

# AUTOMATIC DIVIDER

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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.


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

CE EAC



### 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.

3.2 - DESCRIPTION OF THE PARTS COMPOSING THE MACHINE





- . 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. An error will display when they are not closed, therefore 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.

#### 4.2 DANGER DUE TO ELECTRICAL COMPONENTS



- . Such danger is not covered because the components are not directly accessible. Broken or damaged cables or electrical components must be promptly replaced by specialist staff or an electrician.

#### 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.



## 5.1 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.



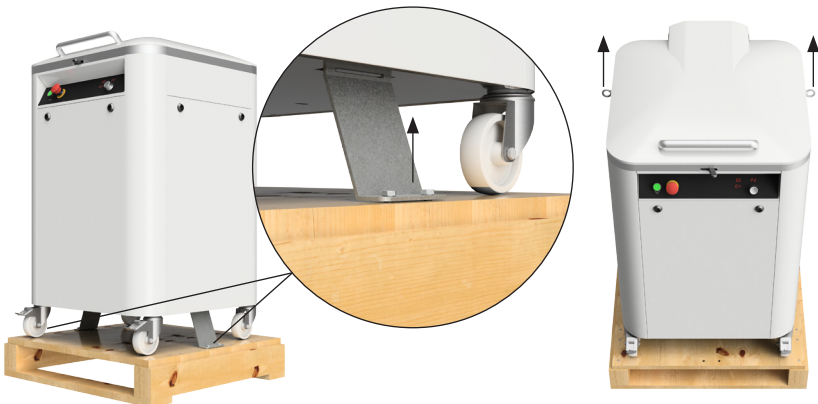
- . Do not position anything on the package.
- . The machine must always be transported in a vertical position.

## 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.



## 6.1 POSITIONING AND MAINTENANCE

The machine must only be installed by qualified and authorised 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 authorisation 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 switch to position I-ON. Close the lid and do a work cycle "unladen". At the end of the cycle the work plan and the knives should be in the highest position. 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.

## 7.1 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.** Start Button
- b.** Emergency
- c.** Digital display
- d.** Knob to change the programs and the working times

## 7.4.1 WORK PROGRAM SELECTION

To select the program to work with, keep the knob pressed for 1 seconds (the display highlights relating to the program); turn the knob to the right or left to increase or decrease the program number. Once the work program is chosen, confirm by pressing the knob once.



## 7.4.2 CHANGING THE WORKING TIMES

To change the working times, keep knob “e” pressed for 3 seconds (the program number is highlighted).

Select the program number, keep the knob to change the individual working times pressed for another 3 seconds with the procedure described below.

**t 1 (pressing time) \***

The relevant display is highlighted.

Turn the knob to the right or left to increase or decrease the value.

Once the desired value is set, press the knob once.

**t 2 (cutting time) \*\***

The relevant display is highlighted.

Turn the knob to the right or left to increase or decrease the value.

Once the desired value is set, press the knob once.

At this point, the machine returns to display the program (all the values are highlighted) and is ready for the working cycle with the selected program. See figure below



#### \* **t 1 (pressing time)**

This parameter identifies the time needed to evenly distribute the dough inside the basin, to ensure in the cutting phase each piece is the same weight and volume.

#### \*\* **t 2 (cutting time)**

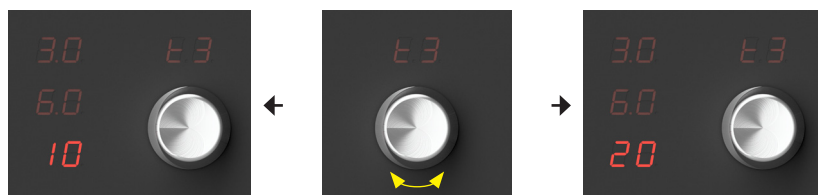
This parameter identifies the time needed by the knife to evenly cut the product inside the basin.

#### \*\*\* **t 3 (number of divisions)**

This parameter identifies the number of divisions with which the machine will cut the product inside the basin.

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

The double cut models have a third parameter used to set two types of division (e.g. 10/20 and 15/30).



The machine cuts with the most number of divisions (e.g. mod 10/20 divides in 20 pieces)

#### **t 3 (number of divisions) \*\*\***

The relevant display is highlighted. Turn the knob to the right or left to change the value. Once the desired value is set, press the knob once.

