



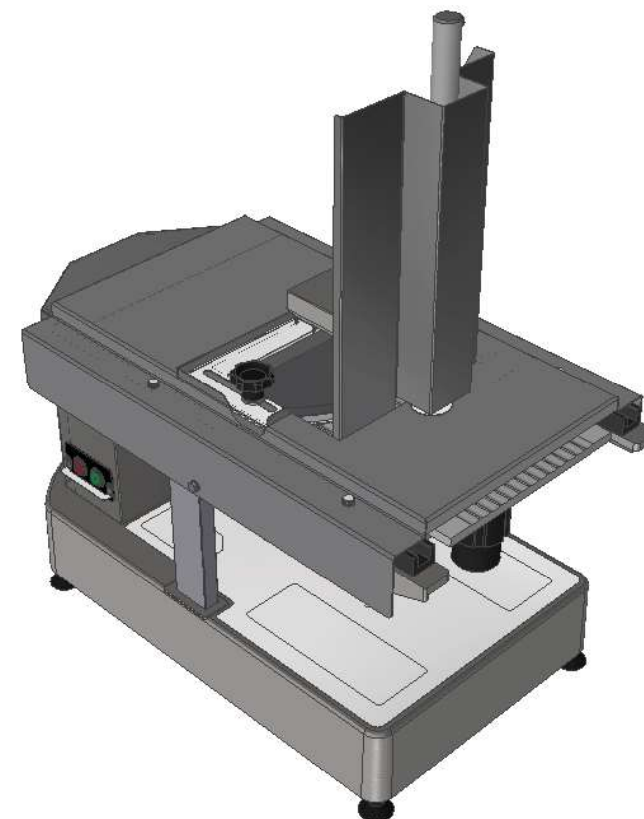
INSTRUCTION MANUAL

Metalúrgica Skymssen Ltda.
Rodovia Ivo Silveira 9525
Volta Grande
88355-202 Brusque/SC/Brasil
www.skymssen.com - Fone: +55 47 3211 6000
CNPJ: 82.983.032/0001-19 - IE 250.064.537

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- WE MANUFACTURE A COMPLETE LINE OF PRODUCTS IN ADDITION TO THE EQUIPMENT DESCRIBED IN THIS DOCUMENT. PLEASE CONSULT A LOCAL RETAILER FOR MORE INFORMATION.
- TECHNICAL ASSISTANCE, REPRESENTATIVES AND RESELLERS ARE AVAILABLE FOR THIS PRODUCT THROUGHOUT BRAZIL'S NATIONAL TERRITORY.
- DUE TO THE FACT THAT OUR PRODUCTS ARE CONSISTENTLY UNDER DEVELOPMENT, THE INFORMATION CONTAINED HEREIN MAY BE MODIFIED WITHOUT PRIOR NOTICE.



