INDEX -1



1- INDEX
2- GENERAL FEATURES 2.1- Manual's Importance 2.2- Remarks 2.3- Machine Warranty 2.4- Copyright
3-TECHNICAL DESCRIPTION 3.1- Machine Name 3.2- Name of the Components 3.3- CE-Marking 3.4- Machine size 3.5- Technical Data 3.6- Destination of use 3.7- Limitations in use
4-HANDLING AND TRANSPORT 4.1- Transport of the machine 4.2- Packaging 4.3- Lifting of the packaging with fork lift 4.4- Unpacking 4.5- Lifting and transport of the machine – manual and/or with crane 4.6- Positioning
5- INSTALLATION5.1- Assembly of the moving working planes5.2- Electrical wiring
6- SAFETY 6.1- Referring Directives and Standards 6.2- Safety devices in use 6.3- Personal Protection Equipment (PPE)
7- USE AND OPERATION 7.1- Checks before the start up
8- MAINTENANCE 8.1- Routine and extraordinary maintenance 8.2- General cleaning 8.3- Scrapers' cleaning
9- DEMOLITIONS 9.1- General notice
11- ELECTRICAL EQUIPMENT 11.1- Wiring diagram and component list



2- GENERAL FEATURES

BEFORE USING THE PRESENT MACHINE THE OPERATOR IN CHARGE MUST COMPULSORY READ AND UNDERSTAND IN ALL ITS PARTS THE PRESENT MANUAL.

THIS MANUAL SHOULD BE CONSIDERED AS INTEGRATING PART OF THE DOUGH SHEETER AND SHALL BE PRESERVED FOR FUTURE REFERENCE.

This technical Manual of "Instructions for Use and Maintenance" has been drawn according to the instructions forecast by the **Directive on Machines 98/37/CE**, in order to ensure an easy and correct comprehension of the subjects treated, for the operator charged for the use of the machine, as well as for the operators charged for the maintenance of the present machine. If, notwithstanding the attention provided during the drawing up by the Manufacturer the operator in charge finds any incomprehension in the reading, please, in order to avoid personal interpretations compromising safety, **require immediately to the Manufacturer the correct explanation and further information**.

THE MANUFACTURERS DECLINES ANY LIABILITY FOR EVENTUAL DAMAGES CAUSED TO PERSONS, ANIMALS OR THINGS, DUE TO FAILURE TO COMPLY WITH THE STANDARDS DESCRIBED IN THIS MANUAL.

2.2- REMARKS

MACHINE STOPPED:

Before any intervention and/or adjustment on the machine it is compulsory to disconnect the power supply source. Make sure that the machine is actually stopped and there is not an unforecast start.

OPERATOR IN CHARGE:

An operator professionally trained, being at least 16 years old, in compliance with the regulations in force in the country of use, enabled to perform exclusively the start-up (cycle-start), the operation and the out of servicing (cycle end) of the machine absolutely observing the instructions indicated in this manual.

MECHANICAL TECHNICIAN FOR MAINTENANCE:

A qualified technician, enabled to perform exclusively interventions on mechanical devices to perform adjustments, maintenance and/or repairing, even with the protections disabled.

ELECTRICAL TECHNICIAN FOR MAINTENANCE:

A qualified technician (an electrician with the technical and professional skills required by the standards in force), enabled to perform exclusively the interventions on electrical devices to perform adjustments, maintenance and/or repairing also in presence of electric power supply and with the protections disabled.

2.3- MACHINE WARRANTY

The warranty period is of 12 (twelve) months from delivery date. Electrical parts, motors and tools are not included in the warranty. With warranty only the replacement of faulty pieces is meant.

2.4- COPYRIGHT

MANIPULATION AND/OR REPLACEMENT OF PIECES WITH NON-ORIGINAL SPARE PARTS CAUSE THE EXPIRATION OF THE WARRANTY AND RELIEVE THE MANUFACTURER OF ANY LIABILITY.

The reserved rights concerning this manual of "Instructions for Use and Maintenance" remain property of the Manufacturer. No part of this manual may be reproduced or diffused (completely or partially) through any device, without a previous written authorisation from the Manufacturer.



3.1- MACHINE NAME

The machine mentioned in the object is called as follows:

DOUGH SHEETER 500 SM

3.2- NAME OF THE COMPONENTS

In FIGG. 2A and 2B we show the main components which make up the machine.

