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Enter **Serial No.** here. _____

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METRO MOULDER

IMPORTANT INFORMATION and INSTALLATION INSTRUCTIONS

MONO EQUIPMENT
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**COMPLETE OPERATION AND MAINTENANCE INSTRUCTIONS
ARE AVAILABLE AT www.monoequip.com**


FILE 22



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 2014 / 35/ EC
- The requirements of the Electromagnetic Compatibility Directive 2004 / 108EC, 91 / 263 / EEC, 92 / 31 / EEC
Incorporating standards
EN55014-1:2006+A1:2009+A2:2011
EN55014-2:1997+A1:2001+A2:2008
- The General Safety of Machinery and food processing Standards applicable
- Materials and Articles intended to come into contact with food
Regulation (EC) No. 1935 / 2004

Signed	
G.A.Williams – Quality Manager	

Date	
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Machine FG Code.		Machine Serial No.	
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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 9, Bryggen Road,
North Lynn Industrial Estate,
Kings Lynn,
Norfolk,
PE30 2HZ

SAFETY SYMBOLS

The following safety symbols are used throughout this product documentation and manual (available at www.monoequip.com).

Before using your new equipment, read the instruction manual carefully and pay special attention to information marked with the following symbols.



WARNING

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates a hazardous situation which, if not avoided, will result in electric shock.



CAUTION

Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

ELECTRICAL SAFETY AND ADVICE REGARDING SUPPLEMENTARY ELECTRICAL PROTECTION:

Commercial bakeries, kitchens and foodservice areas are environments where electrical appliances may be located close to liquids or operate in and around damp conditions or where restricted movement for installation and service is evident.

The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician, and connected to the correct supply suitable for the load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements of the local electrical wiring regulations and any electrical safety guidelines.

We Recommend:

- Supplementary electrical protection with the use of a residual current device (RCD)
- Fixed wiring appliances incorporate a locally situated switch disconnecter to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnecter must meet the specification requirements of IEC 60947.



The supply to this machine must be protected by a **30mA RCD**

**Thank you for purchasing the MONO METRO MOULDER.
A combination of clean industrial design and the latest technology.
The following information should get your purchase running without any problems**

If you have a problem with your purchase please contact MONO EQUIPMENT at:

**MONO EQUIPMENT
Queensway
Swansea West Industrial Estate
Swansea. SA5 4EB UK
Tel. +44(0)1792 561234**

4.0 SAFETY



- 1 **Never use a machine in a faulty condition** and always report any damage.
- 2 **No-one under the age of 16 may operate** this machine.
- 3 **No-one under the age of 18 may clean** this machine under any circumstances.
- 4 **Only trained personnel may remove any part** from this machine that requires a tool to do so.



- 5 **Always ensure hands are dry** before touching any electrical appliance (including cable, switch and plug).

- 6 **All operatives must be fully trained.**

- 7 People undergoing training on the machine must be under direct supervision.



- 8 **Do not operate the machine 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 isolator when machine is not in use** and before carrying out any cleaning or maintenance.

- 12 The pressure board adjusting handle, side guide adjuster handle and dough sheet roller gap lever may be adjusted while the machine is running.



ALL OTHER CLEANING AND MAINTENANCE OPERATIONS MUST BE MADE WITH MACHINE DISCONNECTED FROM THE POWER SUPPLY
DO NOT ATTEMPT TO CLEAN THE MOULDING BELT
WHEN THE MACHINE IS RUNNING



- 13 The Bakery Manager or the Bakery Supervisor must carry out daily safety checks on the machine.

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.

INSTALLATION

- 1 The Metro moulder should be connected to a mains wall isolator.



The supply to this machine must be protected by a **30mA RCD**

- 2 Check the machine after installation to ensure the conveyor belt runs in the right direction (see direction of arrow below). This should be done by “inching” the motor.
If the motor rotation is incorrect transpose any two wires of the three phase carrying wires.



- 3 Ensure machine is standing level on a solid floor.

Note

The Metro will only work if connected to a bread plant or a safety hopper is fitted.

ISOLATION

In an emergency, switch off the machine at the wall isolator or at the emergency stop button shown below.

