



**NSTRUCTIONS MANUAI** 

MEAT GRINDER, STAINLESS STEEL, BARREL 10







METALÚRGICA SIEMSEN LTDA. CNPJ: 82.983.032/0001-19 Rodovia Ivo Silveira - km 12, nº 9525, Galpão 1 - Bairro: Bateas - CEP: 88355-202 Brusque - Santa Catarina - Brasil Phone: +55 47 3211 6000 - Fax: +55 47 3211 6020 www.siemsen.com.br - comercial@siemsen.com.br

49788.6 - VERSÃO 01 - 00001 ATÉ 99999 - INGLES

Data de Correção: 20/05/2013

Besides this equipment, a complete range of other products are manufactured, consult our dealers. - Due to the constant improvements introduced to our equipments, the information contained in the present Instruction Manual may be modified without previous notice

# **SUMMARY**

1. Introduction
1.1 Safety
1.2 Main Components
1.3 Technical Characteristics
1.4 Labels
2. Installation and Pre Operation7
2.1 Installation
2.2 Pre Operation
3. Operation8
3.1 Starting
3.2 Operation Procedure 8
3.3 Safety System
3.4 Assembling the Barrel internal components
3.5 Cleaning and Sanitizing10
3.6 Cautions with Stainless Steel10
4. General Safety Practices
4.1 Basic Operation Procedures
4.2 Safety Procedures and Notes Before Switching the Machine On
4.3 Routine Inspection
4.4 Operation
4.5 After Finishing the Work
4.6 Maintenance
4.7 Advices
5. Analyses and Problem Solving16
5.1 Problems, Cause and Solutions16
5.2 Components Adjustment and Replacement16
6. Maintenance
7. Electric Diagram
-/ · LICCUIC Plagialli


# 1. Introduction

## 1.1 Safety

When incorrectly used this equipment is a potentially DANGEROUS machine. Maintenance, cleaning or any other service shall be performed by a duly trained person and with the machine unplugged.

To avoid accidents respect the following instructions:

1.1.1 Read completely these instructions.

1.1.2 To avoid to risk electric shocks and damage to the equipment never use it with wet clothes or shoes and/or standing on wet floors. Do not plunge it into water nor any other liquid, do not spray water directly to the equipment.

1.1.3 When the equipment is in operation the operator shall supervise it, principally when children might be near.

1.1.4 Unplug the equipment when: It is not in use, before to clean it, before to remove or to place some accessory. Before maintenance or any other service.

1.1.5 Do not operate the equipment if the cord or plug are damaged. Do not lean the cord on table edges, nor let them lie on hot surfaces.

1.1.6 When the equipment may have fall, have been damaged any way, or simply does not work, take it to Technical Assistance to check.

1.1.7 The use of accessories not recommended by the manufacturer may cause corporal damages.

1.1.8 Keep the hands or any other object away from moving parts while the equipment is in operation.

1.1.9 During operation never wear loose clothes with wide sleeves principally around the wrists.

1.1.10 Make sure the equipment voltage and the network voltage are the same, and the equipment has been solidly grounded.

1.1.11 Before to start the equipment make sure the Barrel # 02 (Pic.01) is firm in its position and if all the internal components are correctly assembled as explained by Picture 03.

#### IMPORTANT

For mayor operator protection this equipment is provided with a safety system not allowing to be involuntary switched ON after an eventual energy shortage.

#### IMPORTANT

Make sure the cord is in perfect conditions for use. If it is not, change it for a new one in accordance with the technical specifications and safety rules. The substitution shall be made by a qualified professional, and shall respect the local safety norms.

#### IMPORTANT

This equipment must not be used by children or any persons with reduced physical or mental aptness, lack of experience or knowledge, unless they are under supervision or have received from the person responsible for safety, proper instructions on how to use the equipment.

IMPORTANT Plates with oval form or having a diameter larger than the original plates shall not be used.

IMPORTANT Children shall be watched in order to avoid them to play with the equipment.

IMPORTANT

In case of emergency take off the plug from its socket.

IMPORTANT

Never spray water directly on to the equipment.

