

e.BAKE.solutions The Future of Baking

Baking rethought With intelligent technology from DEBAG





Contents

e.BAKE.solutions The Future of Baking

Intelligent baking rethought

e.BAKE.solutions	04

Assistance systems for the automation of baking processes

e.ASSISTANCE00
SmartBake08
Virtual Baker [®] 10

Solutions for making oven cleaning simple and resource-friendly

e.CLEAN 12
e.CLEAN SYSTEM®14
e.CLEAN 50016

Intelligent software for connected ovens and energy optimisation

e.CONNECT	
FilialNet20	
Performance Control System	

Intuitive and user-friendly oven controls

e.CONTROL	26
Touch control	28
One-Touch control	29
Programme control	30
Manual control	31







e.ASSISTANCE	e.CLEAN	e.CONNECT	e.CONTROL
Assistance systems	Solutions for making	Intelligent software for	Intuitive and user-
for the automation of	oven cleaning simple and	connected ovens and	friendly oven
baking processes	resource-friendly	energy optimisation	controls

Ti e.i Our

Our e.BAKE.solutions not only make it much more straightforward to operate your oven; they also make it easier for you to control and analyse your baking processes. The highly detailed reports and real-time data provide a solid basis for you to make the right decisions for your business.

By supplying the right data at the right time e.BAKE.solutions support you in increasing your revenue sustainably and improving the processes in your branches. This way, you not only save precious working hours; thanks to our e.BAKE.solutions your energy usage and associated costs can also be significantly reduced.

e.BAKE.solutions The modern art of baking.

The control requirements made of managers of bakeries and branches are continually growing, and providing information in an automated way is becoming increasingly important. DEBAG brings you intelligent baking technology to allow you to manage your baking processes with even greater efficiency in future – its e.BAKE.solutions.

These are divided into four product groups: e.ASSISTANCE, e.CLEAN, e.CONNECT and e.CONTROL.



Our assistance systems make operating your oven a much easier and more straightforward task. Using the latest sensor technology the programmes can detect the type and quantity of products in the baking chamber and automatically set the right parameters for baking. Operator errors are a thing of the past. Our assistance systems also mean that energy usage can be significantly reduced. This is because the energy supply is adjusted precisely to what your systems require at that moment. Another benefit: the quality of the baked goods is consistently high across all your sites. Your customers will love it!





SmartBake*

The programme detects the batch quantity in the oven and automatically adjusts the parameters during the baking process. **Virtual Baker**®* The programme detects the type and quantity of the baked goods in the baking chamber and automatically selects the appropriate baking settings.

*Only available on selected DEBAG ovens.

e.ASSISTANCE

Assistance systems for the automation of baking processes



Other clever solutions*:

Automatic programme start function, automatic switch-on function, automatic door-opening function, re-bake function, automated soft-close door closure system, e.Fresh (controllable fresh air inflow)

SmartBake

Automatic detection of batch size

SmartBake* detects the batch quantity in the oven and automatically adjusts the parameters during the baking process. No matter how many trays have been loaded, SmartBake ensures that only as much energy as is necessary is input. The programme therefore not only helps to save energy and prevent operator errors but also guarantees a consistently high quality of baked products. SmartBake optimises workflows and increases process reliability in your branches.

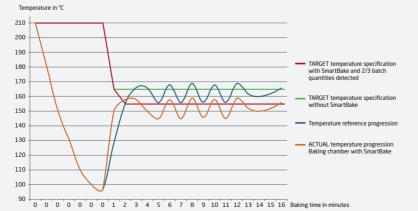
- automatic selection of batch quantity inside the oven
- time saving when setting parameters
- minimises operator errors
- baking process optimisation by means of energy savings
- guarantees a consistently high quality of the baked goods

*SmartBake is available for the DECON and DILA in-store ovens.

Reduces operator errors and optimises your energy usage

This is how it works: The system detects that the batch quantity differs from the baking programme entered and automatically adjusts the requisite parameters accordingly.

Temperature progression: 2/3 oven batches







Virtual Baker® Your digital baking

With the help of the latest sensor technology the programme can detect the type and quantity of the contents of the oven and will automatically select the appropriate baking programme. This minimises the probability of operator errors. BakeIT Cloud[™] assists in monitoring and documenting the whole baking process in full. This provides you with an extremely detailed and systematic analysis of all data around the baking process - and entails minimal workload. Armed with this knowledge you can optimise the workflows and baking processes in your branches!