3.3- CE-MARKING

The CE-Marking is made of a label in aluminium, red colour, silk printed, (is applied through 2 rivets as shown in **FIG. 1.** On the label in a readable and indelible way the following data are given:

- Name and address of the manufacturer; - Serial Number (MATR.);

- CE-Marking; - Voltage of power supply (VOLT/HZ);

- Model (MOD); - Electric power (KW/A);

- Year of Manufacture (ANNO); - Weight of the machine (PESO)

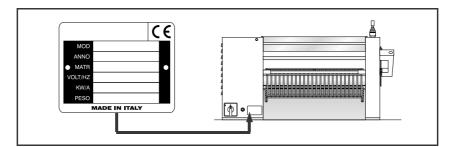
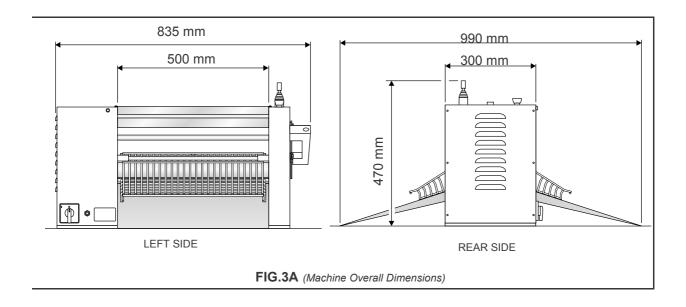


FIG.1 (CE-Marking plate)

3.4- MACHINE SIZE

In **FIG. 3A** in the related views we show the overall dimensions of the machine.



3.5- TECHNICAL DATA

In **TAB. 1** we quote the technical data which characterise the machine.

		SINGLE PHASE	THREE PHASE
Electric Power Voltage / Frequency	Volt / Hz	230 / 50	400 / 50
Electrical current intensity	А	3	1,9
Gearmotor electric power	kW	0,37	0,37
Rolling thickness values	0,1 ÷ 34		
Average acoustic pressure	dB(A)	<70	
Operation temperature	+10 ÷ +40		
Max operation humidity	90%		
Sizes of the Teflon-covered anti-adherent working planes	500 x 496		
Weight of the moving working plane	Kg	1,5	
Weight of the machine	Kg	70	

TAB.1 (Technical Data)

3.6- DESTINATION OF USE

THIS MACHINE HAS BEEN DESIGNED ONLY AND EXCLUSIVELY FOR THE ROLLING OF PASTRY FOR USE IN FOODSTUFFS FOR BAKERIES, PASTA FACTORY AND PIZZERIAS.

THIS MACHINE HAS BEEN DESIGNED ONLY AND EXCLUSIVELY FOR THE ROLLING OF PASTRY FOR USE IN FOODSTUFFS FOR BAKERIES, PASTA FACTORY AND PIZZERIAS.

IT IS ABSOLUTELY FORBIDDEN TO OPERATE THE MACHINE IN ENVIRONMENTS WITH POTENTIALLY EXPLOSIVE ATMOSPHERE.

3.7- LIMITATIONS IN USE

THIS MACHINE HAS BEEN DESIGNED EXCLUSIVELY FOR THE DESTINATION OF USE STATED IN PAR. 3.6. ANY USE OF THE MACHINE FOR INCORRECT PURPOSES IS THEREFORE FORBIDDEN IN ORDER TO GRANT THE GENERAL SAFETY OF THE SAME IN ANY MOMENT.

4- HANDLING AND TRANSPORT



4.1- TRANSPORT OF THE MACHINE

The machine is transported at the customer's by a "specialised transport firm" which through its own personnel and suitable devices, by observing the standards in force, ensures the operations of lifting and unload according to the type of transport (by surface, sea or air).

MANUFACTURER DECLINES ANY LIABILITY FOR DAMAGES CAUSED TO PERSONS, ANIMALS AND/OR THING CAUSED DURING THE TRANSPORT AND LIFTING OPERATIONS.

4.2- PACKAGING

The machine is usually packed by the Manufacturer on a cardboard box, fixed with strips on a wooden pallet.

Components supplied as disassembled:

N°2 Moving working planes;

N°1 Use and maintenance instructions.

4.3- LIFTING OF THE PACKAGING WITH FORK LIFT

The persons in charge to perform this task are obliged to strictly use a fork lift suitable for the use (in compliance with the regulations in force), as well as to follow the instructions applied externally to the machine packaging (See Chap. 12 - ENCLOSURES).