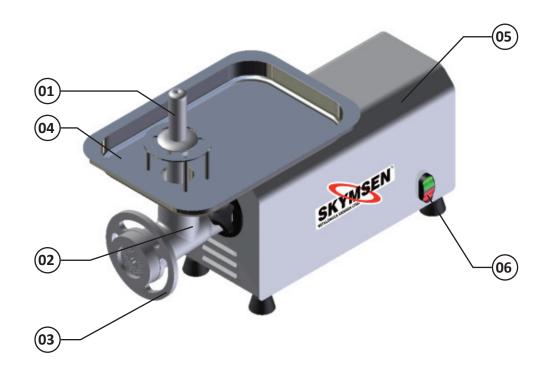
#### 1.2 Main Components

All components are made with carefully selected materials, in accordance with Siemsen experience and standard testing procedures.

The Barrel # 02 (Pic.01) and the Worm # 03 (Pic.03) receive a superficial treatment to isolate and facilitate cleaning.

Knife and discs are made of hardened material to provide a long life cutting quality.

# PICTURE 01



- 01 Stumper
- 02 Barrel
- 03 Locking Ring
- 04 Pan
- 05 Motor Housing

06 - ON/OFF Switch

20

#### **1.3 Technical Characteristics**

# TABLE 01

CHARACTERISTICS	UNIT	PSEE-10-N
Average Production	kg/h	200
Voltage	V	110
Frequency	Hz	60
Power Rating	CV	1
Consumption	kW/h	0,73
Height	mm	505
Width	mm	315
Depth	mm	740
Net Weight	kg	39
Gross Weight	kg	47

#### 1.4 Labels

- Label giving advice to read the Instruction Manual.



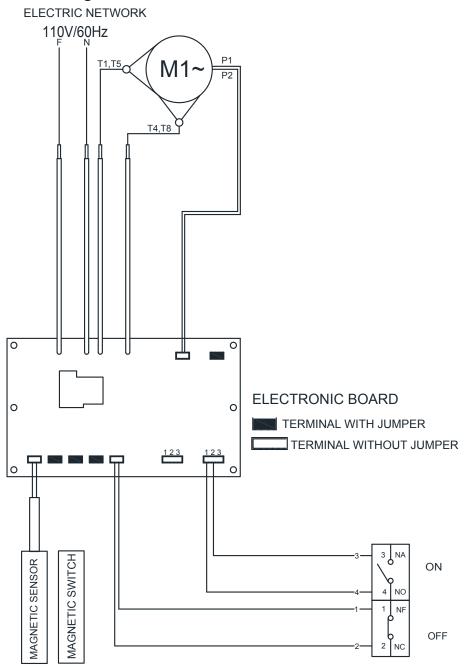
- Label giving advice to be careful when operating the equipment.



- Label giving advice to be careful when handling the equipment.



# 7. Electric Diagram



Electric Diagram code: 49790.8 Version: Versão 01

# 6. Maintenance

Maintenance must be considered a set of procedures with the purpose to keep the equipment best operating conditions, therefore increasing the equipment life and safety.

\* Cleaning – Check item 3 5 Cleaning.

\* Wiring – Check all wires regarding deteriorate conditions as well as all electric contacts (terminals) regarding tightening and corrosion.

\* Contacts – ON/OFF switch, emergency button, reset button, electronic circuits etc, check the equipment in order to assure that all components are correctly working and the equipment operation is normal.

\* Installation – Make sure the installation followed item 2.1 instructions.

- 1 Each month check:
- Check the electrical installation;
- Measure the voltage at the socket;
- Measure the working current and match it with the nominal current;
- Check the tightening of all electric terminals to avoid bad contacts;
- Check electric motor shaft clearance;
- Check the wiring for overeating, insulation failures and mechanical damages.
- 2 Each three month checks:

- Check electrical components such as ON/OFF switch, emergency button, reset button,

- electronic electric circuits, overeating, insulation failings, or mechanical damages.
- Check bearings clearances.
- Check retainers, O'rings, V'rings and other seals.

- Label giving advice to be careful while cleaning or giving maintenance to the equipment.

