



USE AND MAINTENANCE MANUAL

SEMI-AUTOMATIC DIVIDER





## 1 - GENERAL

## 2 - PRODUCT INFORMATION

- 2.1 VOLTAGES
- 2.2 POSSIBLE VERSIONS
- 2.3 MATERIALS USED

## 3 - PRODUCT CONCEPTS

- 3.1 WARNINGS
- 3.2 DESCRIPTION OF THE PARTS COMPOSING THE MACHINE
- 3.3 ERROR SIGNALLING

## 4 - SAFETY

- 4.1 DANGER DUE TO MECHANICAL COMPONENTS
- 4.2 DANGER DUE TO ELECTRICAL COMPONENTS
- 4.3 DANGER DUE TO HYDRAULIC COMPONENTS
- 4.4 DANGER DUE TO LACK OF HYGIENE
- 4.5 DANGER DUE TO NOISE

## 5 - TRANSPORT AND UNPACKING THE MACHINE

- 5.1 TRANSPORT
- 5.2 UNPACKING

## 6 - INSTALLATION

- 6.1 POSITIONING AND MAINTENANCE
- 6.2 ELECTRICAL CONNECTION
- 6.3 DISPOSAL OF THE MACHINE
- 6.4 PLACING THE MACHINE OUT OF SERVICE

## 7 - PRODUCT DESCRIPTION

- 7.1 SCOPE OF THE MACHINE
- 7.2 UNPERMITTED USE OF THE MACHINE
- 7.3 DESCRIPTION OF THE SEMI-AUTOMATIC CONTROL PANEL
- 7.4 HOW THE COMMAND KEYPAD WORKS
  - 7.4.1 WORK PROGRAM SELECTION
  - 7.4.2 CHANGING THE WORKING TIMES
  - 7.4.3 CHANGING THE NUMBER OF DIVISIONS (only on double cut models)
- 7.5 ERROR SIGNALS

## 8 - HOW TO WORK WITH THE MACHINE

- 8.1 WORKING CYCLE
- 8.2 USEFUL ADVICE

## 9 - JUDGING THE RESULTS

## 10 - MAINTENANCE

- 10.1 DAILY MAINTENANCE
- 10.2 PERIODIC MAINTENANCE

It is important to read this manual and comply with the suggestions and/or rules for unpacking, installation, use and maintenance of the machine.

If the machine is sold, the manual must be given to the new owner.

Only operators trained for use and having read the manual can operate the machine.

The manufacturer's warranty obligations only apply to defects arising from correct use of the machine, as described in this manual.

The manufacturer cannot be held in any way liable for damage to people or property, if caused by improper use of the machine.

The manufacturer cannot be held liable for errors and/or oversights in this manual.

All the machinery complies with EC and EAC standards and is manufactured in Italy.



If any part of the manual is unclear, immediately contact the manufacturer before starting work with the machine. Do not hesitate to contact the manufacturer directly for any problems relating to operation; our technical staff will help you with any problems relating to operation and production. Specify the model and serial number for all correspondence about the machine.

### ATTENTION

- . Do not work under the influence of alcohol, drugs or medicine which could alter physical conditions.
- . Keep your hair and other parts of your body far from rotating parts, belts and gears.
- . Keep the danger and safety data labels clean and tidy.

## 2 - PRODUCT INFORMATION

After sales support: contact the retailer.

All machine data are outlined on the serial number:

Modello/Mod.	ST A 20
Data/Date	05 / 2016
Matricola/Serial Number	90166275
Voltaggio/Volt.	400 V-50/60 Hz-3 ph
Potenza/Kw	0,75 kW
Ampere/A	2,21 A
Peso/Weight	200 Kg

MADE IN ITALY



### 2.1 VOLTAGES

All the machines are supplied as standard with a 400 Volt 50 Hz 3 phase connection.  
On request: different voltages can be manufactured.

