

### 6 Safety System

1. INTRODUCTION ————	_02
1.1 Safety 1.2 Main Components 1.3 Technical Characteristics	_02 _02 _04
2. INSTALLATION and PRE OPERATION	_04
2.1 Installation         2.2 Correct Worm Rotation         2.3 Pre Operation         2.4 Feeding Process	_04 _04 _05 _05
3. OPERATION	_05 _05
<ul> <li>3.1 Starting</li> <li>3.2 Head Internal Components Assembling -HEAD98</li> <li>3.3 Head Internal Components Assembling -HEAD 22</li> <li>3.4 Clening</li></ul>	_00
4 GENERAL SAFETY RULES	_08
4.1 Basic Operation Practices         4.2 Safety Procedures and Notes Before Switching Machine ON         4.3 Routine Inspection         4.4 Operation         4.5 After Finishing the Work         4.6 Maintenance         4.7 Advices	09 10 10 11 11
5 PROBLEMS ANALYSIS and SOLUTIONS	_11
5.1 Problems, Causes and Solutions 5.2 Adjustment and Components Replacement 5.3 Electric Diagram Mod.PSEE-22HD, PSEE-98MHD and PSEE-98THD _	11 13 13
6 Safety System	_14

SUMMARY

The Meat Grinders have been equipped with a safety system approved by Brazilian ABNT NBR 13767:2002 Norm, in order to avoid the grinder operation when the Pan is taken away.

SIEMSEN has developed a system to at the same time obey the Norm and allow an easy operation of the machine.

In case the Pan is taken away the ON/OFF Switch will not be able to switch ON the machine.

To allow the machine to operate again, it will be necessary to replace and to fit the Pan on its due place, to restore the machine.

To withdraw the Pan, ALWAYS WITH THE ON/OFF SWITCH TURNED OFF, just lift the front part of the Pan (N°01), from inside the Head and drag it rearwards. The ON/OFF Switch will remain out of use (see picture below)

To replace the Pan, ALWAYS KEEPING THE ON/OFF SWITCH TURNED OFF, just place the Pan support onto the activating pin, drag the Pan forward and introduce the pan exit hole inside the Head throat.

When withdrawing or replacing the Pan, it is important to watch how the Pan is fitted into the Head throat, as well as the fitting of the Pan Support N°02 on the Motor Housing (see picture below).



#### 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.

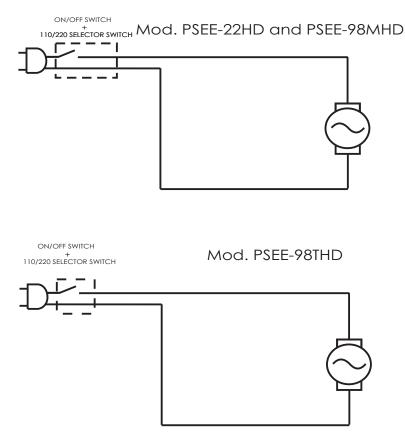
#### 5.2.2 Gear Box

The Meat Grinders models PSEE-22HD, PSEE-98MHD and PSEE-98THD have 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 gear box. The following oils are recommended: SAE140, APIGL-4 or ANP1006.

#### 5.3 Electric Diagram PSEE-22HD, PSEE-98MHD and PSEE-98THD



### 1. Introduction

#### 1.1 Safety

When not properly used the Meat Grinders Models PSEE- 22 HD , PSEE-98 MHD and PSEE-98 THD can be potentially DANGEROUS. Servicing, cleaning or any other operation shall be made by trained people.

The following instructions must be observed in order to avoid accidents:

1.1.1 Always unplug the machine when cleaning, servicing or when any other operation is needed.

1.1.2 Never use tools that do not belong to the machine during operation.

1.1.3 Before switching the machine on check if the Head N°06 (Pic.01) is firm in its position, if all its internal components are assembled as well as if the Pan N°02 (Pic.01) is duly fitted .

1.1.4 Never spray water directly at the machine.

1.1.5 Never use loosen clothes specially shirts with loosen sleeves during operation.

1.1.6 Never put your fingers or any other object but the Stumper N°01 (Pic.01) inside feeding throat.

1.1.7 Keep hands off turning parts.

1.1.8 Never switch the machine on with wet clothes or wet shoes.

1.1.9 Before using the machine make use it is properly grounded.



#### 1.2 Main Components:

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

The Head N°01 (Pic.02) and the Worm N°03 (Pic.02) receive a superficial treatment to isolate and facilitate cleaning.

