



MONO DX Deck Oven



Product Version

- UK specification
- Eco-touch control
- Fixed standard-depth decks

Enter Serial Numbers here

Deck 1
Deck 2
Deck 3
Deck 4
Deck 5
Fan (If fitted)

In the event of an enquiry please quote these serial numbers.

Safety symbols

The following safety symbols are used throughout this document and manual (available at <u>www.monoequip.com</u>). 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 that, if not avoided, could result in death or severe injury.
A	WARNING	Indicates a hazardous situation that, if not avoided, could result in death or severe injury.
	CAUTION	Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

Electrical safety and advice regarding supplementary electrical protection

Commercial bakeries, kitchens and food service 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 disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnector must meet the specification requirements of IEC 60947.

Your attention is drawn to:

BS 7671:2018 – Guidance Note 8 – 8.13 : Other locations of increased risk

It is recognised that there may be locations of increased risk of electrical shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity, and water is present, and commercial kitchens with stainless steel units, where once again, water is present. Where, because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available includes:

- Automatic Disconnection of Supply (ADS) by means of a residual current device having a residual operating current not exceeding 30 mA;
- Supplementary protective equipotential bonding; and
- Reduction of maximum fault clearance time.

The provision of RCDs and supplementary bonding must be specified by the host organisation's appointed installation designer or electrical contractor and installed by a suitably qualified and competent electrician so as to comply with Regulations 419.2 and 544.2.



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



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	CHAD Whows.
	G.A.Williams – Quality Manager
Date	
Machine FG Code.	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 9, Bryggen Road, North Lynn Industrial Estate, Kings Lynn, Norfolk, PE30 2HZ



Important safety matters: fix a water leak immediately to help prevent electrocution

It is essential to regularly check for any signs of a water leak from an oven installation. If there is evidence of a water leak, do not ignore it. Immediately report it to a manager or as applicable to your organisation.

Furthermore:

- Isolate the oven from the electrical supply (see Isolation).
- Place an out-of-service notice on the oven.
- Contact MONO Equipment for assistance (see Back Page).

Ovens need to be maintained and serviced at appropriate intervals to help prevent water leaks from the internal plumbing and external hose connections. See **Maintenance** for further information.

Important notes

4	WARNING	 An electrical socket must be protected by a 30mA Residual Current Device (RCD) before installation and commissioning of the oven.
		 To reduce the risk of fire or electric shock, do not remove covers (or back sheeting). There are no user-serviceable parts inside. Repairs should be done by authorised personnel only.
		 Never use the USB port to power or recharge electronic devices e.g., mobile phones. Incorrect usage causes damage to the oven and could result in a fire.
	CAUTION	 Be aware of hot surfaces. Do not touch the front with bare skin.
		 Failure to adhere to the cleaning and maintenance instructions detailed in this manual could affect the warranty of this machine.
		 The oven should only be used for baking bread, pastries, and cakes.
		 Some sections of this manual are for engineers only and the customer should not

attempt to make any alterations.

Contact Information

Thank you for purchasing this MONO DX Deck Oven.

"A combination of clean industrial design and the latest technology."

The information in this quick start guide should get your purchase up and running without any problems. If you have a problem with your purchase, please contact the Mono Service Department at:

MONO Equipment Limited

Queensway, Swansea West Industrial Park, Swansea, SA5 4EB, UK

Phone: +44/0 1792 561234 | Email: mono@monoequip.com

Please quote the serial numbers of each deck when contacting the MONO Service Department. You can write the serial numbers in the boxes below.



Safety

The Bakery Manager or Supervisor must carry out daily safety checks. Bakery staff **must not**, under any circumstances, remove panels to access any part of the oven.

Only fully-trained and authorised persons are permitted to do any work on the oven. Authorised electricians must carry out all repairs and maintenance of electrical units. Always disconnect or isolate the power supply before starting any maintenance (i.e., opening panels) or cleaning work on the oven.

 WARNING Before using the oven, check that: All cover panels and pipe fittings are secure. The door handles are not damaged. If the oven is damaged or malfunctioning, stop using it. Do not attempt any repairs. Contact the Mono Service Department for advice. Fit only MONO spare parts to this oven.
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 Contact the Mono Service Department for advice.
 Fit only MONO spare parts to this oven.
 All connections to the oven must comply with the statuary requirements of the country of installation.
 Never use the USB port to power or recharge electronic devices e.g., mobile phones. Incorrect usage causes damage to the oven and could result in a fire.
 Operate the oven only as described in this manual.
WARNING • Separate electrical supplies to each deck and the prover base must have their own 30mA Residual Current Device (RCD).
 Always fit a wall isolator to isolate the oven completely. The isolator must be
visible, labelled, and easily accessible by an operator.
 Always check the electrical ratings on the nameplate before connecting power.
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 CAUTION • Be aware of hot surfaces: Always use oven gloves when loading or unloading the oven. Allow time for the oven to cool down before cleaning it. To prevent door glass from shattering, do not clean the oven glass when hot. While the oven is in operation (and for some time after use), it is inadvisable to touch the oven window or the surrounds because of conducted heat. The oven owner is legally obliged to instruct staff on these safety points and the safe operation of the oven. Therefore, these instructions should not be
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Installation

WARNING • An electrical socket must be protected by a 30mA Residual Current Device (RCD) before installation and commissioning of the oven.

- Always fit a wall-mounted isolator to isolate the oven completely from the electrical supply. The isolator must be visible, labelled, and easily accessible by an operator.
- Always check the electrical ratings on the nameplate before connecting power.

