



FULL OPERATING AND MAINTENANCE MANUAL

FOR THE STANDALONE FUSION MOULDER

# -DECLARATION OF CONFORMITY-

We hereby declare that this machine complies with the essential health and safety requirements of:-

### The Machinery Directive 2006/42/EC

### The Low voltage Directive 2006/95/EC

The requirements of the Electromagnetic Compatibility Directive 2004/108EC,91/263/EEC,92/31/EEC

and

General Safety of Machinery and food processing Standards applicable

Signed:

(G.A.Williams: Quality Manager)

Date: .....

Machine Code FG..... M

Machine Serial No.

A technical construction file for this machine is retained at the following address: MONO EQUIPMENT

#### Queensway,

Swansea West Industrial Park, Swansea SA5 4EB

#### UK

#### MONO EQUIPMENT IS A BUSINESS NAME OF AFE GROUP LTD

REGISTERED IN ENGLAND NO. 3872673 VAT REGISTRATION NO.923428136 REGISTERED OFFICE: Unit 35, Bryggen Road, North Lynn Industrial Estate, Kings Lynn, Norfolk, PE30 2HZ.

# **IMPORTANT NOTES**

#### IF YOU ENCOUNTER ANY ISSUE WITH THIS EQUIPMENT THAT YOU HAVE NOT BEEN TRAINED FOR, YOU MUST CONTACT YOUR INSTORE TECHNICIAN.

• Ensure the moulder is set up and adequate tins and trays are available before starting.

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## **1.0 INTRODUCTION**

**MONO's Moulder** combines the capabilities of traditional bread and French stick moulding machines. Its small footprint and simple controls are of particular benefit in small bakeries and when used with an automatic bread plant.

The Moulder will process up to 900 dough pieces an hour.

## **2.0 OVERALL DIMENSIONS**

Height:	1825mm.
Depth:	1205mm.
Width:	1020mm.



## 3.0 SPECIFICATIONS

Total power:	0.75kW three phase
Capacity:	Up to 900 dough pieces processed every hour, between 250g (9oz) and 0.9kg (2lb) in weight and between 125mm (5") and 760mm (30")
Weight:	430kg
Noise level:	Less than 85dB.

### 4.0 SAFETY

#### IF YOU ENCOUNTER ANY ISSUE WITH THIS EQUIPMENT THAT YOU HAVE NOT BEEN TRAINED FOR, YOU MUST CONTACT YOUR INSTORE TECHNICIAN.

- 1 Never use a machine in a faulty condition and always report damage.
- 2 No one under 16 may operate this machine.
- **3** No one under 18 may clean this machine.
- 4 Only trained and authorised persons may remove any part that requires a tool to do so.
- **5** Always ensure hands are dry before touching any electrical appliance (including cable and plug).
- 6 All operatives must be fully trained.
- 7 People undergoing training on the machine must be under direct supervision of a trainer.
- 8 Do not operate with any panels removed.
- **9** All guards must be fixed in place with bolts or screws unless protected by a safety switch.
- **10** No loose clothing or jewellery to be worn while operating the machine.
- **11** Switch off power at the mains isolate switch or isolate at the main control box
- **12** The Bakery Manager or the bakery Supervisor must carry out daily safety checks.

#### 13 Warning: Do not attempt to scrape moulding belts when moulder is running.

14 Any internal maintenance must be by fully trained maintenance personnel.

#### **WARNING:**

Hand or bodily contact with moving belt surfaces may cause friction burns to skin. This situation need not occur to successfully operate the moulder

### **5.0 INSTALLATION**

**1.** Ensure machine is standing on a solid level floor. Plug mains cable in to wall isolator. Lock the two front castors into place after the connection is made.



2. Check machine after installation to ensure drive motor rotation is in the direction of the arrow shown above. This should be done with drive V-belt removed. If motor rotation is incorrect, change round any two of the three phase carrying wires. The drive motor should be travelling in an anti-clockwise direction. To stop the moulder in an emergency, switch off at the main wall isolator, or use the EMERGENCY STOP BUTTON.



EMERGENCY STOP BUTTON





- 4. Set sheeting gap to the widest mark and brush out residue from the area, using a plastic scraper on the rollers if required.
- 5. Clean any residue that has been trapped at the bottom of the belt. Scrape exposed surface of the dough-moulding belt with a **plastic** scraper.
- 7. Brush/vacuum the area.

SET SHEETING GAP



### To replace scraper and curling chain.

Clean and then replace the curling chain by dropping down the conveyor from the back and clipping in place at the front. (Reverse of removal).