STAINLESS STEEL, AUTOMATIC HORIZONTAL
SLICER WITH 260 mm BLADE

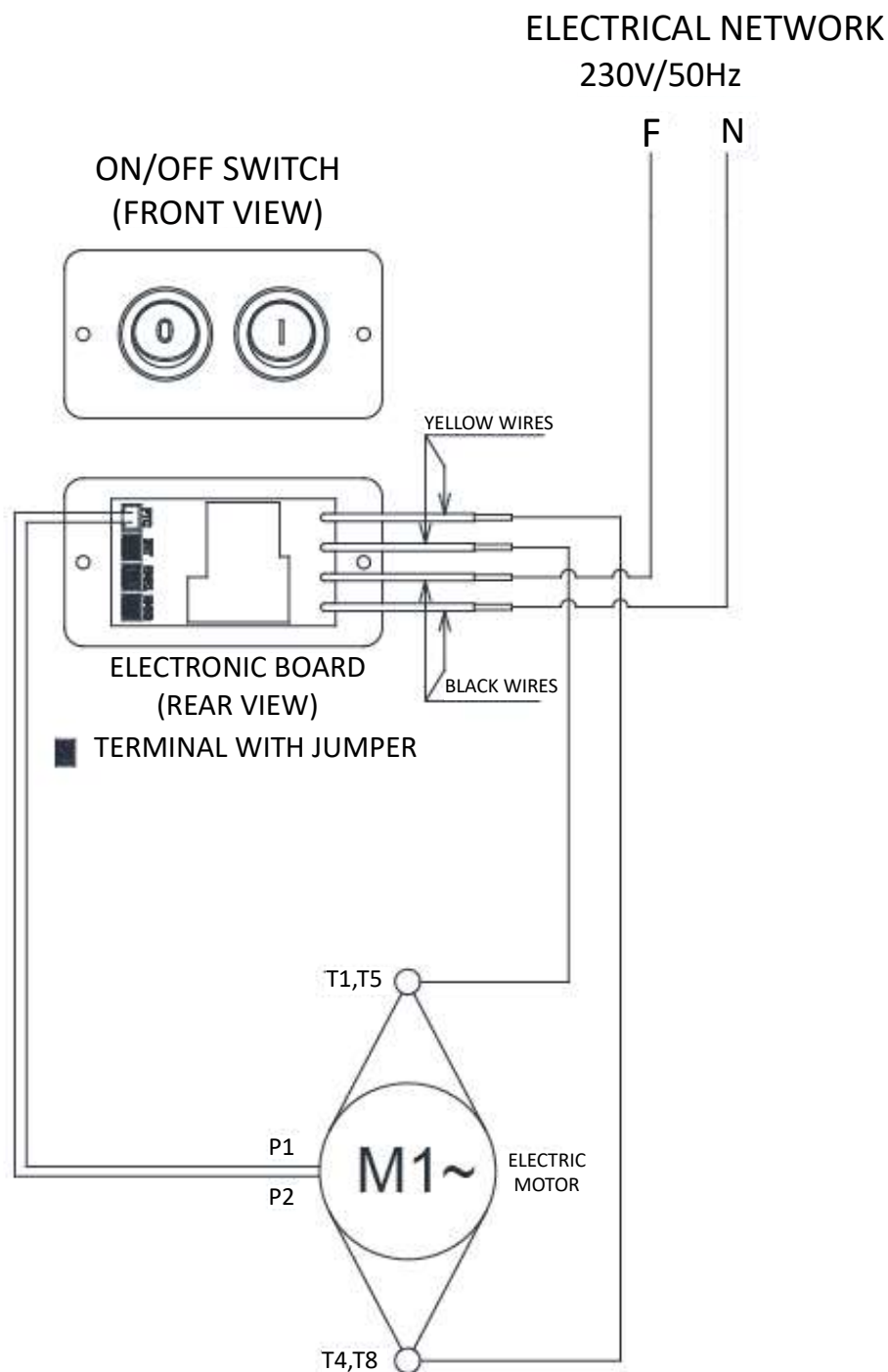
MODEL
FFA

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8. Electrical Diagram



1. Introduction

1.1 Safety

This equipment is potentially dangerous when used incorrectly.

Read this manual carefully before using the equipment and store it in a readily accessible area for future reference.

In order to prevent accidents, injuries or damage to the equipment, it is important that the instructions provided below be followed at all times:

1.1.1 Never use the equipment while wearing wet clothing or with wet feet or on a damp or wet surface. Never immerse the equipment in water or spray water or other liquids onto it.

1.1.2 Equipment must always be used under supervision, especially when used near children.

1.1.3 Equipment must be disconnected from its power supply in the following situations: when not in use, before cleaning, when inserting or removing accessories, during maintenance, and when performing any services other than operation.

1.1.4 Do not use equipment with damaged cables or plugs. Ensure that the equipment power cord is not positioned over the edge of a table or comes into contact with heated surfaces.

1.1.5 If equipment is dropped, dented, damaged, or does not switch on, it must be sent to an Authorized Technical Assistance Center – ATA for servicing, repair or adjustments.

1.1.6 Do not use accessories that have not been recommended by the manufacturer.

1.1.7 Keep hands or any tools away from moving parts.

1.1.8 Never wear clothing with loose sleeves, especially in and around the cuffs, during operation.

1.1.9 Check that the equipment voltage is compatible with the electrical network and that it is properly connected to the grounding network.