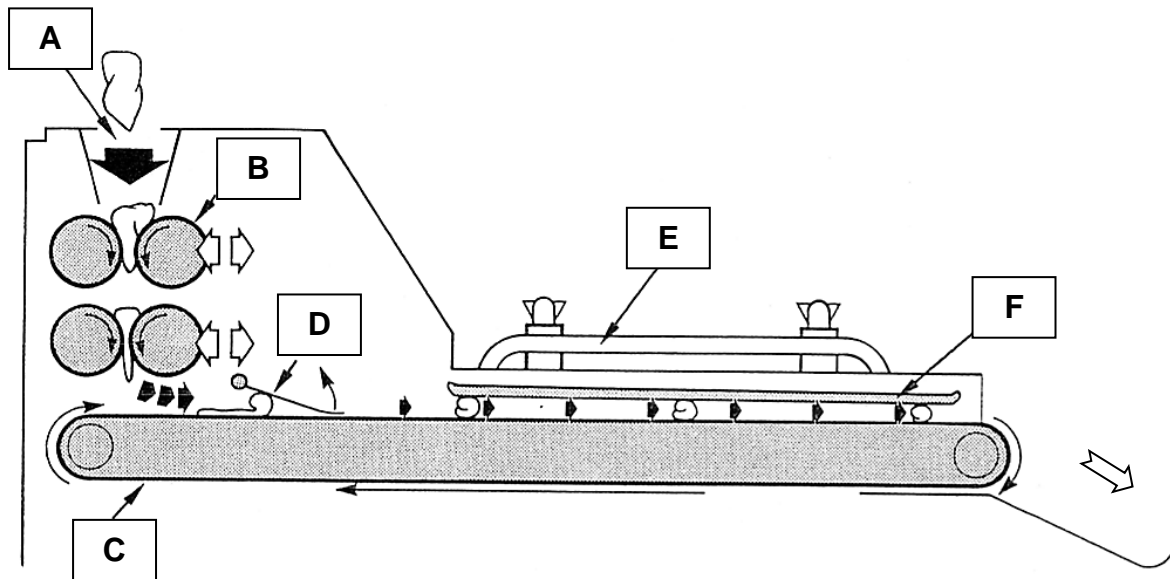
EMERGENCY STOP BUTTON



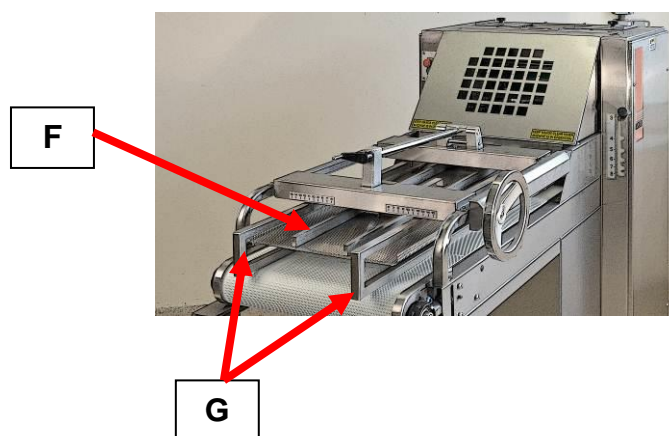
To release stop button after use, twist and release.

OPERATING INSTRUCTIONS

HOW THE METRO MOULDS DOUGH PIECES



- Dough piece is feed into hopper (A) from intermediate prover or safety hopper.
- Twin sets of rollers (B) form a sheet of dough.
- This is carried along the off take conveyor (C) to the curling chain (D).
- The curling chain then picks up the leading edge of the dough sheet and forms a curled roll of dough.
- This is then carried to the pressure module (E) in which it is moulded. Its final shape and consistency are determined by the pressure board (F) and the side guides (G) positions.
- The finished dough pieces are conveyed to the collection tray.



OPERATING THE METRO MOULDER

To ensure the best mould, make sure that the moulder is free of any previous dough used and set the following adjustments.

- a. Hopper width. (move cheeks(9) to required width).
- b. Sheeting gap. (move lever (10))
- c. Side guides position.(turn wheel (11) to adjust pressure board width)
- d. Moulding pressure.(turn handle (17) to adjust pressure board height)

MOULDER ADJUSTMENTS CHART				
DOUGH PIECE WEIGHT	HOPPER CHEEK SETTING	SHEETING ROLL GAP SETTING	PRESSURE BOARD WIDTH	PRESSURE BOARD HEIGHT SETTING
900g	1	4	10	10
450g	5	6	8	6
225g	6	6	10.5	6

a. HOPPER WIDTH ADJUSTMENT.

1. Slacken wing bolts (8) and slid the hopper checks (9) to the required setting. See *chart for suggested settings*.
2. Tighten wing bolts and go on to next adjustment.



b. SHEETING GAP ADJUSTMENT.

