

German bakery maximises output and flexibility with Spooner Vicars' Continuous Proof & Bake System

An oven system that can provide total flexibility is the holy grail of bakers everywhere. With this in view, UK bakery equipment specialists Spooner Vicars have developed their Continuous Proof & Bake System which allows for high capacity baking and the option of fast, frequent changeovers.

The system can deliver up to 12,000 tinned loaves, 35,000 muffins and 72,000 buns per hour. Spooner Vicars' cost-effective and innovative system delivers improved fuel efficiencies, reduced investment costs, minimal operator levels and a continuous process that eliminates batching.

An example of the system in action can be seen at a large bakery in North Germany which opened a purpose-built site in November 2004 to make hamburger buns and hotdog rolls for own-label projects and a fast-food giant.

The single line, which currently runs in a two-shift pattern, has the capacity to produce up to 50,000 hamburger buns per hour and is capable of many smooth changeovers every day.

According to Pxxxx Kxxxx, Spooner Vicars' R & D and Marketing Manager:

“Changeover times can be minimised with the Continuous Proof & Bake System which tracks product through the proofer and oven, and allows process conditions to be changed on the run.”

The whole system can be recipe-driven using a PLC with touch-screen operator interface. This can download all the necessary process conditions for each product as well as providing fault identification and product tracking.

The Continuous Proof & Bake System is based on a multi-tier continuous conveyor which eliminates the need for product batching, providing a smooth flow of product through the proofer and oven. Another advantage of the multi-tier system is in reducing the space requirement in a bakery when compared with a traditional tunnel oven.

At the heart of the new technology – designed to ensure that every product is exposed to identical proofing and baking conditions – is a new low-profile continuous carrier chain. This gives superior load carrying, maximum access for lubrication and the highest level of grid stability.

A single motor drive interface delivers smooth and continuous operation, whilst the conveyor system incorporates magnets or centre guides – or a combination of both – to enable indented or flat pans to be randomly loaded onto the conveyor to maximise throughput.

The Continuous Proofer can be conditioned by steam, hot water, gas or electric heating, with humidification added by steam injection or atomised water spray over an extensive range of 30% to 95%. Spooner Vicars' high performance 'Klimatank' air conditioning system also provides accurate control of process conditions and allows for rapid changes to the temperature and humidity.

The Continuous Oven, meanwhile, uses the tried and tested technology of ribbon burners with forced air convection to provide the most efficient and uniform bake currently available. Single-point or multi-zone temperature control uses averaging thermo-couplers to maintain product consistency, even under partial load conditions.

The oven is available in a figure-of-eight or twin-oval configuration to maximise plant capacity and available space, with virtually any combination of infeed and outfeed positions possible.

NOTES FOR EDITORS

- Merseyside-based Spooner Vicars has designed, manufactured and supplied machinery and bakery products for over 150 years and is now a leading international name in high quality bakery equipment.
- Spooner Vicars can provide customers with a complete turnkey service from design to installation and commissioning.
- Spooner Vicars combines the latest technological advances and innovations to provide a full service from product development to equipment selection to after-sales service and maintenance.

Details of Spooner Vicars' full range of equipment can be seen on the company's web-site:

For further information contact: