



700 Series DGF Oven

The Direct Gas Fired (DGF) oven provides cookie, cracker and snack manufacturers with consistency, flexibility and superior product quality. These proven attributes are enhanced in the 700 Series by a stable, controllable and predictable heating system within a carefully engineered structure, to create an oven that is as easy to

operate as it is to clean and maintain.



Cookies



Soft Dough Products



Hard Dough Products



Crackers



Bars



Baked Snacks



Baker Perkins supports every piece of equipment throughout its life, with a comprehensive programme of parts, service, upgrades and rebuilds. Parts are available around the clock, while our team of service engineers can assist with both repairs and routine maintenance. Existing equipment may be rebuilt to extend service life, and/or upgraded to improve performance.

Consistently high quality products

The ability to combine radiant and convective heat in varying proportions along the length of the oven enables the ideal size, color, moisture and thickness for a wide range of products to be achieved. Heat input and airflow are laterally balanced and fully controlled throughout the oven to ensure that every product meets standards consistently and repeatedly.

Easy operation to achieve and maintain optimum baking

Powerful controls and a carefully designed process make it very easy to achieve and maintain optimum baking conditions. The various heating and airflow systems all respond in a linear manner and do not interact with each other. Recipe driven settings and intuitive controls, clear process visualization and full alarm management provide operators with all the information they need to run the oven efficiently.

Hygienic and easy to use

Cleanout doors with clear access to the whole of the chamber floor, plus automatic cleaning of the oven band ensure that the two main hygiene tasks can be carried out quickly and easily. Maintenance-free components are used wherever possible; everything on the oven that does require regular maintenance and/or occasional replacement is mounted externally and is readily accessible.

For videos and more information on the 700 Series DGF Oven, please see www.bakerperkins.com/700DGF

Typical Installation Includes:





Easy to install and expand when necessary

Modules are fully assembled, pre-wired and tested for rapid, trouble-free installation. Bellows-type module joints allow for expansion and are fully sealed to prevent heat and moisture loss. DGF oven modules can also be combined with zones of other oven types into a hybrid configuration for additional process flexibility.

Modular construction provides flexibility and control

A DGF oven comprises a number of independent heating zones, each made up of one control module and a number of standard modules, plus feed and delivery ends. Temperature, extraction and turbulence (where fitted) are controlled separately in each zone to achieve the desired baking profile.

Body and chamber designed for efficient baking

A high emissivity coating on the stainless steel roof provides additional radiant baking effect, while low emissivity Aludip walls and floor resist corrosion and prevent sidewall heat radiation from causing edge coloring. Stainless steel radiator panels above the top burners provide enhanced infrared radiation. High density, non-settling mineral wool insulation in the oven body minimizes heat losses.

Doors for enhanced visibility and hygiene

A hinged inspection door and light in each zone enables operators to monitor the bake throughout the process. Floor level cleanout doors every 2.8m provide full access to chamber floor for cleaning.

Heavy-duty feed and delivery ends with variable speed drive Drop-in skids form a stable and hard-wearing support for any type of oven band. Rollers are used to reduce friction on long ovens, and are used on the return. Twin pneumatic cylinders apply constant tension to the band; a back-up air reservoir maintains band tension if factory air pressure fails. A high-accuracy pneumatic band tracking system maximizes tracking accuracy and extends band life.

Intuitive touch screen controls

Easy-to-use interface allows operators to visualize and control every aspect of the baking process. Recipe-driven settings, historical trending and sophisticated alarm management ensure that all information needed to set up and run the oven efficiently is easily accessible.

Hybrid ovens combine the benefits of all baking processes

Companies can combine the best baking methods by specifying a hybrid oven. Direct gas fired (DGF) and direct convection baking have characteristics that are ideal for one part of the process: combining the benefits of each can create a unit that exactly matches a specific need for any kind of cookie, cracker and bar.

DGF and direct convection all have different heating, thermal efficiency, heat transfer and airflow characteristics that affect product quality. Most hybrid ovens feature a DGF section for the first part of the bake to provide radiant heat without turbulence: at this point, air movement is often undesirable as it dries the outer layers and prevents proper flow and lift. During the drying and coloring process in the later stages of baking, air movement is beneficial, so a convection section is specified.

Flexiflame Ribbon Burners

Baker Perkins' Flexiflame ribbon burners guarantee product consistency and quality. Independently adjustable flames, solid design, increased throughput and easy maintenance ensure low cost of ownership.

Flexiflame burners are available in single and five-lane configurations. On five-lane burners, the height and width of each flame section are individually adjustable to eliminate edge effects and balance overall heat input. On single-lane burners the overall flame width and height are adjustable.

The high heat input provides flexibility, precise control and fast start-up. Burners are supported on horizontal rails across the chamber for easy installation and removal. High and standard rate burners are available and are easily converted with simple set of change parts.

Specification

Nominal band widths: 39.4"(1,000mm), 47.2"(1,200mm), 59.1"(1,500mm),

63"(1.600mm)

Module lengths: Control 220" (5,600mm)

Standard 220" (5.600mm), 110" (2.800mm)

Gas or LPG Fuel type:

Insulation type: Packed mineral wool Insulation thickness: Roof 17.7"(450mm) Walls 7.9"(200mm)

Floor 4.9" (125mm) Every 110.2"(2,800mm)

Inspection doors: One per zone

Options

High rate burners

Cleanout doors:

- Infra-red radiant burners
- Hinged cleanout doors
- Insulated band return
- · Band return side sheets
- Oven band pre-heat
- UPS for emergency wind-out
- · Outer covers in stainless steel
- · Acoustic cover for combustion air fans
- Band cleaner