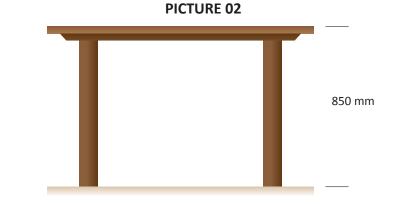


# 2. Installation and Pre Operation

#### 2.1 Installation

#### 2.1.1 Placing

The Meat Grinder must be placed onto a leveled and stable surface, preferably 850mm high from floor.



#### 2.1.2 Electrical Installation

This equipment has been designed for 110 V. When receiving the equipment check the voltage indicated on the cord label.

The cord has a plug with three pins, the middle one is ground. It is mandatory the three pins to be duly connected before to start the machine.

IMPORTANT Make sure the network voltage is the same as the voltage indicated on the cord label.

## 2.2 Pre Operation

## TABLE 02

First of all check if the machine is firm in its position.

Before operation all parts that get in contact with food must be washed with running water and neutral soap (see item 3.5 cleaning).

## IMPORTANT

Do not tighten the Locking Ring too much when assembling the Grinding Device as an excessive pressure on the hole plate and knife may lead to their abnormal wear.

# 3. Operation

#### 3.1 Starting

#### IMPORTANT

Unplug the equipment before to remove the Barrel. The machine is silent, do not let on the pan any kind of objects such as knives, forks or similar.

Make sure that the Barrel internal components follow the correct sequence as instructed on Picture 03.

Starting is made as follows:

1 - Plug the equipment on the network socket.

2 - Press the ON/OFF Switch on position "I".

IMPORTANT The equipment will start only if the pan is correctly placed.

**3.2 Operation Procedure** 

#### IMPORTANT

Under no circumstances use your hands or any other kind of instrument to push meat into the feeding throat. Use only the Stumper # 201 (Pic.01) to do this operation. The processed meat has the function of lubricating the Barrel internal components. Therefore do not run the machine without load, as it would warm up and damage the internal components.

PROBLEMS	CAUSES	SOLUTIONS
- The machine does not start.	-Electricity shortage; - Worn out or broken gears; - Problems with the electric circuits.	- Check electricity supply; - Call Technical assistance;
- Smoke or burnt smell.	- Problems with the electric circuits.	- Call Technical assistance.
- The machine starts but the worm does not turn or turn too slow.	<ul> <li>Worn out or broken gears;</li> <li>Problems with the motor.</li> </ul>	- Call Technical assistance.
- The cord is damaged.	- Damages during transportation.	- Call Technical assistance.
- Strange noise.	- Damaged bearings.	- Call Technical assistance.
- The processed meat comes out smashed.	- One of the internal components of the Barrel is missing or assembled incorrectly; - Plate or knife are blunt.	<ul> <li>Check the internal components assembling see Pic. 03;</li> <li>Consulte ítem 5.2.</li> </ul>
- The worm stops during operation.	<ul> <li>Electricity shortage;</li> <li>Problems with the electric circuits;</li> <li>Worn out or broken gears.</li> </ul>	<ul> <li>Check if the plug is in the socket and possible electricity shortage;</li> <li>Call Technical assistance.</li> </ul>
* Oil leaking through the gear box.	* Damaged seal.	* Call Technical assistance.

# 5. Analysis and Problems Solving

#### 5.1 Problem, causes and solutions

The Meat Grinders were designed to operate with the need of minimum maintenance but the natural wearing caused by longer use of the equipment may occasionally cause some malfunctions.

If such problem occurs with your Meat Grinder refer to Table 02 in which the most common situations are listed with recommended solutions.

#### 5.2 Components Adjustment and Replacement

#### 5.2.1 Plate and knife sharpening

Well-sharpened plates and knife will make machine to work with less effort and consequently all components will last longer. Therefore call your nearest technical assistant to sharpen plates and knife periodically.

5.2.2 Gear Box

The Meat Grinders have a gear box lubricated with oil.

To keep your machine in good conditions for a long time check oil level at every 5.000 hours of use. Take your machine to the nearest technical assistant to do this job.

Use 250 ml of oil each time you need to refill the gear box. The following oils are recommended: UNITRON 140-CASTROL or similar having a viscosity (SAE140, APIGL-4 or ANP1006).

The Meat Grinders are relatively fast machines, therefore they need equally be fast fed.