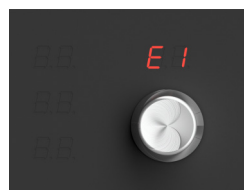
The machine cuts with the least number of divisions (e.g. mod 10/20 divides in 10 pieces)

### 7.5 ERROR SIGNALS

The display can signal the following errors:

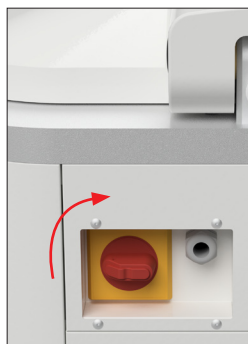
**E1** - Emergency inserted

**E2** - Thermal relay



## 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. Set the pre-selected program for the working cycle



4. Close the cover using the specific handle.



5. Press the green Start key



6. Wait for the green button to flash;  
Open the cover and remove the cut product.

## 8.2 USEFUL ADVICE

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.

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 increase the pressing time
- . If the outer pieces are bigger than the inner ones, you need to decrease the pressing time
- . 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 select the cleaning cycle program, turn the knob until the CL program appears on the display, as in the figure below.



Press the Start button “a”:  
the machine will automatically position the knives in the highest position (fig.2).

Once the knives are cleared, press the Start key again and the machine will lift the surface (fig.3) to conclude the cleaning operation.



fig.1



fig.2



fig.3



. Keep the worktop and the edge of the tub clean at the ends to be able to close the lid correctly during the cycle of work.



## 10.2 PERIODIC MAINTENANCE

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.



## RECTANGULAR BASIN (H=125 mm)

no. divisions	weight min *	weight max *	basin capacity	hourly capacity **	dimensions bxdxh	press dimensions	weight
	gr	gr	kg	pz/h	mm	mm	Kg
10	300	2000	20	1200	660x660x1100	100x200	210
20	150	1000	20	2400	660x660x1100	100x100	210
20s	80	500	10	2400	660x660x1100	80x80	210
24	130	830	20	2800	660x660x1100	100x80	210
30	100	660	20	3600	660x660x1100	80x84	210
40	80	500	20	4800	660x660x1100	50x100	210
48	60	400	20	5700	660x660x1100	50x80	210
60	50	330	20	7200	660x660x1100	80x42	210
80	40	250	20	9600	660x660x1100	50x50	210

## HEXAGONAL BASIN - double cut (H=110 mm)

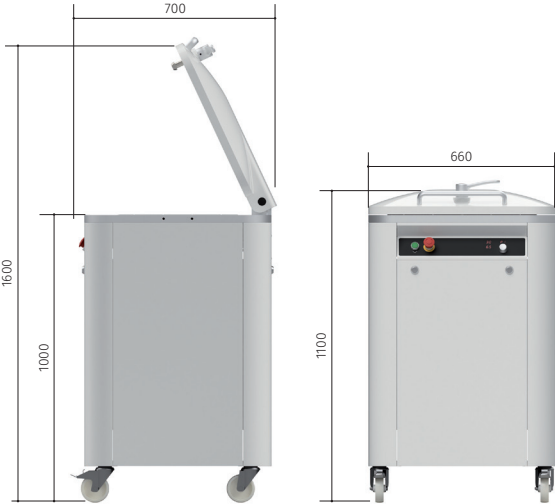
no. divisions		weight min *	weight max *	basin capacity	press dimensions	hourly capacity **	dimensions bxdxh	weight
		gr	gr	kg	mm	pz/h	mm	Kg
10/20	10	300	1800	18	100x200	1200	660x660x1100	210
	20	150	900	18	100x100	2400	660x660x1100	210
12/24	12	260	1500	18	80x200	1400	660x660x1100	210
	24	130	750	18	80x100	2800	660x660x1100	210
15/30	15	200	1200	18	80x170	1800	660x660x1100	210
	30	100	600	18	80x84	3600	660x660x1100	210

## ROUND BASIN (H=125 mm)

no. divisions	weight min *	weight max *	basin capacity	hourly capacity **	press dimensions	dimensions bxdxh	weight
	gr	gr	kg	pz/h	mm	mm	Kg
16	190	1200	20	1900	660x660x1100	-	210
20	150	1000	20	2400	660x660x1100	-	210
24	130	830	20	2800	660x660x1100	-	210

HEXAGONAL BASIN (H=110 mm)

no. divisions	weight min *	weight max *	basin capacity	hourly capacity **	dimensions b x h x l	press dimensions	weight
	gr	gr	kg	pz./h	mm	mm	Kg
19	90	500	9,5	2300	660x660x1100	85	210
37	30	160	6	4400	660x660x1100	57	210
37	45	220	8	4400	660x660x1100	65	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 organisation (tests conducted in an equipped laboratory).



Tutte le macchine sono conformi alle normative CE e sono prodotte in Italia  
/ All machines are in conformity with EC regulations and are manufactured  
in Italy.

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