Our formula for the future:

intelligent sensor technology + cloud services = more efficient baking processes

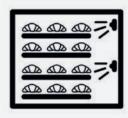
*The Virtual Baker® can be installed in selected DEBAG in-store ovens.

Benefits of the assistance system compared to conventional workflows

- increased process reliability in the branches
- fewer operator errors
- optimised energy usage thanks to baking tailored to quantity and product
- consistently high baking quality in all branches
- automated documenting of the processes inside the oven
- simplified compliance with regard to hygiene regulations, e.g. "hygiene traffic light", HACCP
- image documentation, makes it easy to track goods
- less time required to train new employees
- less time required to operate the oven (staff only need to close the door)



Optimal processes for your branches through systematic data collection and analysis



Sensor analyses the baking chamber.



All the data are saved in the BakeIT Cloud™.



assistant*



Artificial intelligence identifies the contents of the baking chamber (type and quantity of the baked goods) ...

Photos and videos can be used for the purposes of documentation and quality assurance.







.. and selects the correct baking programme together with the appropriate settings.

All information is available at any time and from anywhere. Different devices can be used to access this information.





e.CLEAN means hygiene at the press of a button. Our resource-friendly cleaning systems win the day with their low electricity and water usage. We offer a range of different systems to ensure that the oven cleaning is designed precisely according to your requirements:

e.CLEAN[®] e.CLEAN SYSTEM

e.CLEAN SYSTEM®

The e.CLEAN SYSTEM® is a highly efficient cleaning system. It features impressively low water and energy consumption. The employees in the branch are responsible for refilling the

e.CLEAN 500

The first automatic oven cleaning with a 500-day refill cycle! Once filled, the supply of cleaning agent lasts for a minimum of 500 days.* Refilling is carried out by DEBAG's customer service team. Employees in the branch do not need to worry about a thing.

*When adhering to the recommended cleaning intervals **The second cleaning phase is currently only available for the DECON in-store oven.

e.CLEAN



CleanFinish rinse agent**

The oven cleaning procedure can, if wished, also be extended to include a second stage using the CleanFinish rinse agent. This maintains and protects the baking chamber at the same time.

e.CLEAN SYSTEM®

Resource-friendly dual-stage oven cleaning

The e.CLEAN SYSTEM[®] is a highly efficient oven cleaning system – with up to 2 stages. Phase 1 includes normal oven cleaning with CleanFixx liquid detergent. If required, phase 2, which uses the CleanFinish rinse agent, can be activated manually. Both cleaning agents (CleanFixx, CleanFinish) can be refilled very easily via a small opening at the front of the oven.

- low water and energy usage
- integrated tank for cleaning product and rinse agent (optional)
- duration of cleaning: 35 to 87 minutes
- water usage: approx. 9 to 24 litres*
- automated, programmable night-time cleaning
- cleaning stage 1: with the CleanFixx cleaning agent
- cleaning stage 2: with the CleanFinish rinse agent**

*Depending on the cleaning programme and level of dirtiness within the baking chamber **Currently, the second cleaning phase is only available for the DECON in-store oven.









e.CLEAN 500

The first oven cleaning with a 500-day refill cycle

No need to worry about a thing for 500 days. The new, automatic e.CLEAN 500 oven cleaning system makes this a reality.

Once refilled, the supply of cleaning agent lasts for a minimum of 500 days*. Refilling is extremely convenient and takes place as part of DEBAG customer service. Removes the work involved in purchasing, storing and disposing of the cleaning agent. The dosing and programme start take place automatically, meaning that the operator no longer needs to be involved. In addition, the cleaning agent is HACCP-certified (Hazard Analysis & Critical Control Points).

e.CLEAN 500 makes cleaning the oven significantly more straightforward and less work. This allows sales staff to focus fully on what really counts: offering a great customer service.