1. Move roller gap lever (10) to required setting.
See chart for suggested settings.



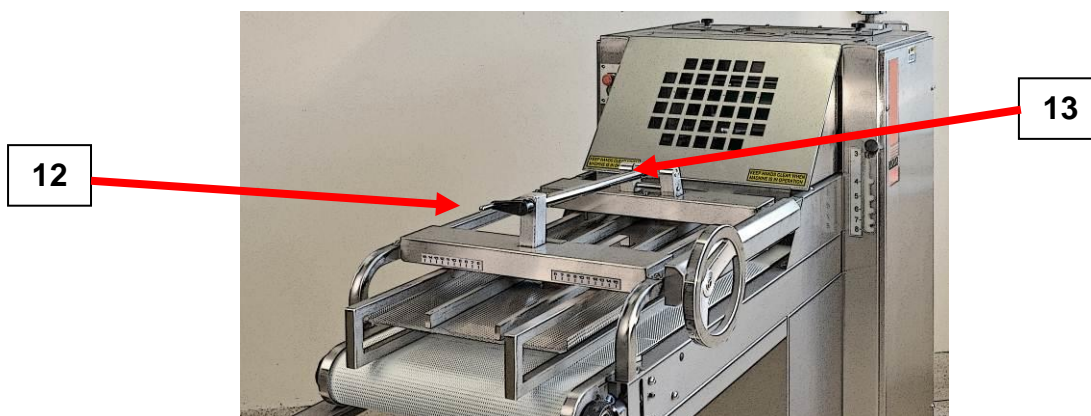
c. SIDE GUIDES ADJUSTMENT.

1. Turn wheel (11) to required setting.
See chart for suggested settings.

d. MOULDING PRESSURE ADJUSTMENT.

1. The pressure board height is adjusted by turning the adjusting handle (12).

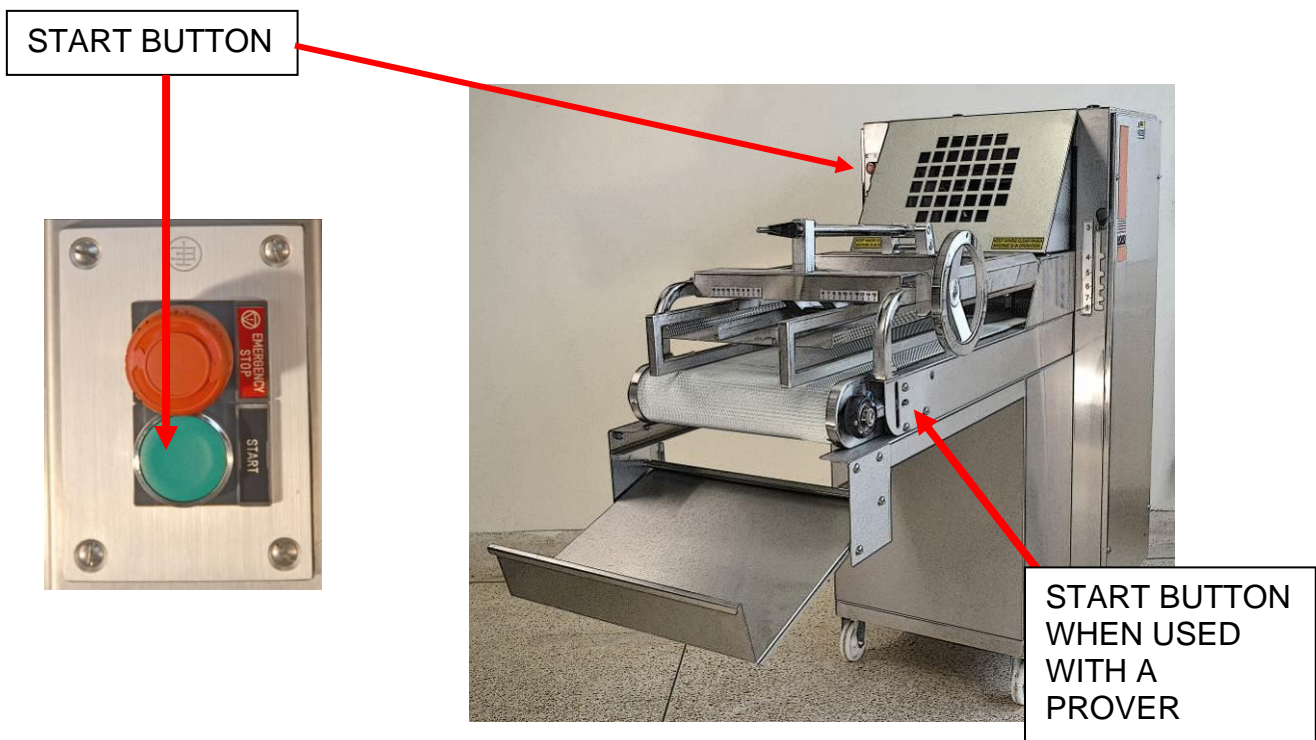
To ensure the moulding pressure can be exactly reproduced at a later date, the adjusting handle shaft is graduated (13).



STARTING THE METRO

- Before starting ensure the metro has been adjusted for the product mould required. (See previous section.)
- If using in conjunction with a prover make sure that the eight minute pocket is open.
- Do not allow dough pieces to “skin” as this will result in the dough pieces catching each other up, “doubling”, and could cause a jam.