### 2.2 POSSIBLE VERSIONS



Rectangular



Hexagonal



Round

### 2.3 MATERIALS USED

- .Frame in electro-welded, painted or galvanised steel;
- .Coating in painted steel or stainless steel.
- .Basins in Anticorodal aluminium MG5 with anodising;
- .Knives in stainless steel AISI 304;
- .Grids in stainless steel AISI 304 or polyethylene for foodstuff use PE500;
- .Inner cover surface and presses in polyethylene for foodstuff use PE500;
- .Oil for hydraulic control unit: H32.

**N.B.: all parts in contact with the product are suitable for the food industry**

### 3.1 WARNINGS

The following signals warn the operator of possible danger due to mechanical or electrical components.



Before using the machine, you need to carefully read this manual and follow the instructions. Ensure the warning adhesives are in good condition and, if necessary, replace them. When you use the machine for the first time, carefully follow the instructions, to avoid unpleasant surprises.

Do not allow unqualified staff to use the machine.



The machine can only be used by qualified staff.



Ensure the machine is off during cleaning, maintenance and lubrication.



Return the safety guards to their original position after cleaning, maintenance or lubrication of the machine.



Both mechanical and electrical repairs must be carried out by qualified staff, i.e. by a person who has familiarity with and has the right qualifications for installation, assembly and use of the machine.



## 4 - SAFETY



- . Remove the plug from the electrical power supply during machine maintenance.
- . Only qualified and well-instructed staff can carry out mechanical or electrical operations.
- . The machine must be used by one person at a time.
- . Do not remove the guards when the machine is on.

### 4.1 DANGER DUE TO MECHANICAL COMPONENTS



- . The safety guards protect all the parts. Keep them on during normal operations. All the guards are controlled by a micro. If they are not closed correctly, the machine will not work.
- . There is a risk of injuring yourself during machine maintenance, particularly when parts are removed without complying with safety standards.
- . There is no danger if the machine is used correctly, as described in chapter 8.

### 4.3 DANGER DUE TO HYDRAULIC COMPONENTS



- . Such danger is not contemplated because the components withstand at least five times 40 bar pressure.

### 4.4 DANGER DUE TO LACK OF HYGIENE



- . If the precautions in the MAINTENANCE chapter are not strictly complied with, there may be serious hygiene-related danger.

### 4.5 DANGER DUE TO NOISE



- . The average noise level measured near the work station is under 70 decibels.



## 5 - TRANSPORT AND UNPACKING THE MACHINE

### 5.1 TRANSPORT

The machine must be transported in its original packaging. It must be moved with an adequate lifting system to avoid damaging it and injuring yourself.



- . Do not position anything on the package.
- . The machine must always be transported in a vertical position.

### 5.2 UNPACKING

The machine can be sent packaged with a pallet and cardboard, cage or crate. The packaged machine can therefore be lifted with a forklift or pallet truck by inserting the forks in the specific spaces prepared under the packaging. It can also be lifted with a crane, passing the ropes or straps under the packaging. In this case, comply with the maximum tensioning angle of the ropes which must be 45°, as shown in the figure.

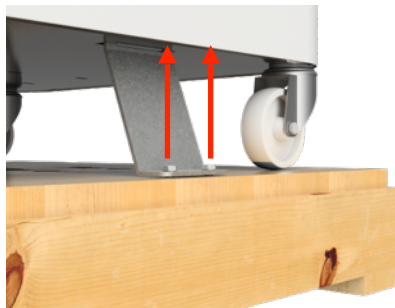


Remove the packaging vertically.

Carefully unpack the machine and check there are no signs of damage from transport. If found, promptly inform the carrier. You are always advised to photograph the damage.

Remove the fastening brackets as in the figure and, using a forklift (or a lifting device), remove the machine from the pallet.

To ensure further staff safety, you are advised to maintain a sufficient distance from the machine when it is being lifted.



## 6 - INSTALLATION

### 6.1 POSITIONING AND MAINTENANCE

The machine must only be installed by qualified and authorized staff.

The machine must only be used for the purpose of dividing dough (rounding for rounding dividers).

The warranty is not valid if changes are made without the manufacturer's authorization and/or if non-original spare parts are used. Use of non-original spare parts can damage the machine and/or harm the operator.