- 1. Fully lower the rear-moulding belt using lever (**A**) and fully lower the pressure board by adjusting handle (**B**) to setting "400" on the counter. Open rear door.
- 2. Remove the pressure board by gripping the handle provided, and then lift up and out.



- 3. Wash dough contact surfaces of the pressure board and side guides with sanitising solution and hot water. Dry with cloth.
- 4. Remove any dough from the bottom belt with a plastic scraper.
- 5. Replace the pressure board, making sure the hooks on the board are fully engaged.

#### Close the rear door firmly to make the safety switch connection.

## WEEKLY CLEANING INSTRUCTIONS

AS DAILY INSTRUCTIONS AND ALSO:

- 1. Disconnect from main power supply.
- 2 Wipe the stand with a cloth dampened with disinfecting solution and hot water.
- **3** Scrape and scrub the wheels on the machine.
- 4 Wipe down all internal surfaces (not electrical parts) with disinfecting solution and hot water. Dry with a cloth.

# 8.0 **OPERATING INFORMATION**

- 1 The Moulder should be used on a level floor for the best results.
- 2 All control levers, handles, etc are best adjusted when the moulder is running, although they can be adjusted with the machine stationary.

#### Machine cycle information.

- 1 The moulding elements consist of two dough guides, two differential sheeting rollers, a guide roller, a stripper roller, a removable curling chain, two endless polyurethane belts rotating in the same direction, a two position deflector, a pressure board, a pair of dough guides and an offtake tray.
- 2 Dough is delivered from the prover conveyor. The dough is then sheeted through the two differential rollers into a pancake shape.
- **3** The dough piece is taken off the rollers by means of a stripper roller and guided by the remaining roller onto the endless polyurethane belt. Upon making contact with the belt the dough piece is immediately pressurised by the curling chain mat. The light pressure produced by the chain causes the dough piece to roll over on its self and produce a sausage shape.
- 4 At this stage in the moulding process the dough path can be selected, via pushrod to be further processed either between front and rear belts or between the rear belt and pressure board.
- **5** Both of the moulding routes chosen will deposit the finished dough piece onto an offtake tray.







- 1 Set lever "A" to control the length of the dough piece required.
- 2 Adjust "E" to open or close the sheeting gap of the two infeed rollers.
  - Control settings will vary according to user, dough mixes, product, machine construction etc, and are best established by the user.
  - It is advisable for the Bakery Manager to inform staff of settings required for all French range once established. This will result in consistent product, assuming dough condition is constant.



### 10.0 MAINTENANCE

- **1** Refer to cleaning instructions.
- 2 Maintenance other than cleaning must be carried out by trained maintenance personnel.
- 3 It is recommended that the bearings, chain, motor, etc. be greased every six months
- 4 If a belt is tracking to the left or the right. Call in maintenance contractor immediately before any permanent damage can occur.

#### MAINTENANCE ENGINEER NOTES

Moulding belts should be no tighter than necessary to eliminate slippage. Over tensioning can lead to belt and/or bearing failure. The belt should be adjusted by means of the adjustment tensioning screws (shown below).

The belts should run with equal clearance between its edges and the unit side frames. If one edge of the belt is tighter than the other, it will tend to run towards the slack side. This tracking defect can be eliminated by individual adjustment of the tensioning screws.

#### **Caution**

Adjustment screws should not be continually tightened (this will cause bearing failure or the moulding belt to stretch and break). It may be that one side is too tight so should be eased off a little.

Bearings and bearing grub screws (2 per bearing) should also be checked as a seized bearing may be the cause of the moulding belt needing adjustment.

If a bearing is replaced, the grub screws should be tightened and liquid thread lock applied.

(On later models the grub screws should also be aligned with dimples in the roller shaft).



ADJUSTMENT TENSIONING SCREWS (one side shown.)

## **11.0 TROUBLESHOOTING**

- The final dough temperature, after mixing, should not exceed the ideal. (typically 25 - 26 ° C).
- A dough conditioner containing a good relaxant is required.
- French dough should be soft but not sticky.
- Curling chain should be kept clean.

### 12.0 SERVICE AND SPARES

If a fault arises, please do not hesitate to contact the Customer Service Department, quoting the **machine serial number** on the silver information plate of the machine and on the front cover of this manual



FOR SPARES RING: 01792 564039

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## "V" BELT AND DRIVE INFORMATION



### MOULDING BELT DRIVE INFORMATION







## 13.0 MOULDER ELECTRICAL INFORMATION







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