1.1.10 Never use instruments that are not part of the equipment during operation.

1.1.11 Do not spray water directly onto the equipment.

1.1.12 Keep hands away from moving parts.

1.1.13 This product is designed for use in commercial kitchens. It can be used, for example, in restaurants, canteens, hospitals, bakeries, butcher shops, and similar establishments.

1.1.14 When using this equipment, it is not recommended that:

- The production process be continuous and carried out on an industrial scale;
- The workplace consists of a corrosive, explosive atmosphere, or is contaminated with steam, dust or gas.

1.1.17 Equipotential Symbolology Label.

The figure shown below indicates the presence of an external equipotential bonding terminal.

These terminals must be used to ensure that there is no difference in potential between different equipment connected to the power grid in order to minimize the risk of electric shock.

Different equipment must be connected to one another by their respective equipotential bonding terminals.



7. Maintenance

Maintenance must be considered a set of procedures aimed at keeping the equipment in the best operating conditions, providing increased service life and safety.

* Cleaning – Check item 3.3 Cleaning of this manual.

* Wiring – Check all cables for deterioration and all electrical contacts (terminals) for tightness and corrosion.

* Contacts – On/off switch, emergency button, reset button, electronic circuits, etc. Check the equipment so that all components are working properly and that the operation of the appliance is normal.

* Installation – Check the installation of your equipment according to item 2.1 Installation, of this manual.

* Product service life – 2 years when used during standard work shifts.

1 - Items to be checked and executed monthly:

- Check the electrical installation;
- Measure outlet voltage;
- Measure operating current and compare with rated current;
- Check tightness of all electrical terminals of the device, to avoid possible bad contacts;
- Check for possible looseness of the electric motor shaft;
- Check wiring and electrical cable for signs of overheating, poor insulation or mechanical breakdown.

2 - Items to check or run every 3 months:

- Check electrical components such as on/off switch, emergency and reset buttons, and electronic circuit for signs of overheating, poor insulation or mechanical failure.
- Check possible clearances in the bearings.
- Check seals, o-rings, v-rings and other sealing systems.

5. Analysis and Troubleshooting

5.1 Problems, Causes and Solutions

This equipment is designed to require a minimal level of maintenance. However certain irregularities may occur during operation due to natural wear and tear resulting from use.

If you experience any problems with your equipment, consult the following table for a possible solution.

6. Observed Standards

ABNT NBR NM 60335-1
IEC 60335-2-64

IMPORTANT
This equipment is fitted with an electronic safety system. Follow the instructions provided in this manual under the item “Operation” in order to operate equipment. Any other procedures that not listed here are considered unsafe and must not be used with equipment.

IMPORTANT
This equipment is fitted with a safety system that prevents unintentional activation after any power failure.

IMPORTANT
Regularly check to ensure that the Skymesen slicer’s power cord is in perfect operating condition. If damages or any other issues are identified, replace the power cord with a cord that meets required technical and safety specifications. Power cords must be replaced by a qualified professional according to local safety standards.

IMPORTANT
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or those lacking the necessary experience and knowledge, unless such persons have received instructions in use of the appliance or are supervised by a person responsible for their safety.

IMPORTANT
Keep equipment out of the reach of children.