The machine must be positioned on a solid and regular floor. The machine is very stable. (For rounding dividers): if the feet are regulated properly, the machine will be very stable.

### 6.2 ELECTRICAL CONNECTION

A qualified technician should carry out installation and an electrician should connect the machine to the power supply system. Firstly check the voltage and the connection phases are equal to those of the machine (see identification plate). If this is not the case, contact the retailer.

Check the rotation direction of the motor on the machine. Turn the main knob to position I-ON. Open the cover and position the joystick in W (Work) and see if the work surface rises.

If this is not the case, an electrician must invert the phases, i.e. he must invert the two cables in the power plug to change the rotation direction of the motor.

### 6.3 DISPOSAL OF THE MACHINE

When you want to dispose of an entire machine, parts or just the packaging, you must comply with the waste disposal rules. Specifications regarding the material on the various parts can be obtained from the manufacturer. See WEEE.

### 6.4 PLACING MACHINE OUT OF SERVICE

Switch off the machine by bringing the main switch to 0-OFF and subsequently protecting the machine from external factors and leave it in a dry and enclosed location.

## 7 - PRODUCT DESCRIPTION

### 7.1 SCOPE OF THE MACHINE

The **dividers** are machines that enable cutting pieces of raw dough, in various parts, even large in size, of equal shape and weight according to the model.

**N.B.: all parts in contact with the product are suitable for the food industry**

### 7.2 UNPERMITTED USE OF THE MACHINE

The divider can only be used for the activities described in chapter 8.

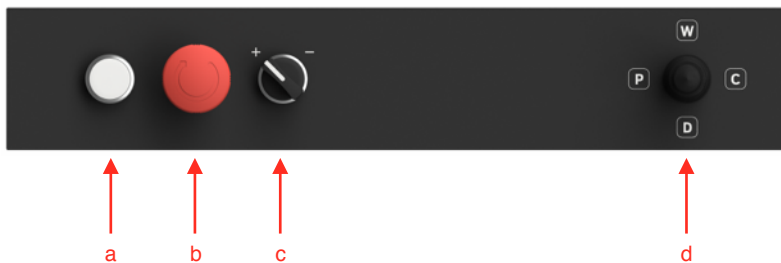
The machine can only be cleaned using products suitable for the food industry.

Ensure the machine is on a flat surface.

Only use original spare parts.

Do not use mixtures with metal, stones or other particular objects, which could compromise parts of the machine.

### 7.3 DESCRIPTION OF THE COMMAND KEYPAD



- a. Mains light
- b. Emergency
- c. . Size change selector (only on double cut models)
  - . Selector for high/low pressure (optional - *not available on double cutting models*)
- d. Command joystick (4 positions)

## 7.4 HOW THE COMMAND KEYPAD WORKS

### 7.4.1 POSITIONS OF THE JOYSTICK

The machine is equipped with a joystick used to execute all the functions.

#### **W (Work)**

the machine executes the complete work cycle (automatic pressing and cutting)

#### **P (Press)**

the machine only executes the pressing phase.



#### **C (Clean)**

the machine brings the knives to the highest position to execute cleaning

#### **D (Down)**

the machine brings the knives and the work surface to the lowest position (rest position)

**N.B.:** when the joystick is released, at any time, the machine leaves the knives and the work surface in the current position.

### 7.4.2 CHANGING THE NUMBER OF DIVISIONS (only on double cut models)

On models with a double cut, use the selector to set two types of division.



**pos. +** the machine is cutting with the most number of divisions (e.g. mod 10/20 divides in 20 pieces)

**pos. -** the machine cuts with the least number of divisions (e.g. mod 10/20 divides in 10 pieces)

### 7.4.3 CHANGING THE WORKING PRESSURE (only on models with regulator)

On models with a pressure regulator, using the selector, you can set two mode types.



