

USER'S OPERATING

AND INSTRUCTION MANUAL



CE

MOULDER M-600 S DR M-750 S DR

TECHNICAL CHARACTERISTICS

Machine	Model	Characteristics
Horizontal Moulder	M-600S-DR	Simple moulding, horizontal type with double moulding
	M-750S-DR	Simple moulding, horizontal type with double moulding

Model	Voltage (V)	Intensity (A)	Phases	Power (kW)	Frecuency (Hz)
M-600S-DR	230/400V	3.8/2.1	3+T	0.75	50
M-750S-DR	230/400V	3.8/2.1	3+T	0.75	50

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0. WARNINGS

IMPORTANT

Read this Instruction Manual carefully before starting the machine up.

INSTRUCTIONS FOR START-UP

The machine must be earthed for protection against electric shocks and must be directly connected to the earthing point. The earthing cable must not be cut or disconnected from the machine.

NOISE LEVEL

LEQ sound pressure at 1 m under operating conditions < 70 dB (A)

LPC sound pressure at 1 m under operating conditions < 130 dB (C)

Keep this Instruction Manual in a safe but accessible place for future reference throughout the working life of the machine.

1. PRE-ASSEMBLY INSTRUCTIONS

1.1 Introduction

This Manual contains all the information needed to correctly carry out the installation, use and maintenance of the equipment by qualified personnel.

You should read these instructions carefully before carrying out any operation, as they provide essential indications for the safe operation of the equipment.

1.2 Moving and transport

We recommend unpacking the machine immediately to check that it is in perfect condition and has not suffered any damage during transport.

If any damage is detected this should be notified to the transport company at the earliest opportunity. Under no circumstances may the damaged machine be returned to the manufacturer without prior notice and without having received authorisation to do so in writing.

All the machines have wheels, so they can be easily moved by 2-3 people. Whenever possible, a lifting system such as a forklift truck or transpallet should be used, taking particular care to ensure the weight is balanced.

The packaging is usually cardboard on a pallet or wooden crate. DO NOT STACK.

1.3 Tests

The product is delivered after the successful completion of visual, electrical and functional tests.

1.4 Preparations before installation

- Prepare a high-sensitivity thermal-magnetic circuit breaker with an Herat fault current interrupter (300 mA).
- Pre-install an earthed power point.
- Check that the support surface for the machine is flat.

1.5 Electrical connection

The electrical connection must be made by authorised professionals, following the regulations in force of the country in which the machine is being installed.

Before connecting up to the power supply, ensure that the voltage and frequency of the network correspond to those indicated on the characteristics card of the machine.

CAUTION: DO NOT USE PLUGS OR PINS THAT ARE NOT EARTHED.

The machine is protected against overloads and short-circuits. The electrical connection is made via a manually activated high-sensitivity thermal-magnetic circuit breaker with an earth fault current interrupter

(300 mA).

1.6 Safety warnings during installation

- Before connecting to the power supply, ensure that the voltage and frequency of the network correspond to those indicated on the characteristics card of the machine.
- Always connect the machine to a high-sensitivity thermal-magnetic circuit breaker with an earth fault current interrupter (300 mA).
- Do not touch electrical parts if your hands are wet or if you are not wearing shoes.
- All our machines must be installed by specialised and authorised technical personnel with good mechanical and electrical knowledge of the machines.
- Before connecting up to the power supply, ensure that all switches are in the 0 position and that nobody is working on the machine.
- Once the machine is connected, check the rotation direction of the belt.

1.7 Start-up

- The direction of the belts show the turning of the motor.
- Adjust the sheeting rollers, the best distance is between 3,5-5,5.
- Check that the belts are perfectly centred.

2. TECNICAL DATA

2.1 Materials used

- Zones that enter into contact with the food product are reduced to conveyor belts made of materials that are suitable for food use (PVC belts...etc).
- Sheeting rollers made of synthetic material for food use.
- o Steel structure and plates, coated with epoxy paint.

2.2 Dimensions and weights

Model	Width (mm)	Lenght (mm)	Height (mm)	Weight (kg)
M-600S-DR	800	2000	1300	330
M-750S-DR	860	2250	1400	390

2.3 Data Sheet

Component	M - 600-S	M - 750-S	Details	
Motor power (kW)		0.75	0.75	400/230 V, with Braker
Rpm		1000	1000	
Belts (mm)	Flattening Entry	750 x 600	1120 x 570	
	Flattening	2150 x 600	2600 x 750	
	Collection Belt	3200 x 600	4000 x 750	
Otras lonetas plastificadas (mm)	Pre- Flattening	900 x 600	850 x 750	
(evitan el pegado en los	Flattening	900 x 600	1150 x 750	
aplastes)	Ramp	300 x 600	300 x 750	
	Height	1170	1300	
Height to the entry belt (mm)		1020	1130	
Height to the outlet belt (mm)		770	880	
WT (gr)		601000	601000	
Hourly production (pieces/hour)		2400	2400	

3. OPERATION

3.1 Characteristics

Horizontal type moulders with double travel and enclosed belt for the (manually) formed product.

