

MONO Equipment is the leading designer and manufacturer of bakery and foodservice equipment in the United Kingdom. This proud heritage of British Craftsmanship, combined with a reputation for creating high-quality, innovative products, can be traced back to its origins in 1947.

MONO Equipment's professional bakery deck ovens are the preferred choice of many of the UK's leading supermarket chains and independent artisan bakers who all demand the very best quality, reliability and value for money.

MONO Equpiment's **NEW** Fan Assisted Deck Oven builds on this amazing legacy, combining cutting-edge design with innovative technology to create a ground-breaking, professional bakery oven that provides truly outstanding energy saving and time saving benefits. With the addition of fan assisted baking, not only does the oven warm up faster and bake faster, but also reduces energy consumption quite dramatically when all the various energy saving features are used collectively.

Naturally, the fan assisted baking can be switched off, if required, so that the oven reverts to operating as a standard MONO bakery deck oven.

To find out more contact us directly or check out our website below.



Scan using your smart phone to view the Fan Assisted Convection Ovens Video.





Queensway, Swansea West Industrial Park,

Swansea SA5 4EB United Kingdom

Tel: +44 (0)1792 561 234 (Switchboard)

Tel: +44 (0)1792 564 000 (UK Sales)

Tel: +44 (0)1792 564 004 (International Sales)

Tel: +44 (0)1792 564 048 / +44 (0)1792 564 039 (Spares) Fax: +44 (0)1792 561 016

Email: sales@monoequip.com Web: www.monoequip.com



an Ali Group Company



V1.0



X

# Fan Assisted Bakery Deck Oven







# MONO's **NEW** Ground-Breaking Fan Assisted Deck

The Ultimate Energy Saving Professional Bakery Deck Oven



Fan Assisted Double Depth Deck Oven with optional Extractor Canopy and Bumper Bars

# Absolutely Incredible Energy and Time Saving Benefits

MONO's **NEW** industry-leading Fan Assisted Deck Oven is the result of an exciting 2-year collaboration between MONO and one of the UK's leading supermarket chains to design the most energy-efficient deck oven possible, whilst simultaneously improving the overall bake quality resulting in improved bake yields.



In addition to the traditional top and bottom heat generated in a standard deck oven, the Fan Assisted Deck Oven also uses fan derived technology to drive the baking process. Each module in the Fan Assisted Deck Oven features two perfectly balanced fans which circulate the hot air evenly around the products during the bake cycle, resulting in a major reduction in energy consumption and reduced bake times, whilst consistently delivering a more even bake colour. MONO's Fan Assisted Deck Ovens provide the ultimate energy saving baking

solution for all kinds of bakeries including in store bakeries (ISBs), independent bakeries and artisan bakeries. Available in single and double-depth models, the Fan Assisted Deck Oven is absolutely perfect for tin breads, bloomers, farmhouse loaves and all oven bottom breads, along with everything else you would normally expect to bake in a traditional deck oven.

Naturally, the fan assisted baking feature can be switched off completely if required.

Fan Assisted Single Depth Deck Oven

\* With optimum usage and programming, using 7-Day Timers, Auto Shutdown, fan assisted baking, reduced bake times etc. when compared with similar ovens of the same size without fan assisted baking.







# **SAVE** Up To **50%**\* Energy and Typically **40%** Faster Warm Up Times!

Independent tests across a number of stores, using an energy monitoring system, showed MONO's Fan Assisted Deck Oven to be up to 50%\* more energy efficient than the existing traditional deck oven. The test results also showed MONO's Fan Assisted Deck Oven reached initial baking temperatures 45 minutes quicker than the standard equivalent deck oven.

# **REDUCE** Bake Times By Up To 25% With Superb Results

Incredibly, the same independent tests reported that for some products like tin breads and bloomers, there was an average reduction in bake times of around 25%, whilst delivering a superb quality of bake each time.

# **NEW** Fan Assisted Technology

Provides Phenomenal Energy Saving Benefits



The **NEW** fan assisted baking technology used in the Fan Assisted Deck Oven transforms our already amazing deck oven in to one which constantly delivers superb bake results and provides absolutely fantastic energy savings time and time again. Independent trials have shown incredible energy savings of up to 50%\* when compared with a similar sized deck oven without fan assisted baking.

The twin fans drive hot air evenly around the baking chamber creating swirls of heat which flow around each product to create a more even bake with more accurate consistency. At the same time, the assisted hot air flow provides a much quicker bake time whilst also improving the overall look and taste of the bread.

Interestingly some products can be baked on average up to 26% quicker than in a standard deck oven. Add to this the fact that the initial warm up time of the oven is around 40% faster too and it is immediately apparent how this oven saves so much on energy consumption!