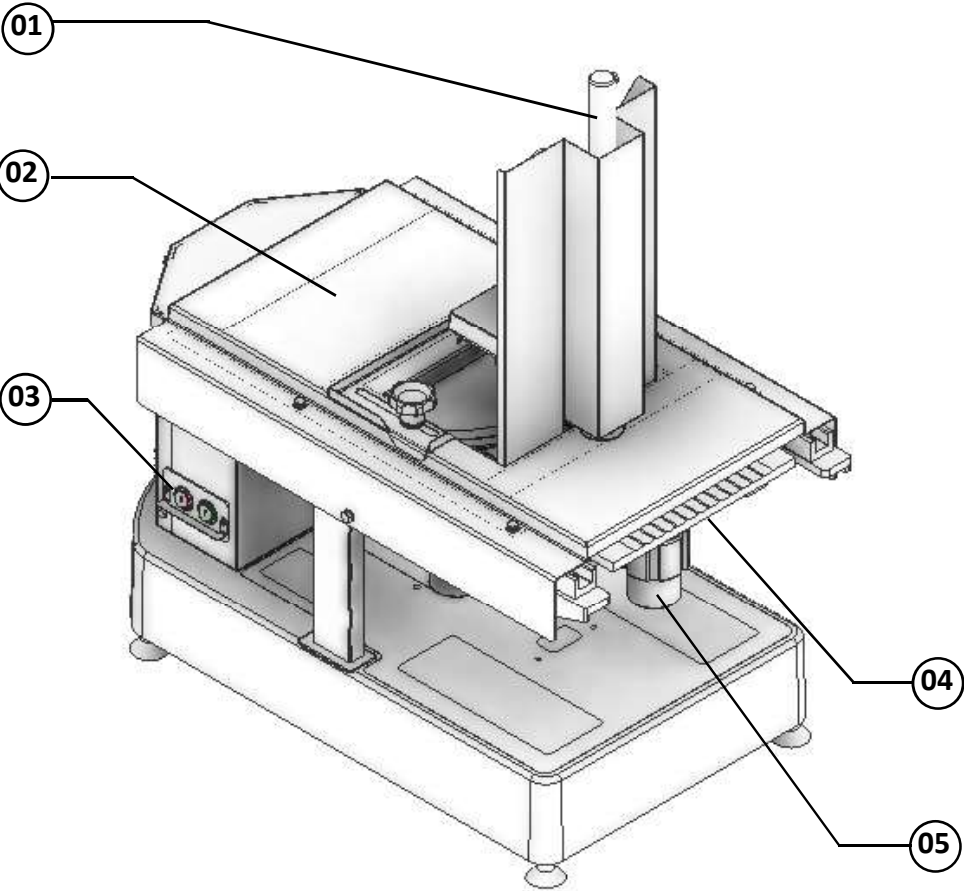
IMPORTANT
In case of an emergency, remove the equipment’s plug from the corresponding electrical outlet.

IMPORTANT
Do not spray water directly onto the equipment.

1.2 Main Components

All equipment components use materials that are carefully selected for each function according to Skymesen testing standards and knowledge base.

FIGURE 01



- 01 – Piece Holder Rod
- 02 – Moving Table
- 03 – On/Off Switch
- 04 – Regulating Table
- 05 – Slice Thickness Regulator

TABLE 02

PROBLEM	CAUSE	SOLUTION
The equipment will not switch on.	Incorrect start up procedure used.	See item 3.1 - Switching equipment on
	The motor's thermal protection system is engaged.	Wait several minutes before attempting to switch equipment on again
	Lack of electricity	Check that power source is functioning properly
	Problem with equipment's internal or external electrical circuit.	Contact Authorized Technical Assistance (ATA) Center
The equipment stops or slows down during the processing of food items.	Slippage in belt	Adjust belt tension
	Poor contact with safety device fitted onto Chamber's Cover.	Contact Authorized Technical Assistance (ATA) Center
	Problem with equipment's electric motor	Contact Authorized Technical Assistance (ATA) Center
Cut product is trapped inside equipment	Missing expeller plate	Properly position expeller plate
	Clogged Outlet Nozzle	Unclog Outlet Nozzle
Irregular slices	Blades have become dull or are damaged.	Sharpen or replace blades.
Smell of burning materials and/or smoke.	Problem with equipment's internal or external electrical circuit.	Contact Authorized Technical Assistance (ATA) Center
Damaged electrical cable	Failure in equipment transport	Contact Authorized Technical Assistance (ATA) Center
Equipment emitting abnormal noise	Problem with bearings	Contact Authorized Technical Assistance (ATA) Center

4.5.1 Equipment Care

Always clean equipment after use. Disconnect equipment from power source before cleaning.

Only start cleaning equipment after it has completely stopped operating.

Reposition all equipment components before switching appliance back on.

Check fluid levels.

When checking tension in belts and chains, DO NOT place fingers between these parts or chains and gears.

4.6 Maintenance

4.6.1 Hazards

Performing maintenance on equipment poses a certain risk.

ENSURE EQUIPMENT IS DISCONNECTED FROM ITS POWER SOURCE DURING MAINTENANCE.