4.4- UNPACKING

Once you locate the packaging on the ground, on a flat surface ensuring its stability, unpack the plant as follows:

- **1-** Cut the strips with a tool suitable to the use;
- 2- Remove the cardboard box;
- 3- Remove from the packaging the components disassembled (See Par. 4.2).

4.5- LIFTING AND TRANSPORT OF THE MACHINE - MANUAL AND/OR WITH A CRANE

DURING THE LIFTING AND TRANSPORT OPERATIONS IT IS COMPULSORY THAT IN THE OPERATION RANGE THERE ARE NO PERSONS, ANIMALS AND/OR THINGS WHOSE SAFETY MAY ACCIDENTALLY BE ENDANGERED.

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Manual:

- 1- Employing 3 (three) operators carefully lift the machine from the pallet;
- 2- Transport the machine on the place of use and position it according to the indications given in Par. 4.6.

With crane:

- 1- Remove the flour-holder box (FIG.2A-Ref.10) by means of the two screws placed on the sides. Insert the straps or the ropes suitable to the use (complying with the regulations in force) under the rods of the shoulders (See FIG.5):
- 2- Verify that the sling does not hurt and/or damage the components of the machine;
- 3- Carefully perform the lifting.

4.6- POSITIONING

The machine must be located in a closed and covered environment, on a flat ground or plane ensuring its stability compared to the **overall dimensions** and to the **weight (Par. 3.5-3.4).**

RESPECT THE MINIMUM MEASURES OF POSITIONING STATED IN FIG.6, IN ORDER TO GRANT AN EASY AND SAFE ACCESS TO THE OPERATOR IN CHARGE AND TO THE MAINTENANCE TECHNICIANS.

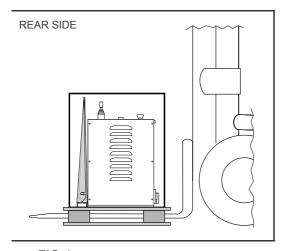


FIG.4 (Lifting of the packaging with fork lift)

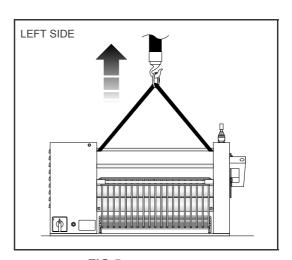


FIG.5 (Machine Lifting)

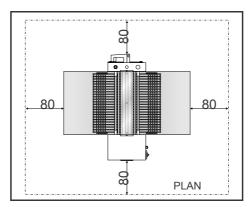


FIG.6 (Positioning)



5.1- ASSEMBLY OF THE MOVING WORKING PLANES

Lift the protecting grating and manually assembly the moving working planes on the support screws as shown in **FIG. 7**.

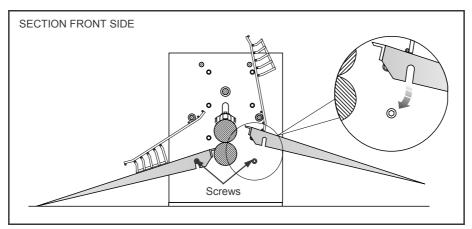


FIG.7 (Assembly of the moving working planes)

5.2- ELECTRICAL WIRING

The electric mains for power supply to which the machine is connected must meet the technical requirements indicated in **TAB. 1 (Par. 3.5)**, therefore the section of cables and mains switch must be suitably sized for a passage of current corresponding to the power installed.

Single-phase Model (230 V)

The power supply cable is already equipped with a plug.

Three-phase Model (400 V)

The power supply cable is not equipped with a plug, therefore you need to connect a suitable plug.

BEFORE PERFORMING THE ELECTRICAL WIRING OF THE MACHINE, THE PURCHASER MUST VERIFY THAT THE POWER SUPPLY MAINS AND THE GROUND PLANT MEET THE REQUIREMENTS FORESEEN BY THE REGULATIONS IN FORCE IN THE COUNTRY OF USE OF THE MACHINE.

THE ASSEMBLY OF THE PLUG ON THE POWER SUPPLY CABLE MUST FORCEDLY BE PERFORMED BY AN ELECTRICIAN MEETING THE TECHNICAL-PROFESSIONAL REQUIREMENTS REQUIRED BY THE REGULATIONS IN FORCE IN THE COUNTRY OF USE OF THE MACHINE.