**pos. +** High Pressure: the machine executes the pressing phase with the standard pressure set (approx 40 bar)

**pos. -** Low Pressure: the machine executes the pressing phase with reduced pressure (approx 25 bar) to avoid the dough going flat that you are working on (specifically for certain types of dough)

## 7.5 ERROR SIGNALS

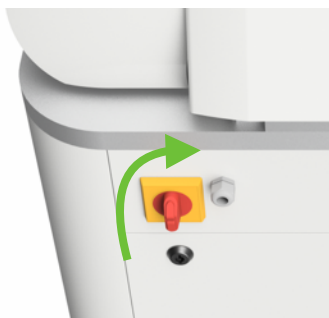
The machine is equipped with a safety micro.

If the machine is on (mains light on), but there is no sign of operation:

- . check the opening casings (front and rear). If these two casings (or just one) is not closed properly or they are missing, the machine cannot work.
- . check the emergency is not inserted.

### 8.1 WORKING CYCLE

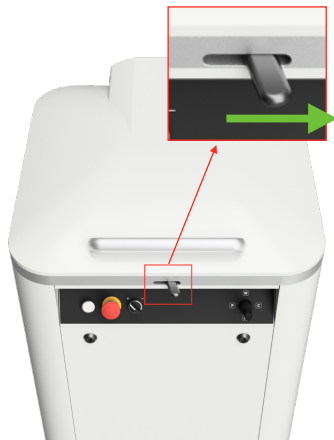
The phases follow for correct use of the divider



1. Position the main switch in the ON position



2. Insert the weighed dough in the basin



3. Close the cover using the specific handle.



4. Position the joystick in position W; the machine automatically presses and cuts



5. On finishing the cutting phase (after a few seconds), slightly lower the work surface by positioning the joystick on D



6. Open the cover, raise the work surface by positioning the joystick on W and remove the cut product.

To obtain a good product, proceed as follows:

- . Put flour inside the basin;
- . Insert the dough;
- . Put flour over the dough.

Using this method, you avoid the dough sticking to the basin and the cover during the pressing and cutting phase.

## 9 - JUDGING THE RESULTS

The following information will help you obtain the best possible results.

### **The pieces of dough are not the same weight?**

- . Ensure the piece of dough is positioned at the centre of the basin and is slightly pressed by hand.
- . Be sure the dough has the right pre-leavening time (depending on the dough, but fifteen minutes is normally enough)
- . If the outer pieces are smaller than the inner ones, you need to do as follows:
  - before cutting the dough by positioning the joystick on W, execute a first pressing phase by positioning the joystick on P.
- . If the dough is not cut, you need to increase the cutting time



- . Check the weight of the dough to cut complies with the capacity of the machine

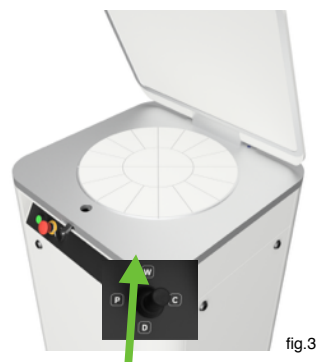


- . With a medium consistency dough, the machine can produce dough pieces that have a weight change of 3-4%.

### 10.1 DAILY MAINTENANCE

To carefully clean the work surface and the knives, follow the various phases described below.

- . Keeping the cover open, position the work surface in the lowest position (rest), moving the joystick to D (fig. 1);
- . Position the joystick on position C; the machine will position the knives in the highest position (fig.2).
- . Once the knives are cleaned, press the joystick on W: the machine will lift the surface (fig.3) to conclude the cleaning operation.

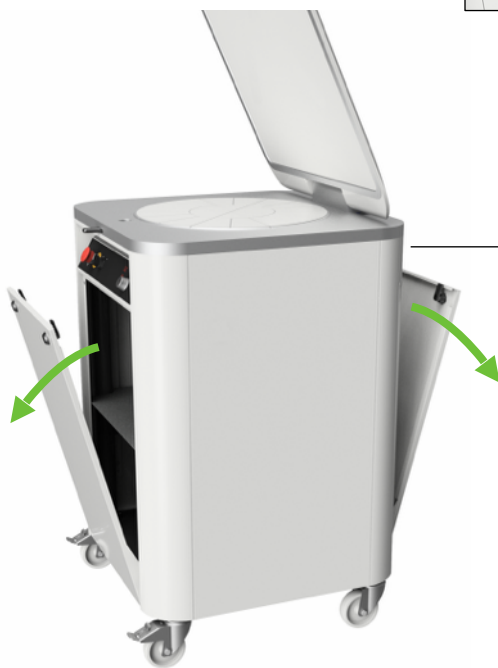
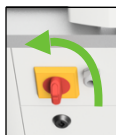


- . Keep the work surface and the edge of the basin clean to correctly close the cover during the work cycle.