IMPORTANT

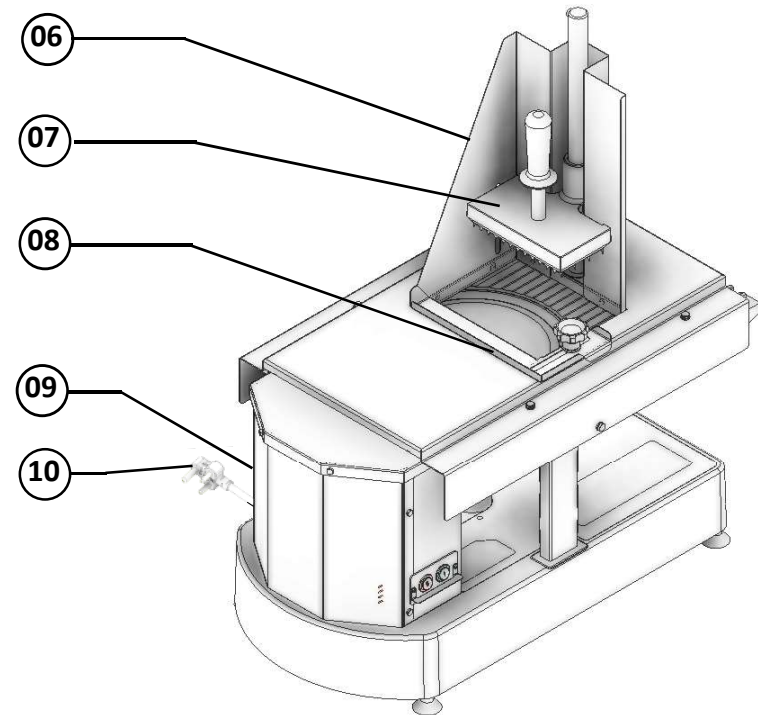
In case of emergency, remove the equipment's plug the outlet.

4.7 Warning

Electrical and/or mechanical maintenance must be carried out by qualified persons.

The person responsible for maintenance must ensure that equipment is operating safely.

FIGURE 02



- 06 – Equipment Guard
- 07 – Vertical Piece Holder
- 08 – Horizontal Piece Holder
- 09 – Equipotential Terminal
- 10 - Power cord

1.3 Technical Characteristics

The Skymsen slicer is bench top equipment that can be used to slice several different products, such as: cheese, mortadella, and ham.

TABLE 01

CHARACTERISTICS	UNIT	FFA
Average Production	kg/h	Variable
Voltage	V	230
Frequency	Hz	50
Power	CV	0,5
Height	mm	790
Width	mm	685
Depth	mm	385
Net Weight	kg	39
Gross Weight	kg	50,5
Blade Diameter	mm	260
Cuts per Minute	Slices	46

Clear instructions must be provided for each operation and maintenance function or procedure.

Manual controls (button, physical or electric switches, levers, etc.) must be verified as performing the desired function before use.

4.2.3 Caring for Electrical Components

The cord used to power the equipment must be fitted with a switch that is capable of supporting the electrical power consumed.

Electrical cables positioned on the ground or next to equipment need to be protected to prevent short circuits.

4.3 Routine Inspections

4.3.1 Warning

When checking tension in belts and chains, disconnect equipment from power source first, DO NOT place fingers between these parts or gears.

4.3.2 Precautions

Check the equipment's motor(s) and sliding and rotating parts whenever equipment emits an abnormal noise.

Check tension in belt(s) and chain(s) and replace assembly if belts, chains and gears present wear.

When checking tension in belts and chains, disconnect equipment from power source first, DO NOT place fingers between belts and pulleys or chains and gears.
Check guards and devices to ensure that they are working properly.

4.4 Operation

4.4.1 Notices

Do not wear long hair while using equipment. Hair may come into contact with any part of the equipment, resulting in a serious accident. Hair must be tied up at the back, or covered with a bandana.

- Only trained and qualified users may operate equipment
- NEVER operate Equipment without the provided safety accessories.