*When adhering to the recommended cleaning intervals e.CLEAN 500 is available for the DILA and DECON in-store ovens from DEBAG.

e.CLEAN 500

A gleaming appearance for 500 days



Making life easier for your staff

no more oven cleaning work, more time for other tasks, increased process security





Perfectly clean

even when it comes to stubborn deposits



Automatic dosing and programme start



With our e.CONNECT solutions we offer you a comprehensive management cockpit that enables you to access your baking processes and data at any time and from any location. Our e.CONNECT products connect your ovens and link them to a clear database that enables you to manage and control your baking processes. In addition, e.CONNECT offers practical and cost-effective remote maintenance for your ovens.

e.CONNECT gives you a window onto all your baking processes at any time and you can control these in real-time. e.CONNECT provides you with extremely detailed data analysis that help you to increase efficiency in your bakeries and branches for the long term.

efficiency, simplified maintenance and service, together with continual process optimisation.

FilialNet

The FilialNet oven networking software can connect an unlimited The ovens are connected to the Performance Control System via an number of ovens with one another, thus making baking programme interface. The software takes over the resource planning for all the management convenient and clearly structured. In parallel to this, connected ovens. Power peaks are limited from the outset. its very detailed analyses aid the control process within your branch This enables you to significantly optimise the energy management in network. your branches.

e.CONNECT

Intelligent software for connected ovens and optimised energy usage

Our e.CONNECT solutions for baking processes offer you greater transparency, increased safety, optimal energy

Performance Control System (PCS)

FilialNet - connection software

Superb control for your branches

The FilialNet oven connection software can connect an unlimited number of ovens with one another, thus making baking programme management convenient and

clearly structured. Within the branch network you have all the baking processes at a glance. The connected ovens can be controlled at any time and from any location. Operating and usage data can be obtained for each specific cooker or device. The modern and user-friendly software improves control and guarantees a detailed analysis of your oven report data. At the same time it offers you the practical means of maintaining your ovens remotely.

Benefits:

- connection of an unlimited number of ovens. refrigeration units and air-conditioning systems
- convenient and clear baking programme management
- practical remote maintenance of all connected devices/units
- guick and easy to control via PC, laptop or tablet
- highly detailed, customer-specific analyses
- available worldwide in 5 languages: German, English, French, Polish and Russian



Intelligent connection of ovens, air-conditioning systems and refrigeration units. FilialNet allows you to see all the processes at a glance – at any time, from anywhere.

FilialNet

FilialNet works as follows:

1 Connection within the branches





 \rightarrow

Within the branches as many systems as wished can be connected.

tunnel.

2 Connection with Head Office

All systems can be run from a central location



The respective branch networks are connected to Head Office via the Internet or by VPN

In the Head Office: you can interact with all the connected ovens and systems within the bakeries/branches, from the office

FilialNet - connection software

Superb control for vour branches

Using FilialNet you can:

- obtain a read-out of all operating and usage data, specific to the individual stove and device – in real time
- carry out remote maintenance
- create, adjust or archive (baking)
- upload or download firmware, updates and configurations – very easily, with a click of the mouse – to one, several or all connected systems
- set automated actions, e.g. rebaking, switching on and off, e.CLEAN (automated cleaning)
- check the specific temperature progression of ovens, refrigeration and air-conditioning systems at any time
- carry out optimal planning and monitoring of the processes in your branches

Which insights does FilialNet deliver?

- What was baked when, where, how and in what quantities?
- How often are which products sold in the branch?
- How much energy do the systems use?

As individual as your business:

- FilialNet can be connected to existing databases
- also available in a single location version (via a USB connection)
- individual allocation of access rights

Precise data collection and evaluation

Using the FilialNet reporting module you can:

- create custom reports, e.g. via baking behaviour, programmes used and much more
- set reports to generate automatically (e.g. monthly)
- compare daily data reports (e.g. hours of operation, baking and heating time), since these are saved automatically
- able to carry out multiple analyses

The way to boost performance in



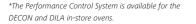
Performance Control System (PCS)

to avoid expensive power peaks

With the help of the Performance Control System (PCS), energy costs can be significantly reduced by avoiding expensive power peaks. This is how it works: A specific oven group is controlled and synchronised via a processor unit. The software takes on the job of resource planning for the linked ovens, limiting power peaks from the outset.