Electrical connections

Table 1: Electrical loading per oven

Tray width	Voltage	Power
3 trays	415 Vac (50 Hz), 3-phase + neutral + earth	42 kW, 60 Amps per phase
4 trays	415 Vac (50 Hz), 3-phase + neutral + earth	56.5 kW, 90 Amps per phase

Note

Whenever connecting power to the oven, eight minutes must elapse before the oven's steam function can be used. The bottom elements require enough time to heat up for steaming. This waiting time applies even if the power is disconnected and connected again, and the oven is still hot.

General installation

- A solid, smooth, and level floor for the oven is best.
- Consider also how the oven is to be accessible for maintenance and cleaning.
- The oven is not a built-in (integrated) appliance. Allow sufficient clearance in front of the access panels (right-hand side) to allow for servicing.
- If not chosen as an oven option, an extraction hood should be mounted above the oven to disperse excess steam and heat. Otherwise, the bakery ceiling and ambient temperature could be adversely affected.
- Fit a chain retainer, shorter than the power cables, to protect them from strain if the oven is moved. Use the hole provided in castor fixing corner plates to fit the chain retainer to the wall (or floor) and the base.
- Installation must be performed by a fully-trained and authorised engineer. Utilities must be installed by licensed contractors and must conform to all local and state building codes.
- Read the **Safety** section on **page 7**.

Overall dimensions



Note: All dimensions are in mm and are approximated.

Water supply requirements

Oven

- All ovens with a steam function require a ³/₄" BSP hot or cold water supply at a pressure of 2 3 bar (29 – 44 psi). The water supply should comply with local water regulations.
- A manifold supplies all decks from one connection point.
- For proper operation of the steam system, it is recommended that the water supply also has the following specifications:

Hardness	0 – 4 grains per gallon
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PH range 7.0 to 8.5

Chloride concentration 0 – 20 ppm

Consult MONO for proper water filtration system information.

- No drain is required for this oven.
- A non-return check-valve is supplied fitted to the water inlet manifold.

Note

The set-up procedure below must be followed to allow the steaming system to function correctly.

Oven water system setup procedure



CAUTION It is imperative that the water delivery to the deck oven is checked for the steam system to operate correctly.

• Note that dynamic pressure, not static pressure, is being measured.

Procedure

- 1. Flush out the main feed pipe to be used until water runs clear and free from debris.
- 2. Connect the main feed to the oven.
- 3. Connect flexible hoses to each deck.
- 4. Place a container under the test valve.
- 5. Slowly open drain valve and set the regulator to 0.5 bar using the screw underneath.
 - Never use the oven above this setting.
- 6. When the pressure has stabilised, shut the test valve.
- 7. Repeat steps 4 to 6 at the end of the installation.

Quick Start Guide



REAR VIEW

Exhaust Connections (if canopy fitted)

- Ideally, an exhaust duct should rise 2 metres above the bakery roof and be protected from wind and birds by a duct protector.
- It should be of a suitable material to take the high temperatures and humidity expected.
- It should be flexible and easily removable at the oven connection point. *This allows the oven to be moved for cleaning when required.*

Figure 2: Canopy (without fan) dimensions



Dimensions are in mm (inches)

Figure 3: Canopy (with fan) dimensions



Dimensions are in mm (inches)

Table 2: Canopy parts

Item		Part number
А	Extraction fan assembly	247-08-04900
В	Inlet ring	247-08-05100
С	Flue assembly 257-10-0001	
D	Canopy assembly 257-10-00016	
E ⁽¹⁾	Extraction duct assembly for 2-tray oven width	257-10-00022

⁽¹⁾ Contact MONO Equipment for the availability of other extraction duct assemblies.

Isolation

To stop the oven in an emergency, switch off using the main isolator on the oven.

A wall-mounted isolator switch, rated for the specific model of oven installed, must also be available to isolate the oven completely in an emergency. The isolator must be clearly accessible and known to the oven operator.

Figure 4: Main isolator switch on the oven



Basic Operations

Operations are performed by touching an area of the screen, bringing up the next information panel or activating a function.



CAUTION • Do not use excessive force. The pressure required to operate the panel is adjustable in the Settings menu.



Cleaning

Daily cleaning instructions

A	WARNING	 Isolate the oven from the mains supply before cleaning.
	CAUTION	 Take care water does not enter the control-panel mounting or roof-mounting fan.

Procedure

1. Sweep any debris out of the oven **after** it has been allowed to cool.

Note: Cooling down could take several hours. Use a vacuum cleaner with metal attachments (i.e. able to take the heat), if available.

- 2. Brush down and wipe oven front, back and sides with a damp cloth.
- 3. Spot clean outside with a damp cloth, which has been soaked in a solution of mild detergent, and hot water. Paying particular attention to ensure excess water is not applied around the area of the electrical panels.

Weekly cleaning instructions



Procedure

- 1. Complete the daily cleaning procedure, as above.
- Use a nylon brush to scrub the wheels with a mild detergent and hot water.
 Note: Using too much water eventually rusts the metalwork.
- 3. Ensure the oven roof area is clear of debris and dust build-up.

Note: Do not stand on the roof.

Maintenance

General maintenance

WARNING	•	This appliance must be maintained at regular intervals. The frequency of maintenance will depend upon your specific use and location. The maximum service interval should be 12 months.

- Service and maintenance should only be undertaken by suitably qualified, trained, and competent engineers.
- You must immediately report any damage or defect arising with the appliance.
- Unsafe equipment is dangerous. Do not use the appliance. Isolate the power supply and contact MONO or your appointed service agent.
- Check for frayed or bare cables.
 - **Do not** use the machine if frayed or bare cables are visible.
- Follow cleaning instructions (see Cleaning on page 16).

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MONO Equipment

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www.monoequip.com

As it is our policy to improve our machines continuously, we reserve the right to change specifications without prior notice.