To feed the Meat Grinders place pieces of meat on the Pan # 04 (Pic.01) and drive them with your hand towards the feeding throat entry only. Then, use the Stumper # 01 (Pic.01) to push them into the feeding throat where they will be sucked in.

#### 3.3 Safety System

04 - Worm Pin

This equipment has a safety system to avoid automatic restart after an energy shortage.

The equipment do not run if the pan is not correctly placed.

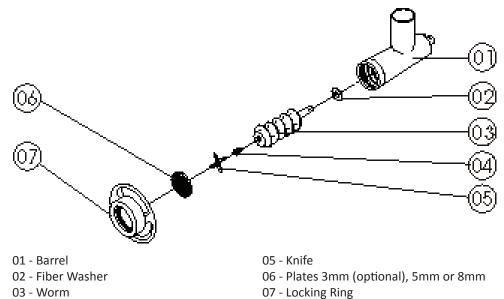
#### 3.4 Assembling the Barrel internal components

To assemble or disassemble the Barrel internal components follow the below sequence:



Note the correct position of each Barrel internal component. Assembling the components in a different order could cause serious damages to the Grinding Device.





## 3.5 Cleaning and Sanitizing

#### IMPORTANT Unplug the machine before to start cleaning.

The equipment shall be totally cleaned and sanitized:

- Before to be used first time;
- After every day's operation;
- When it has not been used during a long time;
- Before to operate it after a long period unused.

Some parts of the equipment may be removed for cleaning, such:

- Stumper.
- Pan.
- Locking Ring.
- Barrel and its internal components (see item 3.4).

Procedure to remove the Barrel internal components:

- Remove the Stumper # 01 (Pic.01) and the Pan # 04 (Pic.01);
- Remove the Locking Ring # 03 (Pic 01);
- Remove the Barrel # 02 (Pic.01), hold the barrel, but before, loosen the handle on the left
- side of the equipment, then move the Barrel left to right and forward;
- Remove the Barrel internal components.

Wash all the parts that might be in contact with the product using water and neutral soap, then dry them with a clean cloth.

IMPORTANT Do not store the Barrel with product inside, to avoid the product to freeze and therefore damage the internal components.

> IMPORTANT Do not spray water directly to the equipment.

## 4.7 Warning

Electrical or mechanical maintenance has to be undertaken by qualified personnel.

The person in charge of maintenance has to be sure that the machine is under TOTAL SAFETY conditions when working.

When checking tensions of belts or chain DO NOT introduce your fingers between belts and pulleys, nor between the chains and gears.

Check protections and safety devices to make sure they are working properly.

## 4.4 Operation

4.4.1 Advice

Be sure your hair is not loose in order to avoid getting caught by turning parts which could lead to a serious accident.

- Tie your hair up well and/or cover your head with a scarf.

- The operation performed by not trained or skilled personnel shall be forbidden.
- NEVER operate machine without any original safety devices under perfect conditions.

## 4.5 After Finishing The Work

## 4.5.1 Precautions

Always TURN THE MACHINE OFF by removing the plug from the socket before cleaning the machine.

Never clean the machine unless it has come to a complete stop.

Put all components back to their functional positions before turning it ON again.

DO NOT place your fingers in between belts and pulleys nor chains and gears.

## 4.6 Maintenance

4.6.1 Dangers

Any maintenance with the machine in working situation is dangerous.

# TURN IT OFF BY PULLING THE PLUG OFF THE SOCKET DURING MAINTENANCE.

IMPORTANT Always remove the plug from the socket in any emergency situation.

# 3.6 Cautions with Stainless Steel

The Stainless Steel may present rust signs, which ARE ALWAYS CAUSED BY EXTERNAL AGENTS, especially when the cleaning or sanitization is not constant and appropriate. The Stainless Steel resistance towards corrosion is mainly due to the presence of chrome, which in contact with oxygen allows the formation of a very thin protective coat. This protective coat is formed through the whole surface of the steel, blocking the action of external corrosive agents.

When the protective coat is broken, the corrosion process begins, being possible to avoid it by means of constant and adequate cleaning.

Cleaning must always be done immediately after using the equipment. For such end, use water, neutral soap or detergent, and clean the equipment with a soft cloth or a nylon sponge. Then rinse it with plain running water, and dry immediately with a soft cloth, this way avoiding humidity on surfaces and especially on gaps.