Benefits:

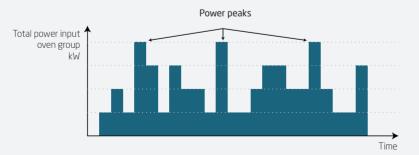
- limits performance peaks within a group of ovens
- avoids overloading the power supply and expensive power peaks
- synchronises the power consumption of the oven heating
- can simulate lower power input



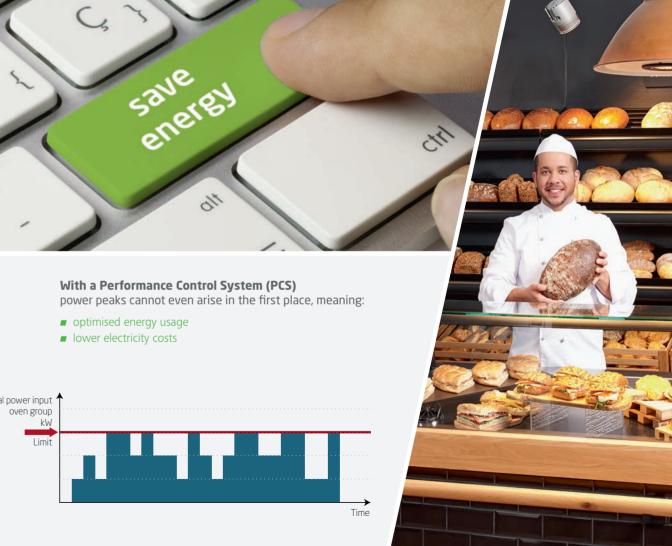
This is how you optimise your energy usage.

Without a Performance Control System (PCS) power peaks will occur again and again, which means:

- higher energy usage
- increased electricity costs









e.CONTROL offers the right control for any situation: from manual control in which the baking parameters are set by hand using mechanical switching components, to the very latest touch control system, which is also intuitive to use. You have the choice between four types of control:

Touch control

One-Touch control

- simple and intuitive to operate
- saves time and reduces operator errors
- faster overview of all baking processes in each oven
- increased convenience for the user, lower purchase costs*

e.CONTROL

Intuitive and user-friendly oven controls

Programme control

- this shows you all the processes at a single glance
- makes the control process highly efficient

Manual control

- functional and clear
- enables baking parameters to be set manually during the baking process

Touch control

Foolproof, intuitive operation

With convenient touch control all the processes and parameters applicable to baking are available to you at a glance. As individual as your products, our control system can be adjusted and programmed according to your requirements. This saves time, staff and reduces sources of errors, nipping them in the bud.

- simple, intuitive operation
- automatic programme start when closing the oven door
- comprehensive programming featuring up to 99 programme settings
- operator approval (optional)
- oven connection and remote maintenance via FilialNet
- standard USB connection
- integrated safety system through various user levels
- operation of proofing chamber: already partly integrated



- W ate ov dis pe Th of ad

One-Touch control

With innovative split screen display for even greater ease of use

Why not operate two ovens with one control? The new, intuitively operated One-Touch control makes this possible.* Users can now control both ovens at the baking station from one display by means of a split screen display – and adjust the baking parameters of each oven completely independently of each other.

The new One-Touch control with split screen display offers all the benefits of Touch control (see left-hand side), as well as the following additional advantages:

greater convenience for the user

- a faster overview of the baking processes in each oven
- and lower purchase costs (a single control display)

*One-Touch control is available for the DECON in-store oven.

Programme control

All processes conveniently at a glance

With programme control you have access to all processes at a glance, at any time. The integrated event memory supports you in evaluating your baking process data and provides an extremely efficient means of control. This is how you optimise the workflows and energy usage in your branches!

- comprehensive programming featuring up to 99 programme settings
- energy saving function
- operator approval (optional)
- oven connection and remote maintenance via FilialNet
- standard USB connection
- integrated safety system through various user levels
- operation of proofing chamber: already partly integrated



Manual control

For baked goods that carry your personal signature

The functional control is suitable for users with technical baking expertise. The baking parameters are set manually and can be readjusted during baking.

- functional and clear
- simple to operate via electro-mechanical switching components
- operation of proofing chamber: already partly integrated
- no connected devices, no USB connection



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