4.5 After Finishing Work

triggered at any time without needing to locate the switch. Before any type of maintenance, disconnect the equipment from the mains (remove the plug from the socket).

Make use of the equipment in a place where there is sufficient physical space for safe handling of the Equipment, thus avoiding dangerous falls.

Water or oil can make the floor slippery and dangerous. To avoid accidents, the floor must be dry and clean.

If there is a need to carry out the work by two or more people, coordination signals must be given at each step of the operation. The next step must not be started before a signal is given and responded to.

4.1.3 Warnings

In the event of a power failure, immediately turn off the On/Off switch.

- Only recommended lubricating oils and greases or equivalent materials may be used.
- Mechanical impacts must be avoided as they may result in faults or equipment malfunction.
- Prevent water, dirt or dust from entering the mechanical and electrical components of the equipment.
- Never change the original characteristics of the equipment.
- Avoid the accumulation of dirty, tear or removal of any safety label or identification. If any are illegible or lost, request another label in the Authorized Technical Assistance (ATA).

4.2 Precautions and Observations Before Starting the Equipment

IMPORTANT

Read this manual carefully before switching equipment on. Make sure all information is understood. If you have any questions or concerns, please contact Skymesen's Customer Service (SAC).

4.2.1 Danger

The cable or an electrical wire, whose insulation is damaged, can produce leakage of electrical current and cause electric shocks. Before using the equipment, check that it is in proper condition.

4.2.2 Notices

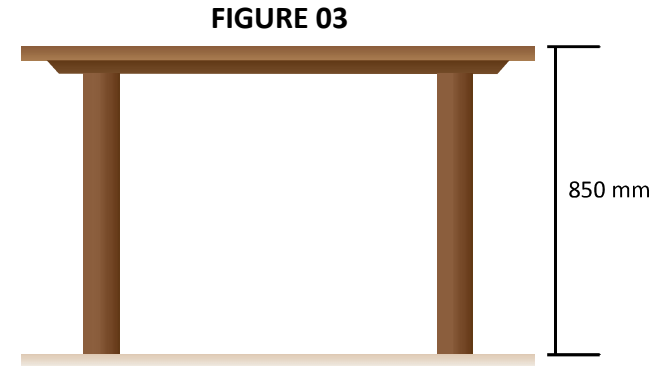
Ensure that users fully understand the INSTRUCTIONS contained in this manual before using equipment.

2 Installation and Pre-Operation

2.1 Installation

2.1.1 Positioning

Position equipment on a dry, firm and level surface, preferably at a height of 850 mm.



2.1.2 Electrical Installation

Check the voltage (voltage) indicated on the Power Cord's label before connecting equipment to the outlet.

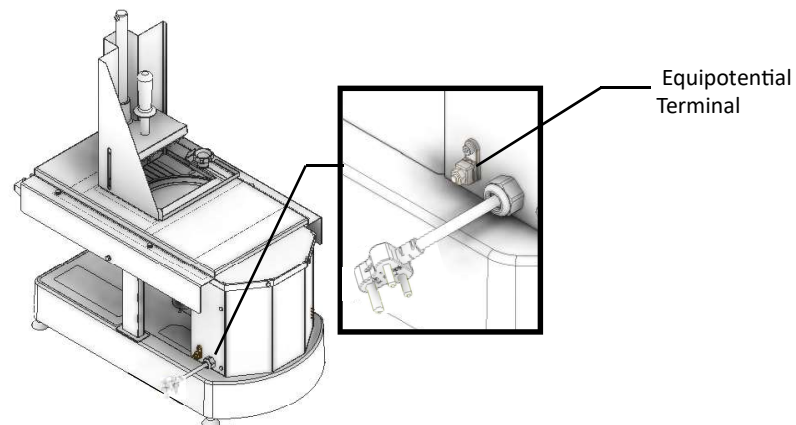
The slicer's power cord is fitted with 3 pins. The central pin is used as the grounding. It is essential that all three pins be properly connected before operating the equipment.

The figure (Fig.04) shown below indicates the presence of an external equipotential bonding terminal.

These terminals must be used to ensure that there is no difference in potential between different equipment connected to the power grid in order to minimize the risk of electric shock.