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



- 01 Stumper
- 02 Pan
- 03 Motor Housing
- 04 Caution Label
- 05 Locking Ring
- 06 Head
- 07 ON/OFF Switch
- 08 Handle

09 - Voltage selector Switch( only for meat grinders equipped with three phase motors, model PSEEE-98THD)

### TABLE-02

Problemas	Causas	Soluções		
* The processed meat comes uot smashed.	* One of the head internal components is missing or they are assembled incorrectly.			
	* Plate or knife unsharpened.	* Consul item 5.2.1 in this manual.		
* The worm stops during operation.		* Check if machine is plugged in and if there is power at power supply source.		
	* Problem in the internal or extenal electric circuit of the machine.			
	* Worn uot or broken gears.	* Call technical assistance.		
* Burn smell and/or smoke.	* Motor or other electrical part with problem.	* Call technical assistance.		
* The machine starts but head internal components take some to start turning.	* Motor capacitor damage.	* Call technical assistance.		
* Abnormal noises.	<ul> <li>Head internal components out of plase.</li> </ul>	* Assemble head internal components correctly, see Pic.02 or Pic.03.		
	* Gears faulty adjusted.	* Call technical assistance.		
* Oil leaking .	* Damaged sealing system.	* Call technical assistance.		

#### 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. Check level of oil. DO NOT place your fingers in between belts and pulleys nor chains and gears.

#### 4.6 Maintenance

#### 4.6.1 Danger

Any maintenance with the machine in working situation is dangerous. TURN IT OFF BY PULLING THE PLUG OFF THE SOCKET DURING MAINTENANCE.

IMPORTANT Always unplug the machine when emergency cases arise.

#### 4.7 Advice

Electrical or mechanical maintenance must be done by qualified personal for such operation.

Person in charge has to be sure that the machine is under TOTAL SAFETY conditions when working.

### 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.

#### **1.3 Technical Characteristics**

Table - 01

Characterstics	Unidade	PSEE-22HD	PSEE-08MHD	
onaracterstics	Officiace	I SEL-22IID	I OLL-SOMITE	PSEL-SOTTE
Avorage Production	[kg/h]	300	450	450
Voltage (**)	[V]	110 ou 220	110 ou 220	220 ou 380
Frecuency(*)	[Hz]	50 ou 60 (*)	50 ou 60 (*)	50 ou 60 (*)
Power Rating	[CV]	2	3	3
Consumption	[kW/h]	1,5	2,2	2,2
Height	[mm]	410	440	550
Width	[mm]	315	350	330
Depth	[mm]	650	700	850
Net Weight	[kg]	33,5	42,5	58
Gross Weight	[kg]	35	44	73

(\*) Frequency will be only one, indicated on motor characteristics label. (\*\*) Voltage will be only one when motor is single phase .

### 2. Installation and Pre Operation

#### 2.1 Installation

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

Meat Grinders model PSEE-22HD and PSEE 98MHD, equipped with single phase motors do not have a Voltage Selector Switch , therefore check the network voltage before to plug in the machine . The voltage of the network shall be the same as the voltage of the machine, 110 or 220 V.

Meat Grinders model PSEE 98THD equipped with a three phase motor have a Voltage Selector Switch No. 09 (Pic.01), therefore check the network voltage before to plug in the machine , and , using the Voltage Selector Switch placed at the rear side of the machine move it to adjust its voltage to the network , 220 or 380 V .

I t is mandatory the Meat Grinders to be grounded . Single phase and three phase machine cords have a green grounding wire .

### 2.2 Correct Worm Rotation

Important It is very important to have the worm right rotation inside the head , it shall be anticlockwise .

When starting the model  $\ensuremath{\mathsf{PSEE}}\xspace.98\ensuremath{\mathsf{THD}}\xspace$  three phase machine check the worm rotation inside the head .

If the worm rotation is found to be clockwise, invert the position of two wires inside the plug , and the rotation will turn ANTICLOCKWISE. On the side of the machine a label is stuck to warn the operator when installing the machine .

### 2.3 Pre Operation

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. For doing that follow the below steps:

2.3.1 Remove the Stumper N°01 (Pic.01) and the Pan N°02 (Pic.01).

2.3.2 Remove the Locking Ring N°05 (Pic.01) and then pull out of the Head No 06 (Pic.01) all the internal components.

2.3.3 Wash the internal components and replace them inside the Head .

IMPORTANT Do not tighten the Locking Ring too much , to avoid the internal components to brake or being stuck .

### 2.4 Feeding Process

#### IMPORTANT

Under no circumstances do use any kind of tool to push the meat inside the head, mainly not your hands . Only use the Stumper No.01 (Pict.01) . The meat processing inside the head will cool and lubricate the head internal components . Therefore do not allow the machine to run empty, because other way it will heat to much and will damage those components .

#### IMPORTANT

Do not store the head with meat inside , intoreezing chambers ..

The meat grinders models PSEE-22HD, PSEE-  $98 \rm MHD$  and PSEE-98THD are high speed machines , therefore the have to be fed  $\,$  fast .

To feed them place the meat pieces on the Pan No.02 (PIC.01) and drive them with the hand only as far as the pan mouth , then using the Stumper No.01 (PIC.01) push them inside where they will be drawn by the Worm .

