2-L3 = 3 AC 400V 50Hz
1-3 = speisung 400V
1-2 = speisung 230V

U -V-W = мотор
PE = заземляющий провод
S1= кнопка старт
S2 = кнопка стоп
SQ1 = микровыключатель
PDC = термическая защита
L1-L2-L3 = 3 AC 400V 50Hz
1-3 = питание 400V
1-2 = питание 230V

TGFR9LS