To start the machine press the green button found either on the main body next to the stop switch or, if used with a prover, on the front of the off take conveyor right hand side.



If used with a prover always start the moulder before the prover or a build up of dough could clog the moulder hopper

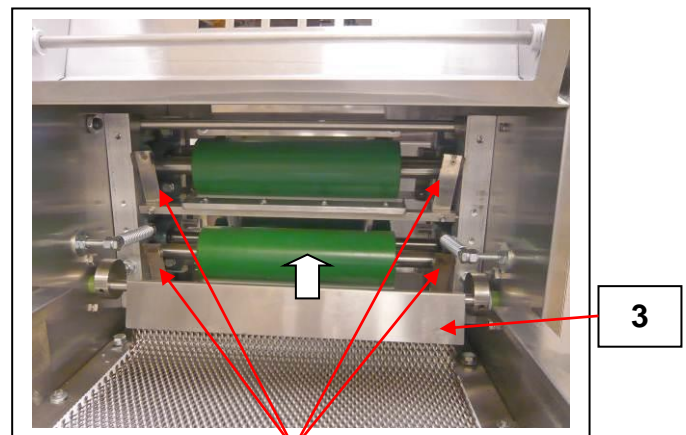
CLEANING



SWITCH OFF AND ISOLATE MACHINE FROM MAINS SUPPLY BEFORE COMMENCING CLEANING

DAILY CLEANING (DO NOT USE A PRESSURE WASHER)

1. Remove hopper (if fitted) or pull machine away from prover.
2. Scrape off any dough residue.
3. Wipe over Perspex window, if hopper fitted, with soft cloth dampened in a sterilising solution and hot water.
4. Replace hopper where applicable.



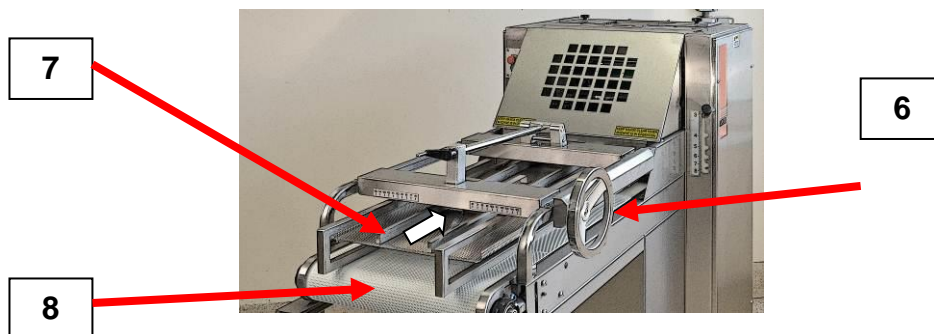
UNCLIP SCRAPERS FOR CLEANING

5. Raise front-hinged cover (2).
6. Lift out curling chain (3) and shake off any dough residue, then brush with a stiff nylon brush. **DO NOT WASH.**
7. Replace chain.
8. Unclip and wipe clean the scrapers (see photo above). **DO NOT WASH.**
Smear edges with vegetable oil.
9. Scrape rollers with a **plastic** scraper and remove any debris from the roller edges.
10. Replace scrapers and close front cover.

11. Unclip and lower the rear window (5)



12. Unclip and wipe the rear scrapers
DO NOT WASH.
Smear edges with vegetable oil.
13. Scrape rollers with a **plastic** scraper and remove any debris from the roller edges.
14. Replace scrapers. Raise rear window. Wipe over Perspex window, with soft cloth dampened in a sterilising solution and hot water.
15. Open dough guides to maximum width by turning wheel (6).
Push pressure board (7) towards the main body, then withdraw.



16. Wash board in sterilising solution and hot water, then dry and replace.
17. Scrape dough belt (8) with a **plastic scraper**.

DO NOT USE METAL SCRAPER OR ATTEMPT TO CLEAN WITH WATER. BELT WILL NEED TO BE INCHED FORWARD TO GAIN ACCESS TO ALL PARTS OF SURFACE. SEE SAFETY INSTRUCTIONS.

18. Brush down external surface of machine to loosen any dough remaining.
19. Spot clean with cloth and sterilising solution and hot water paying particular attention to handles, levers and controls.

WEEKLY CLEANING



SWITCH OFF AND ISOLATE MACHINE FROM MAINS SUPPLY BEFORE COMMENCING CLEANING

1. Follow the daily cleaning instructions 1 - 14 in previous section.
2. Remove side and back panels placing screws in a safe place.
3. Brush down framework where accessible to remove excess flour and dough.
4. Wipe down with a damp cloth and sterilising fluid and hot water.
5. Replace panels ensuring all screws are accounted for.
6. Follow the daily cleaning instructions 15 - 19 in previous section.
7. Scrape and scrub wheels clean as needed.