# Independent Bake **Trials Show Fantastic Time Saving Results**

The most impressive time savings were recorded when baking Bloomers and Tin Loaves. Incredibly, on a standard Bloomer bake, there was an average bake time saving of 10 minutes per bake and on Tin Loaves there was an average bake time saving of 8 minutes per bake.

These much quicker bake cycles not only save on energy consumption but also provides a much quicker turnaround of product to address peak demand times and also the all-important early morning availability.

# Improved Product Quality and Greater Consistency

The **NEW** fan assisted technology also provides a much more consistent bake quality compared with non fan assisted deck ovens of a similar size.

Blind tests undertaken by an independent



Quality Panel showed that the bread baked using MONO's Fan Assisted Deck Oven outshone the results of a competitor for all bread types tested ie. White Farmhouse 400g & 800g, White Bloomer 400g & 800g, Tiger Bloomer 800g, Wholemeal 800g and Soft Rolls. The criteria used to assess the overall quality of the breads baked were Appearance, Odour, Flavour and Texture.

# Setting The Standard For Bakery Deck Ovens

Featuring a Wealth of **NEW** Features and Benefits



# 7 Key Features

- NEW integrated fan technology for faster, more uniform bakes with greater product volume
- NEW 6 Phase Baking provides complete control of the baking process
- NEW higher bottom deck loading height and lower top deck loading height for improved operator handling
- NEW magnetic door catch which provides a more responsive closure when steaming (double depth oven only)
- Improved insulation design at key leak points for improved heat retention and energy efficiency
- Steam is generated via open reservoirs to reduce the opportunities for scalling and pipe blockages
- No steam pods required as the oven generates its own steam reducing potential service issues

\* With optimum usage and programming, using 7-Day Timers, Auto Shutdown, fan assisted baking, reduced bake times etc. when compared with similar ovens of the same size without fan assisted baking.



\*With optimum usage and programming, using 7-Day Timers, Auto Shutdown, fan assisted baking, reduced bake times etc. when compared with similar ovens of the same size without fan assisted baking.

# 7 Key Benefits

- Up to 50%\* saving on energy consumption compared with similar ovens without fans
- Typically 25% reduction in bake times e.g. typically saving 10 minutes when baking Bloomers
- Up to 9% increase in product volume when baking crusty bread rolls
- Around 40% reduction in initial warm up times resulting in reduced energy consumption
- Some products can be baked at lower temperatures due to the integrated fan technology
- Improved operational efficiency as the tins / trays do not need to be moved during the baking process
- Optimum baking environment prevents under baking and sidewall collapse





# **NEW FAN ASSISTED DECK OVENS**

# A Wealth of Benefits and $\ensuremath{\mathsf{NEW}}$ Features from MONO's $\ensuremath{\mathsf{NEW}}$ Fan Assisted Deck Ovens

## Major Energy Saving Benefits: **NEW** Smaller Footprint **Energy Saving NEW** Twin Fan Technology Integrated Steam System - Twin fans circulate hot air around the product - NEW smaller footprint compared with Up to 40% Faster Warm Up Time for consistently even bakes many competitor ovens - No need for external steam pods - Reduces energy consumption - Fans rotate at up to 2000rpm - Maximises the usable space in the bakery - Steam is generated by the oven itself - Provides faster turnaround of first bake - Fans can be programmed for each of the via water troughs 6 individual Bake Phases - No additional energy source required - Oven can be used with or without the fans Typically 25% Reduction in Bake Times being active - Tests showed a typical reduction of 10 minutes for Bloomers Up to 50%\* Energy Savings - Superb energy saving opportunities when using all energy saving features \*With optimum usage and programming, using 7-Day Timers, Auto Shutdown, fan assisted baking, reduced bake times etc. when compared with similar ovens of the same size without fan assisted baking. **NEW** Improved **Operator Experience** - Ergonomically redesigned for 150℃ 0:00∝ improved usability 8.24m<sup>2</sup> (291ft<sup>2</sup>) 050 - Higher loading height for bottom deck - Lower loading height for top deck **NEW** Improved Insulation Design - Generous use of thick solid slab Rockwool RW5 insulation - Achieves Lamda 0.034W/mK on conductivity scale - High levels of fire performance **Available Accessories NEW** Optional Extra: Solid, Heavy Sole Plate for the Perfect Artisan Bread **Bumper Bars** Energy Saving Insulated Doors - Solid, heavy composite sole plate - Protect the side of the oven - Stainless steel doors Provides superb heat retention - Creates 100mm (4") space between equipment - Superwool insulation between door panels Provides even heat distribution - Can be mounted on the left/right or on helps retain heat inside the oven chambers both sides Provides a balanced bottom heat across - Integrated door seals retain heat and steam the deck Available for top and/or bottom mounting in the oven chamber - Ideal for oven bottom and artisan breads Twin Peel Holder Bumper Bars