THE PLUG AND ANY OTHER TYPE OF ELECTRICAL MATERIAL USED FOR THE CONNECTION MUST BE SUITABLE TO THE USE AND MUST COMPLY WITH THE REQUIREMENTS OF THE REGULATIONS IN FORCE IN THE COUNTRY OF USE OF THE MACHINE.



6-SAFETY

6.1- REFERRING DIRECTIVES AND STANDARDS

This machine has been designed and manufactured considering the following directives:

89/392 EEC: "Machine directive and following changes: 91/368 CEE - 93/44 CEE - 93/68 CEE" (Codified

version: 98/37/CE) -

73/23 EEC: Low voltage"

EN 60204-1: "Safety of the machine: **Electric equipment of the machine**".

EN 292-1-2: "Base concepts for the machine safety and general principles for planning".

EN 294: "Safety distance to avoid the reach of dangerous zones with upper limbs".

EN 349: "Minimum distance to avoid the crushing of body parts".

6.2- SAFETY DEVICES IN USE

The safety systems in use on the machine are the following:

IT IS COMPULSORY TO STEADILY VERIFY THE CORRECT OPERATION AND THE EFFICIENCY OF ALL SAFETY DEVICES PRESENT IN THE MACHINE.

1- PUSH-BUTTON "EMERGENCY STOP"

It is installed on the right side of the machine above the shoulder (FIG.2A-Ref.7), and it is a red mushroom button with lock and manual restart. The operation of the push-button causes the immediate stop of the rolling cylinders.

2- PROTECTION GRATINGS (RIGHT - LEFT)

They are made up of a structure in plastified steel wires (FIG.2A-Ref.17/18), installed by means of hinges on the shoulders of the machine in order to protect the dangerous area of the rolling cylinders.

They are equipped with two micro-switches which immediately stop the machine when the gratings are lifted in order to avoid the accidental access to the rolling area.

IT IS FORBIDDEN TO MANIPULATE, EXCLUDE, REMOVE AND/OR REPLACE ANY SAFETY DEVICE PRESENT IN THE MACHINE.

IT IS COMPULSORY TO REPLACE IN TIME EVENTUALLY MALFUNCTIONING AND/OR DAMAGED SAFETY DEVICES USING EXCLUSIVELY ORIGINAL SPARE PARTS.

IT IS COMPULSORY TO REQUIRE THE INTERVENTION AND/OR THE AUTHORISATION OF THE TECHNICAL ASSISTANCE OF THE MANUFACTURER BEFORE REPLACING ANY SAFETY DEVICE.

6.3- PERSONAL PROTECTION EQUIPMENT (PPE)

DURING THE OPERATION OF THE MACHINE IT IS COMPULSORY THAT THE OPERATOR IN CHARGE WEARS THE EAR PROTECTION AND STRICTLY OBSERVES THE SANITARY STANDARDS FORESEEN FOR THE FOODSTUFS SECTOR.



7- USE AND OPERATION

7.1- CHECKS BEFORE THE START UP

Before the start-up the operator in charge must perform the following checks:

- 1- Verify that the moving working planes are correctly assembled (Par. 5.1);
- 2- Verify that the protection grating is lowered (FIG.2A-Ref.17/18);
- 3- Verify that the flour-holder box is correctly assembled (FIG.2A-Ref.10);
- 4- Verify that the emergency stop push-button is not pressed (FIG.2A-Ref.7);
- 5- Verify that main switch is in position "0" (FIG.2A-Ref.1);
- 6- Only for the three-phase model (400 V), verify that the plug is connected to the power supply cable (Par. 5.2).

7.2- START-UP

THE OPERATOR IN CHARGE CAN START-UP THE MACHINE, ONLY AFTER HAVING COMPULSORY PERFORMED THE CHECKS DESCRIBED IN PAR. 7.1.

- 1- Insert the plug of the power supply cable (FIG.2A-Ref.2) in the proper outlet.
- 2- Enable the machine, turning the main switch (FIG.2A-Ref.1) in position "1";
- 3- Adjust the rolling thickness of the pastry by means of the handle (FIG.2A-Ref.3),
 - a) Major (+) = turns the handle clockwise;
 - **b)** Minor (-) = turns the handle counter-clockwise.
- 4- Using the joystick (FIG.2A-Ref.5), select the direction of revolution of the rolling cylinders:
 - a) Pos. RIGHT = outlet of the pastry on the RIGHT side (Insertion of the pastry on the LEFT side);
 - b) Pos. LEFT = outlet of the pastry on the LEFT side (Insertion of the pastry on the RIGHT side);
- 5- Start the machine pushing the push-button "Start" (FIG.2A-Ref.6);
- **6-** Lay the pastry on the selected working plane and start the rolling cycle (More rolling processes with different thickness values) inserting it through the rolling cylinders;
- **7-** Once the wished pastry thickness has been reached, stop the machine turning the main switch and take the pastry away.

7.3- EMERGENCY STOP

The emergency stop of the machine can be performed by pushing the emergency stop push-button (FIG.2A-Ref.7).

In order to avoid dangerous situations which may occur immediately or which are already occurring, the operator must:

- 1- Push the emergency stop push-button (FIG.2A-Ref.7) in time;
- 2- Switch off the machine turning the main switch (FIG.2A-Ref.1) in pos. "0";
- 3- Eventually signal the emergency to the "Person in Charge of Safety";
- 4- Eventually require the intervention of a mechanical and/or electrical technician for maintenance.

7.4- START-UP AFTER AN EMERGENCY STOP

N.B. The sudden interruption of power supply to the machine (current failure) is to be considered as an emergency stop.

Only and exclusively after having solved the reason/s of the emergency and having carefully verified that the same have not caused any damage and/or failure to the machine (eventually with the consensus of the "Person in Charge of Safety") release the emergency push-button (Manual re-start) and follow the instructions given in PAR. 7.2.

7.5- OUT OF SERVICING

Once the operation of the machine has ended, the operator in charge can perform the out of commissioning of the same, compulsory following the indications given here below:

- 1- Switch off the machine turning the main switch (FIG.2A-Ref.1) in position "0";
- 2- Remove the plug of the electric connection cable from the proper outlet:
- 3- Perform the cleaning of the machine as described in Par. 8.1.

8.1- ROUTINE AND EXTRAORDINARY MAINTENANCE

IT IS COMPULSORY TO REMOVE THE POWER SUPPLY PLUG FROM THE OUTLET BEFORE PERFORMING ANY TYPE OF MAINTENANCE INTERVENTION ON THE MACHINE.

Every day:

- Verify the correct operation of the protection grating and of the emergency stop push-button.
- Visually inspect the conservation status of the power supply cable and of the plug.
- Perform the general cleaning of the pastry rolling machine (Par. 8.2).
- Perform the cleaning of the scrapers (Par. 8.2).

After the first 100 hours of work and/or every year:

- Tighten and grease the gearing chains.

8.2- GENERAL CLEANING

To grant the sanitary conditions of the machine you must clean it from any flour or dirt accumulation on the surfaces. The products to be used for this cleaning are common household detergents and you must perform many rinsing procedures with sponges soaked in water.

8.3- SCRAPERS' CLEANING

For a correct operation of the machine, it is necessary to perform the external cleaning of the scrapers **every day**. The parts that are not easily accessible, the cleaning has to be performed **every week**. Disassemble the scrapers as described here below:

1- DISASSEMBLY LOWER SCRAPERS (INTEGRATED IN THE WORKING PLANES):

- a- Remove the moving working planes (FIG.2A-Ref.16/19) and perform a careful cleaning, removing the accumulations of flour and pastry using non-toxic deterring products and performing the rinsing with a sponge soaked in water;
- b- Assemble again the moving working planes (FIG.2A-Ref.16/19) in the working position.

2- DISASSEMBLY UPPER SCRAPERS:

- a- Remove the flour-holder box (FIG.2A-Ref.10) by means of the two screws placed on the sides;
- b- Unscrew the three screws placed on the scrapers' support (FIG.2A-Ref.11);
- **c-** Remove the support and perform a careful cleaning of the scrapers removing any flour or pastry accumulation using non-toxic deterring products and performing the rinsing with a sponge soaked in water;
- **d-** Assemble again the support of the scrapers and tighten the three screws;
- **e-** Assemble again the flour-holder box and tighten the two screws.

When the demolition of the machine must be performed, it is compulsory to follow the prescriptions of the stan-



9-DEMOLITIONS

dards in force. Proceed with the separation of the parts which make up the machine according to the various types of construction materials (plastic, copper, iron, etc.). The lubricating liquids and any other fluid must not absolutely be exhausted in the environment. Those products considered as polluting and dangerous must be strictly disposed by authorised and specialised companies according to the various typologies of products.