Different equipment must be connected to one another by their respective equipotential bonding terminals.

FIGURE 04



2.2 Pre-Operation

Before using the equipment, wash all parts that come into contact with the product to be processed using a neutral detergent and water (read item 3.3 Cleaning and Sanitation).

Check that equipment is secure within the work area.

Main substances that cause corrosion of stainless steels:

Dusts, greases, acidic solutions such as vinegar, fruit juices and other acids, saline solutions (brine), blood, detergents (except neutral ones), common steel particles, waste sponges or common steel wool, in addition to other types of abrasives.

4. Safety Concepts – General

IMPORTANT

Please disregard any item included in GENERAL SAFETY CONCEPTS that does not apply to your product.

The safety notions are designed to properly guide and instruct the users of the equipment and those who will be responsible for its maintenance.

The equipment should only be delivered to the user in good condition, and the user should be advised about its use and safety by the dealer. The user should only use the equipment after full knowledge of the precautions that must be taken, CAREFULLY READING THIS ENTIRE MANUAL.

IMPORTANT

Changes made to equipment protection systems and safety devices imply a serious risk to the physical integrity of personnel involved in operation, cleaning, maintenance and transport as described in ABNT NBR ISO 12100.

4.1 Basic Operating Practices

4.1.1 Hazards

Certain components in the equipment's electric drive contain points or terminals subject to high voltage. Contact with live components may result in serious electric shock or DEATH.

Never handle any manual control (buttons, keys, electrical switches, etc.) with wet hands, shoes or clothing. Failure to comply with the above recommendation may result in serious electric shock or DEATH.

4.1.2 Warnings

Users must be aware of the location of the equipment's On/Off switch, so that it can be.

3.4 Care for stainless steels

Stainless steel may present points of rust. Rust will always form as a result of EXTERNAL AGENTS, particularly whenever equipment is not properly cleaned or sanitized.

The corrosion resistance of stainless steel is mainly due to the presence of chromium, which in contact with oxygen, allows the formation of a very thin protective layer.

This protective layer forms over the entire surface of the steel, blocking the action of external agents that cause corrosion.

When the protective layer is ruptured, the corrosion process is initiated and can be avoided through constant and proper cleaning.

Immediately after using the equipment, cleaning should be promoted, using water, soap or neutral detergents, applied with a soft cloth and/or nylon sponge.

Then, only with running water, rinse and immediately dry, with a soft cloth, avoiding the permanence of moisture on the surfaces and especially in the cracks. Properly rinsing and drying the equipment is essential in preventing the appearance of stains and corrosion.

IMPORTANT

The use of acidic and salt solutions, disinfectants and certain sterilizing solutions (hypochlorites, tetravalent ammonia salts, iodine compounds, nitric acid and other materials) must be AVOIDED since prolonged contact with these products will damage stainless steel.

Since the composition of these products generally includes CHLORINE, they act to attack stainless steel causing points of corrosion to form (pitting).

Even detergents used in household cleaning should not remain in contact with stainless steel beyond what is necessary, and should also be removed with water and the surface completely dry.

Use of abrasives:

Steel sponges or straws and carbon steel brushes, in addition to scratching the surface and compromising the protection of stainless steel, leave particles that rust and react contaminating stainless steel. Therefore, such products should not be used for cleaning and sanitizing. Scrapes made with sharp or similar instruments should also be avoided.

3. Operation

3.1 Switching equipment on

Use the following instructions to switch the equipment on:

- Connect the equipment to the power grid.
- Press the On switch. The equipment will switch on.

3.2 Operating Procedures

Place the product to be processed vertically inside the slicer's Equipment Guard and position the Vertical Piece Holder onto the product.