Types of loaves

All types between 30 and 1000 g (the sheeting rollers and stretching plates can be adjusted). Pieces: rolls, 1/2 baguette, baguette, French sticks, etc.

By controlling the rollers and raising the stretching plates we can produce cake-shaped pieces. Loaves with tips, traditionally-baked, etc. (with a canvas with adjustable conical wedges).

3.2 Operation

Machines designed for the moulding and stretching of pieces, starting from a portion of dough.

They have an entry conveyor belt on which the piece to be moulded is deposited. After going through a series of guides, the piece is put into the sheeting rollers, which are <u>adjustable</u>. These are made of food-grade plastic-polyamide and handle the dough very gently.

After the sheeting of the dough the rolling process is begun with a stainless steel mesh.

The next step is the introduction of the rolled piece into the first stretching plate (also adjustable) in which a special canvas can be installed to produce a tip finish. When the pieces are light and short it is advisable that they fall into the collection belt directly after the first stretching (opening the ramp between the first and second stretching).

When making larger pieces the complete stretching process needs to be carried out. The piece is pulled along by the stretching canvas and placed in the bottom part of the canvas once it reaches the end of it (after the first stretching). At this point, the second stretching plate (also adjustable) is below the canvas. It drags the piece along by friction, turning it against the plate (called the "Return Stretching"). This second stretching area, wider than the first, enables us to work better with different types of loaves with tips.

After the moulding process the piece is deposited on the collection belt, which slowly transports the pieces to the point where the operator picks them up. The pieces are <u>already proofed</u>, which makes them much easier to handle.

3.3 Instructions for use



Handle (A): Setting for the sheeting rollers. If you wish to roll more and make a tighter loaf, move the handle towards the - sign. If you prefer a softer loaf, move the handle towards the + sign.

Handle (B): Between the process of rolling (A) and final stretching (B), there is a hand wheel to separate the pre-stretching plate (Fig. 1). This plate, located above the stretching canvas, carries out an initial stretching of the stick.

The two pushbuttons located on the same side as controls (A) and (B) are the machine start and stop controls. An emergency pushbutton and a general stop button complete the electrical stop/start devices.

4. SAFETY AND HAZARD PREVENTION RULES

- The Manufacturer declines any liability due to non-compliance with the safety and hazard prevention rules described below.
- > Installation must be carried out by personnel authorised by the manufacturer.
- Under no circumstances will any of the safety devices incorporated into the machine (covers. micros, grilles, etc.) be neutralised. Although they may appear a nuisance work must be done with them in position.
- Stop the machine and block it whenever work is done inside and on the rollers when the machine is operating.
- After an overhaul or cleaning, put back all covers and protective devices before starting the machine up. Ensure that nobody is working on the machine.
- Check that the safety and protection devices are working on a regular basis. If one or more are observed to be faulty, block the machine until it is repaired.
- > If there is a jam, do not try and remove it when the machine is running. Switch it off.
- Avoid touching moving parts.
- Before switching the machine on, ensure that it is in perfect condition, together with its safety devices.
- Spare parts must be according to the specifications defined by the manufacturer. Only use original spare parts.
- Strictly follow the maintenance schedule indicated in this Manual.

If an operator detects any "unforeseen" hazard, tell the security guard immediately and any workmates who could use the machine. Also inform the manufacturer

4.1 Safety devices

The sheeting rollers are the point of greatest risk on the moulding machine. To avoid this risk, a safety grille with a shutdown microswitch is provided to cover this area.

The tension adjusters at the ends of the canvases are protected by metal plate half-moons.

Other elements such as a main switch and the emergency STOP button complete the safety devices on the machine.

CAUTION: MANIPULATING OR REMOVING THE SAFETY DEVICES INSTALLED IS STRICTLY PROHIBITED. THE MANUFACTURER DECLINES ANY LIABILITY IN THE EVENT OF THESE INSTRUCTIONS NOT BEING FOLLOWED.