## 3. Operation

### 3.1 Starting

IMPORTANT

Switch the machine OFF any time the head must be removed. Do not let on the pan any tool , as knives hooks or other . The machine works silently .

#### 4.2.1 Danger

An electric cable or electric wire with damaged jacket or bad insulation could cause electrical shocks as well as electrical leak. Before use, check 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 have to be very clear to the operator. Contact your nearest Dealer for further questions.

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.

Oil reservoir has to be full up to the required level as indicated. Check level and add oil if necessary.

### **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.

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

The operation performed by not trained or skilled personnel shall be forbidden.

Never touch turning parts with your hands or in any other way.

NEVER operate machine without all original safety devices under perfect

### 4.1 Basic Operation Practices

#### 4.1.1 Dangerous parts

Some parts of the electric devices are connected to high voltage points.

These parts when touched may cause severe electrical shocks or even be fatal.

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

Before giving any manual command (switch, buttons, turn keys or lever) be sure the command is the correct one. Check this manual for further details if necessary.

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 the sign has been made and responded.

#### 4.1.3 Advices

In case of power shortage, immediately turn the machine OFF.

Use recommended or equivalent lubricants, oils or greases.

Avoid mechanical shocks as they may cause failures or malfunction.

Avoid penetration of water, dirt or dust into mechanical or electrical components of the machine.

DO NOT modify original characteristics of the machine.

DO NOT remove, tear off or maculate any labels stuck on the machine. If any label has been removed or is no longer legible, contact your nearest dealer for replacement.

READ CAREFULLY AND WITH ATTENTION THE SAFETY OR OPERATION INSTRUCTIONS LABELS DISPLAYED ON THE MACHINE, AS WELL AS THE INSTRUCTION MANUAL AND THE TECHNICAL CHARACTERISTICS WRITTEN INSIDE.

#### 4.2 Safety Procedures and Notes Before Switching Machine ON

#### **IMPORTANT**

Carefully read ALL INSTRUCTIONS of this manual before turning the machine ON. Be sure to be familiar with the instructions and that you have well understood all information contained in this manual. If you have any question contact your supervisor or your nearest Dealer. Be assured the internal components of the machine are correctly assembled , as shown by Pict. 02 or Pict. 03..

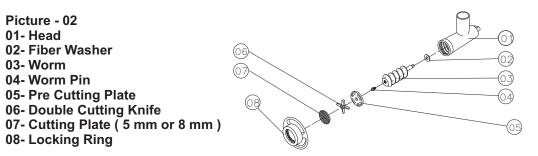
To start the machine pull the ON/OF Switch button , on the right side of the motor housing

# 3.2 Head Internal Components Assembling , using two plates and one double cutting knife ONLY APPLICABLE TO HEAD 98 .

#### IMPORTANT

Note the correct position of each Head internal component. Assembling the components in a different order could cause serious damages to the Meat Grinder.

To assemble the head internal components follow the below sequence:



To disassemble follow the inverse sequence.

#### IMPORTANT

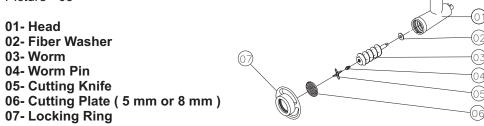
Do not tighten the Locking Ring too much , to avoid the internal components to brake or being stuck .

3.3 Head Internal Components Assembling to Grind Meat , using one plate and one knife ONLY APPLICABLE TO HEAD 22 .

#### IMPORTANT

Note the correct position of each Head internal component. Assembling the components in a different order could cause serious damages to the Meat Grinder

To assemble the head internal components follow the below sequence Picture - 03



To disassemble follow the inverse sequence.

#### **IMPORTANT**

Do not tighten the Locking Ring too much , to avoid the internal components to brake or being stuck .

#### 3.4 Cleaning

To do cleaning proceed as follows:

3.4.1 Switch the machine off and unplug the machine from power supply source.

3.4.2 Remove the Locking Ring N°08 (Pic.02) or No.07 (Pic. 03) and all the Head internal components.

3.4.3 Loosen the handle located on the right side of the Head N°08 (Pic.01) to remove the Head No 06 (Pic 01) .

3.4.4 Wash all components with running warm water and neutral soap.

3.4.5 To assemble the Head follow the above sequence inversely.

#### **3.4.6 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 item from the GENERAL SAFETY NOTIONS section is not applicable to your product, please disregard it.

The safety rules were made to orient and to instruct users of the band saw, and the peaple who will be responsible for its maintenance.

The band saw shall only be delivered to the user in good use conditions, and the user shall be instructed by the dealer, obout how to use safely the band saw.

The user shall only operate the band saw after complete knowledgement of the cares to be taken, after reading carefully the present instruction manual.