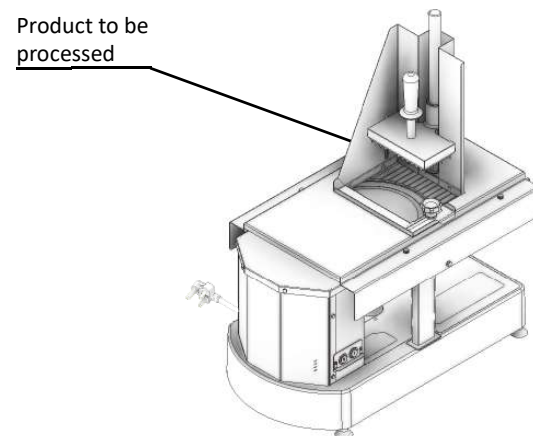
Slide the equipment's Horizontal Piece Holder up to a distance of 3 to 5 mm from the product to be in order to ensure it remains in a vertical position, ensuring that the product is able to move downwards due to the force of gravity.

Adjust the thickness of the slice to be cut using the Regulator located below the equipment's fixed table.

Rotate the knob clockwise and counterclockwise to to increase and reduce the thickness of slices, respectively.

The equipment will now be ready for use once the On switch is engaged.

FIGURE 05



IMPORTANT

Always ensure that the tracks installed in the equipment's Moving Table are properly lubricated. Use liquid petroleum jelly or unsalted margarine to lubricated channels. Never use cooking oil as a lubricant.

IMPORTANT

NEVER clean, lubricate or adjust moving machinery. UNPLUG equipment from the outlet before completing such work.

IMPORTANT

Always use the Vertical Piece Holder during slicing. Never use your hands to hold the product in place when operating equipment.

IMPORTANT

Do not use equipment to slice parmesan cheese or products with a similar consistency.

ATTENTION

Do not slice frozen cheeses.

ATTENTION

The ideal temperature for cutting cheese is $4 \pm 2^{\circ}\text{C}$.
At this temperature, the machine will have its best cutting performance.

3.3 Cleaning and Sanitation

IMPORTANT

Never clean equipment while connected to its power source.

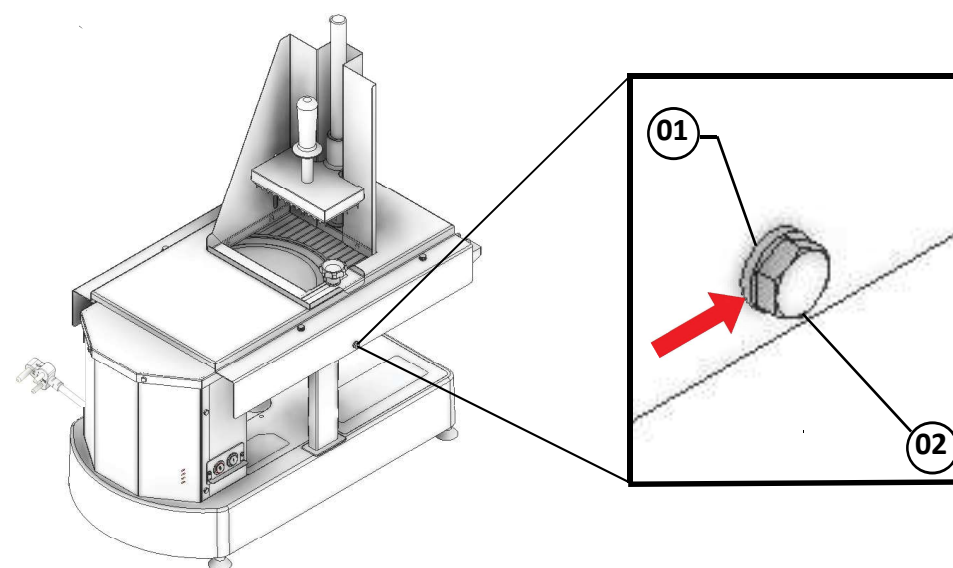
IMPORTANT

Wash all moving parts with hot water and mild detergent. Wipe the equipment's Base using a cloth damped with the same solution.

IMPORTANT

The Regulator Table must be positioned and kept in the zero "0" position before switching the equipment on and during cleaning.

FIGURE 06



All moving parts must be removed and properly cleaned. The following procedure must be used to remove moving parts:

To remove the equipment's Moving Table, loosen and remove the bolt (No. 2) and washer (No. 1 Figure 6).

To reassemble equipment after cleaning, reposition the Moving Table, making sure it is properly fitted onto the table and that the Roller Bearing is correctly positioned in the tracks installed on the Moving Table.