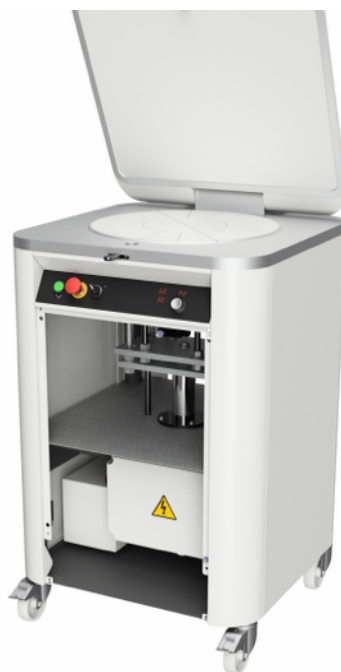


To ensure the machine works properly and, in particular to ensure a long life, you are advised to periodically clean it, inside and out (see use manual). The stainless steel parts, the painted covers, the polyethylene PE500 and the plates in PETG can be easily cleaned with water and soap or a neutral detergent, then you need to rinse them with plenty of water and dry them with a soft cloth.

1. Position the main switch in the O OFF position



2. Open the casings using the specific locks



3. Clean inside the machine.

RECTANGULAR BASIN

no. divisions	weight min (gr) *	weight max (gr) *	basin capacity (Kg)	press dimensions	hourly capacity **	dimensions bxhxl (mm)	weight (Kg)	
10	300	2000	20	100x200	1200	660x660x1100	210	
20	150	1000	20	100x100	2400	660x660x1100	210	
20	150	1000	20	120x80	2400	660x660x1100	210	
24	130	830	20	100x80	2800	660x660x1100	210	
30	100	660	20	80x84	3600	660x660x1100	210	
40	80	500	20	50x100	4800	660x660x1100	210	
48	60	400	20	50x80	5700	660x660x1100	210	
60	50	330	20	80x42	7200	660x660x1100	210	
80	40	250	20	50x50	9600	660x660x1100	210	
10/20	10	300	1800	18	100x200	1200	660x660x1100	210
	20	150	900	18	100x100	2400	660x660x1100	210
15/30	15	200	1200	18	80x170	1800	660x660x1100	210
	30	100	600	18	80x84	3600	660x660x1100	210

HEXAGONAL BASIN

no. divisions	weight min (gr) *	weight max (gr) *	basin capacity (Kg)	press dimensions	hourly capacity **	dimensions bxhxl (mm)	weight (Kg)
37	45	220	8	65	4000	660x660x1100	210
37	40	190	7	62	4000	660x660x1100	210
37	30	160	6	57	4000	660x660x1100	210

ROUND BASIN

no. divisions	weight min (gr) *	weight max (gr) *	basin capacity (Kg)	press dimensions	hourly capacity **	dimensions bxhxl (mm)	weight (Kg)
16	190	1200	20	460	1900	660x660x1100	210
20	150	1000	20	460	2400	660x660x1100	210
24	130	830	20	460	2800	660x660x1100	210

**Note:** \*the min./max weights are provided purely as an indication and can vary based on the degree of dough leavening, \*\* hourly production rates are also approximate, as they always depend on the user's internal organization (tests conducted in an equipped laboratory).





Reproduction forbidden. The illustrations and technical data in this catalogue are for indication purposes only and are non-binding. The manufacturer reserves the right to make changes, without prior warning, to the technical data and the characteristics of the products at any time for the sole purpose of improving their characteristics.