6

### 5

# Feature-Packed Touch Screen Controller

- NEW 6-Phase baking
- Full colour touch screen controller
- Stores 240 programmes
- Easy access Favourites Menu
- 7-Day, 24-Hour Timer
- Energy saving Sleep Mode
- Energy saving Auto Shutdown
- Manual Bake option
- Full Load / Half Load options
- Programmable steam function
- Independent top and bottom heat
- Programmable fans per phase

## 6

# **NEW** Optional Extra: Double Peel Holder

- Crafted in solid stainless steel
- Can hold two peels
- Can be mounted on the left or right hand side of the oven
- Models available to suit ovens with or without canopies

# **NEW** Magnetic Door Closures\*

- More positive door closing contact
- Helps retain steam inside the chamber during the steaming process

\*Double depth deck oven only





Deck Setter / Loader



# Increase Product Volumes by Up To 9%



Crusty roll baked in a non fan assisted oven

Crusty roll baked in a fan assisted oven - up to 9% volume increase

Fully-Integrated Energy Saving Steam

The innovative steam generating system featured

on MONO's Fan Assisted Deck Ovens produces a

plentiful supply of saturated steam which is generated

by the oven itself using solid, heavy aluminium water

troughs; thereby removing the need for expensive

their associated maintenance costs. As the steam

is produced directly by the oven the actual kW rating

per deck is also reduced compared with ovens using

To counteract any drop in temperature after steaming, a clever

Isotherm Recovery Programme automatically triggers after a

steam cycle which rapidly recovers the deck oven chamber's

Just a single water supply is required to be connected to the

each of the decks in the oven stack. This means that service

and maintenance is kept to a minimum whilst easy access is

provided by removable panels on the back of the deck oven.

temperature to produce the perfectly finished, shiny crust.

oven which is then diverted via a manifold system to feed

external boilers or steam generators, along with

traditional external steam pods.

System with Minimum Maintenance

# Another great advantage of baking in MONO's Fan Assisted Deck Oven is that some products like crusty rolls display a visible increase in volume.

Displacement tests carried out on crusty rolls using exactly the same recipe and the same dough piece weights delivered tangible volume increases; fifty percent of the rolls were baked in a traditional deck oven and the other fifty percent were baked in the Fan Assisted Deck Oven. The test was then repeated several times to establish a true indication of the average volume increases across a number of bakes.

The end result was quite dramatic. On average the crusty rolls baked in MONO's Fan Assisted Deck Oven showed an average volume increase of 9%; the rolls looked visibly larger than their counterparts and demonstrated a beautiful shiny crust.

# **NEW** Space-Saving Smaller Footprint

MONO's **NEW** Fan Assisted Double Depth Deck Oven has also been redesigned to be much more compact than many of its competitors on the market providing more usable space in the bakery without compromising on the number of trays that can be loaded in a single bake.

Dimensions	Well Known Competitor Double Depth Deck	MONO Fan Assisted Double Depth Deck
Width	2,070mm (81½")	1,975mm (77¾")
Depth	2,203mm (63¾")	2,140mm (84½")
Height	2,096mm (82½")	1,950mm (76¾")
Cubic Area	9.56m² (337½ft²)	8.24m <sup>2</sup> (291ft <sup>2</sup> )





# Energy Efficiency: The Keystone of Every Design Decision



When approaching the design of MONO's **NEW** Fan Assisted Deck Oven the overriding objective was not only to create a superb fan assisted, energy saving deck oven, but to ensure that each and every decision made would have a positive impact on the overall energy efficiency of the oven.

So, in addition to introducing new fan technology to our much-loved standard deck oven, the Design Team also took the opportunity to look at new materials, new devices, new technology and new design improvements to take the deck oven to a completely new level in terms of energy efficiency and the quality of the bake.

# **NEW** Improved Insulation Design

As insulation plays such a crucial role in both retaining valuable heat in the oven chamber and in preventing expensive heat loss, a great deal of attention was given to minimising any potential heat leakages and to ensure the oven's insulation values were as high as possible. Using advanced thermal imaging cameras enabled even the smallest areas of heat leakage to be identified and sealed.

MONO's Fan Assisted Deck Oven is generously insulated using high quality, Rockwool RW5 resin-bonded slabs which achieve Lambda 0.034 W/mK on the thermal conductivity scale. This not only provides excellent heat retention properties but also high levels of fire performance.





8

The steam generated by the integrated steam generating system on the Fan Assisted Deck oven is so generous that each door features magnetic door closures which prevent the door from being forced open during the steaming process; this naturally helps to retain as much steam and heat as possible in the oven chamber. As a result, the bread not only bakes with a superbly shiny crust, but the oven also works more efficiently.

# 2 Key Energy Saving Software Features

There are a number of innovative energy saving features built in to the software of the Fan Assisted Deck Oven's touch screen controller which can help to reduce energy consumption significantly.