4.2 Risks and hazards that cannot be eliminated

The moulding machines have been designed and manufactured with the necessary precautions to ensure their safe operation and the health and safety of the operators. Nevertheless, there is a risk of getting trapped at the point of entry of the pieces to the sheeting rollers. This opening cannot be protected. Stickers are placed in this area to indicate the risk. The user is warned of the serious risks involved in putting one's hands into this area. When production is completed, clean the machine for any sticking dough and lumps of flour. Remove canvases from the upper flattening roller and the return belt, clean them and leave them to dry.

5. MAINTENANCE

CAUTION

Disconnect the machine to carry out clearing or repair operations.

- . Check that the canvases are centred from time to time
- Lubricate chains and bearings with a very light oil (spray)
- Check the tension of chains and belts
- Clean canvases and rollers every day when work has finished

Do not use cutting tools or metal tools to clean rollers and canvases

IMPORTANT

Any repair work must be carried out by the Official Technical Service or Personnel authorised by the Distributor.

5.1 Daily cleaning

When production is completed, clean the machine for any sticking dough and lumps of flour. Remove canvases from the upper flattening roller and the return belt, clean them and leave them to dry.

6. REPAIRS

6.1 Request for service

Before requesting the services of a technician, carry out the following checks:

- a) if the machine stops working:
 - i. Check to see if the reason is due to the lack of electric power.
 - ii. Check that the pin is correctly inserted in the plug.
 - iii. Check that the Thermal Protection Relay of the motor is not activated.
- b) if the machine is making a lot of noise:
 - i. Check that no metal components are loose.
 - ii. With the machine working, see if the noise comes from the chain, a bearing or the motor(s).

Once you have carried out these checks, if the problem persists contact the Technical Support Service, indicating:

-the nature of the problem

-the code and registration number of the machine (located on the identification plate)

6.2 Request for spare parts

We recommend the use of original spare parts.

Check the faulty part or component on the spares list. When you place an order, please quote the reference number.

The manufacturer declines any liability due to the use of non-original spare parts.

7. GUARANTEE

Our equipment is guaranteed against any manufacturing defect or flaw provided that proper use of the equipment is made.

Not included: belts and electrical components.

The guarantee DOES NOT apply to replacements and repairs due to:

- -Abnormal use of the machine.
- -Deterioration or accidents caused by negligence.
- -Maintenance errors.
- -The defective installation or use of the equipment.
- -Connection to a different voltage from that indicated on the machine.
- -If payment is not made according to the established payment schedule.

The guarantee is restricted to the replacement and repair of parts that have failed as a result of construction defects. Applicable labour and travel expenses will be paid by the customer

The duration of the materials guarantee is 12 months.

Terms of the guarantee

The material must be installed, used and maintained under the conditions stated in this Instruction Manual.

Problems that require the intervention of a technician must only be dealt with Manufacturer or with the Distributors that have sold the equipment.

Non-compliance with these terms may lead to the suspension of the guarantee.

In its constant search to improve its products, the Producer reserves the right to make modifications to them without prior notice.

8. SPARES AND DIAGRAM

8.1 Layout of rollers and belts (M - 600S-DR)









8.4 Spare parts list M - 600S-DR

Position	Reference	Description	
001		Collection belt 3.150 x 600	
002		Stretching belt 2.125 x 600	
003		Pre-flattening control	
004		Mesh	
005		Scraper	
006		Pre-flattening	
007		Tipper	
008		Upper sheeting roller	
009		Pre-sheeting roller	
010		Centring Device	
011		Entry belt 750 x 600	
012		Stretching plate	
013		Setting	
014		Lower sheeting roller Z-32	
015		Large pulley	
016		Drive Pinion Z-14	
017		V-Belt A-65	
018		Tension adjuster	
019		Motor	
020		Chain 3/8	
021		Tension adjuster Z-16	
022		Upper sheeting roller (Z008)	
024		Belt drive Z-45	
025		Chain 3/8	
026		Lower sheeting roller Z-20	

8.5 Spare parts list M -750S-DR

Position	Reference	Description	
001		Collection belt 4000 x 750	
002		Stretching belt 2.540 x 750	
003		Pre-flattening control	
004		Mesh	
005		Scraper	
006		Pre-flattening	
007		Tipper	
008		Upper sheeting roller	
009		Pre-sheeting Soller	
010		Centring Device	
011		Entry belt 1100X600	
012		Stretching plate	
013		Setting	
014		Lower sheeting roller Z-32	
015		Large pulley	
016		Drive Pinion Z-14	
017		V-Belt A-65	
018		Tension adjuster	
019		Motor	
020		Chain 3/8	
021		Tension adjuster Z-16	
022		Upper sheeting roller (Z008)	
024		Belt drive Z-45	
025		Chain 3/8	
026		Lower sheeting roller Z-20	