The rinsing and drying processes are extremely important to prevent stains and corrosion from arising.

## IMPORTANT

Acid solutions, salty solutions, disinfectants and some sterilizing solutions (hypochlorites, tetravalent ammonia salts, iodine compounds, nitric acid and others), must be AVOIDED, once it cannot remain for long in contact with the stainless steel:

These substances attack the stainless steel due to the CHLORINE on its composition, causing corrosion spots (pitting).

Even detergents used in domestic cleaning must not remain in contact with the stainless steel longer than the necessary, being mandatory to remove it with plain water and then dry the surface completely.

## Use of abrasives:

Sponges or steel wool and carbon steel brushes, besides scratching the surface and compromising the stainless steel protection, leave particles that rust and react contaminating the stainless steel. That is why such products must not be used for cleaning and sanitization. Scrapings made with sharp instruments or similar must also be avoided.

## Main substances that cause stainless steel corrosion:

Dust, grease, acid solutions such as vinegar, fruit juices, etc., saltern solutions (brine), blood, detergents (except for the neutral ones), common steel particles, residue of sponges or common steel wool, and also other abrasives.

# 4. General Safety Practices

#### IMPORTANT

If any recommendation is not applicable to your equipment, please ignore it.

The following safety instructions are addressed to both the operator of the machine as well as the person in charge of maintenance.

The machine has to be delivered only in perfect conditions of use by the Distributor to the user. The user shall operate the machine only after being well acquainted with the safety procedures described in the present manual. READ THIS MANUAL WITH ATTENTION.

## 4.1 Basic Operation Practices

## 4.1.1 Dangerous parts

Some areas of the electric device have parts that are connected or have parts connected to high voltage. These parts when touched may cause severe electrical chocks or even be fatal.

Never touch commands such as buttons, turning keys and knobs with wet hands, wearing wet clothes and/or wet shoes. By not following these instructions operator could be exposed to severe electrical shocks or even to a lethal situation.

#### 4.1.2 Warnings

The operator has to be well familiar with the position of ON/OFF Switch to make sure the Switch is easy to be reached when necessary.

Before any kind of maintenance, physically remove plug from the socket.

Provide space for a comfortable operation thus avoiding accidents.

Water or oil spilled on the floor will turn it slippery and dangerous. Make sure the floor is clean and dry.

Never use a manual command (switch, buttons, lever) unadvisedly.

If any work is to be made by two or more persons, coordination signs will have to be given for each operation step. Every step of the operation shall be taken only if a sign has been made and responded.

## 4.1.3 Precautions

In case of power shortage, immediately switch the machine off.

Use recommended or equivalent lubricants, oils or greases.

Avoid mechanical shocks, once they may cause damages or bad functioning.

Avoid water and dust entrance on the mechanical e electrical components of the machine. Do not change the standard characteristics of the machine.

DO NOT remove, tear off or maculate any labels stuck on the machine.

If any labels have been removed or are no longer legible, contact your nearest dealer for replacement.

4.2 Safety Procedures and Notes before Switching the Machine ON

#### IMPORTANT

Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to well understand all the information contained in this manual. If you have any question contact your supervisor or your nearest Dealer.

4.2.1 Danger

An electric cable or electric wire with damaged jacket or bad insulation might cause electrical shocks as well as electrical leak. Before use, check the conditions of all wires and cables.

4.2.2 Advices

Be sure ALL INSTRUCTIONS in this manual have been thoroughly understood. Every function and operational procedure has to be thoroughly clear to the operator.

Any manual command (switch, button or lever) shall be given only after being sure it is the correct one.

4.2.3 Precautions

The electric cable has to be compatible with the power required by the machine.

Cables touching the floor or close to the machine need to be protected against short circuits.

#### 4.3 Routine Inspection

#### 4.3.1 Advice

When checking the tension of the belts or chains, DO NOT introduce your fingers between the belts and the pulleys and nor between the chain and the gears.

#### 4.3.2 Precautions

Check if motors and sliding or turning parts of the machine produce abnormal noises.

Check the tension of the belts and chains and replace the set when belt or chain show signs of being worn out.