**Sleep Mode** directs the oven to revert to a defined, pre-set temperature after a given period of time in an idle state. The 'Sleep' state reduces energy consumption by reverting the oven to the optimum core temperature (usually around 50°C lower than the bake temperature) between bakes. This enables it to return to full baking heat as quickly as possible but at the same time preventing the oven from standing idle and consuming power at full baking temperatures.

**Auto Shutdown** function prevents the oven from using costly energy when left on for long periods of time, or overnight, by mistake. The Auto Shutdown facility only needs to be activated once in the General Settings menu and as soon as the oven is switched on an 8 hour countdown timer is started. If the oven is not in a bake cycle and there has been no activity at the end of the 8 hour period, the oven will automatically switch itself off.

Technical Specifications	Fan Assisted Single-Depth Deck Oven	Fan Assisted Double-Depth Deck Oven
Dimensions		
Width without Bumper Bars	1 975mm (77¾")	1 975mm (77 <sup>3</sup> /")
Width with Bumper Bars	2.075mm (81¾")	2.075mm (81¾")
Depth	1.338mm (52¾")	2.140mm (84¼")
Height without Canopy (including flue)	2,156mm (85")	2,055mm (81")
Height with Canopy	2,346mm (92½")	2,245mm (88½")
Height with Canopy and Extractor	2,610mm (102¾")	2,509mm (99")
Crown height	203mm (8")	203mm (8")
nternal deck height with door open	188mm (7½")	188mm (7½")
nternal usable area per deck	1.16m² (12½ft²)	2.26m² (241/3 ft²)
Bottom deck loading height	345mm (13½")	533mm (21")
op deck loading height	1,697mm (67")	1,590mm (62½")
eatures		
lumber of Decks	5	4
lumber of programmes	240	240
an assisted	Yes	Yes
ull colour touch screen controller	Yes	Yes
Ianual Bake Mode	Yes	Yes
avourites Menu	Yes	Yes
-Day, 24-Hour Timer	Yes	Yes
-Hour Countdown Timer	Yes	Yes
Full-Load and Half-Load option	Yes	Yes
-Phases per bake programme	Yes	Yes
Energy saving Sleep Mode	Yes	Yes
	Yes	Yes
Programmable Fan per Phase	Yes	Yes
ndependent top and bottom heat	Yes	Yes
Golid heavy sole plate	Yes	Yes
ntegrated steam generating system	Yes	Yes
re-Steam function	Vec	Vac
	Vec	Vac
	Vas	Vec
	Yes	Yes
Programmable Damper	Yes	Yes
RW5 solid slab insulation	Yes	Yes
Superwool insulated stainless steel doors	Yes	Yes
hterlocked door / fan switch	Yes	Yes
lagnetic door closures	No	Yes
ISB Programmable	Yes	Yes
	Yes	Yes
ockable castors	Yes	Yes
mergency Isolation Switch	Yes	Yes
n-board diagnostics screen	Yes	Yes
)rainage required	No	No
lumber of Trave per Deck		
	2	4
	2	
8" x 30" (portrait)	3	6
8" x 26" (portrait)	3	6
	3	
	4	0
ptional Extras		\/
	res	Yes
anopy without Extractor Fan	Yes	Yes
rotective Side Bumper Bars	Yes	Yes
ouble Peel Holder	Yes	Yes
eck Loader / Setter	No	Yes
vater Softening Unit	Yes	Yes
Dectrics	415V, 3 phase +neutral +earth, 50HZ 42kW per oven, 12 amps per phase, per deck. 80 amp supply required.	415V, 3 phase +neutral +earth, 50Hz. 59kW per oven, 21 amps per phase, per deck. 100 amo supply required.
The oven must be connected to the mains supply vork in accordance with national and local regular uarterly for the lifetime of the oven.	using a <b>30mA Residual Current Device (RCD)</b> . A 30mA RCD must protect tions. The RCD is a safety device which automatically switches off the powe	the supply to this oven. A qualified electrician must carry out all electrica supply if an earth fault develops. Test the RCD after installation and the
Vater Connection		
Il ovens with steam require a $15 \text{ mm}$ ( $\frac{1}{2}^{\circ}$ ) BS op corner of the stand when facing the front of central connection point. It is recommended t	P/NPT water supply at a pressure of 2-3 bars (29-44psi), located appi of the oven. Only one water supply is required per oven stack. A manii hat the water supply conforms to the following specifications: Hardness	toximately 250mm (9% <sup>*</sup> ) from the right corner and 100mm (4 <sup>*</sup> ) from fold, fitted with a non-return check-valve, supplies all decks from on is 2-4 grains per gallon, PH Range 7-8, Chloride concentration 0-30
	Less than 80 dB	Less than 80dB



www.monoequip.com