

# Spotlight on cooking

*A look at some of the recent developments in cooking, baking and thermal processing for food and drink from PPMA members.*

## PLANET FLOWLINE

### Overspray units based on standard modules

Pasteurisation and sterilisation installations by Planet Flowline for the [food processing](#) and drinks industries cover tunnel pasteurisers, coolers and pre-heating plants for operation on cans, bottles, jars and plastic containers, utilising machinery manufactured by Niko/SMB and Hermann Stock, of Germany.

The Niko/SMB stainless steel flat bed overspray pasteuriser/coolers are said to be well suited to handling products such as beer, fruit juices, carbonated drinks, wines, cider, pickles and preserves. They are based on standard modular units and are custom built in stainless steel to suit the application.

"This method of construction eases delivery, installation and commissioning, and the fact that the units are normally pre-wired and piped reduces disruption," points out Planet Flowline.

Particular attention has been paid to accurate temperature control

throughout the heating and cooling processes which, the company adds, ensures accurate PU values under varying conditions.

Special features on the Niko/SMB range of machines include non-clog open orifice nozzles, stainless steel open aperture pumps for high volume at low pressure, stainless steel filters and heat exchangers. There are also specially designed stainless steel conveyor beds which enable delicate containers to be transferred in and out of the system without risk of toppling.

On most modern systems a counter-flow water distribution system is included within the units, with water from the cooling sections being transferred to pre-heat zones to minimise energy and water consumption.

For the sterilisation of products in cans, glass jars, pouches and plastic containers Planet Flowline works in conjunction with Hermann Stock, the manufacturer of batch full water rotary sterilisation.

The Rotomat full water rotary steriliser employs end-over-end container rotation during sterilisation and cooling. This is said to ensure a uniform and consistent process, achieving good sterilisation values without destroying the natural texture and colour of the product.

"Full water gives great advantage in this process as it helps support the product during both sterilisation and cooling modes, thus producing a gentle action which reduces damage



**Combination oven:** Tom Chandley *tc-combi* has automatic cleaning

to the containers and their closures," points out Planet Flowline

The Z rotary series of retorts has been developed by Stock to suit an increasing number of applications in which a widening variety of containers and product types demand greater versatility in processing methods.

Built in stainless steel, they can operate in full water, semi-immersion and super heated water overspray modes, allowing the user to choose the optimum process for each type of product and container, either static or rotary.

More information - enter 113

## TOM CHANDLEY

### Combination oven has automatic cleaning

Tom Chandley's Convecta-tc range of ovens has been expanded with the introduction of the Convecta tc-combi, which combines steam and convection heat to provide the flexibility for baking, cooking, heating and roasting meat, fish, vegetables, snacks and a variety of baked goods.

The oven is equipped with ProClean, the fully automatic oven cleaning programme, which will soak, rinse and dry the oven ready



**Full water rotary:** Stock full immersion steriliser from Planet Flowline



**Roll plant:** Backtech-Grubelnik roll system available from Mono Equipment

for the next time. This cleaning system has already collected several awards, including an Award of Excellence from the PPMA last year.

A computer-based control system can hold details of 99 different products, each with up to nine steps, and there are 12 shortcut picture buttons which can be programmed with the most popular products.

The fan is reversible to ensure a constant quality and even bake while the oven also incorporates a core temperature probe, and a steaming system as standard. Four or eight tray formats are available and the tray runners can be removed for easier cleaning.

**More information - enter 114**

#### MULTIPLICITY

## Walk through ovens aid menu meal producers

A range of walk through ovens that combines the ability to separate 'high to low' hazard zones with refreshing,

chilling, freezing, or smoking in the one free standing appliance, is now available in the UK. This offers major advantages to menu meal producers, says Multiplicity, representative of the French manufacturer Bodson.

Tailor made combination or conventional ovens can be supplied as two door, walk through units with a specification that could include smoking, both dry and liquid, or chilling by gas or mechanical means, and a refreshing/douche operation for washing or blanching. All ovens can be equipped with steam generators, or be connected to a main boiler system.

The two door facility allows a secure production installation for all products, says Multiplicity, while the free standing design provides easy access underneath for cleaning. Additional advantages of this design include high and low risk trolleys for further security in avoiding cross contamination.

Ovens are PLC controlled and can include pasteurisation programmes, particularly for *sous vide*.

Control of cooking can be from a remote location, while a hard copy

printout showing all features of time and temperature information, displayed as a drawn curve as well as conventional display, is also offered.

"These, and other features, give the user the ability to specify an oven to suit particular applications or factory installation requirements, rather than having to compromise by using a standard or adapted oven," says Multiplicity.

**More information - enter 115**

#### GIUSTI

## Large wok suits stir-fry and flash sealing

A 1.2 metre diameter wok introduced by Giusti is aimed at processes such as stir-frying, bratting and flash sealing which have historically been difficult to achieve in large batches. It is also useful, says Giusti, for sauce reduction.

The vessel has mechanical scraped-surface agitation, offering fast, even heat transfer while helping to prevent burn-on and comes with a self-contained 48kW oil heater to give temperatures in excess of 300deg C.

The system weighs 280kg and requires just 2 metres headroom, yet can cope with batches of 75-150kg. Full pan tilt is provided to allow discharge into a 200 litre Eurobin.

**More information - enter 116**

*For full details of all PPMA members able to supply cooking, baking and thermal processing equipment, enter 402 on the free reader service card in this issue.*

#### MONO EQUIPMENT

## Industrial roll plants added to range

Roll plant machinery available from Austrian manufacturer Backtech, represented by Mono Equipment in the UK, has recently been extended with equipment from the German industrial roll plant specialist Grubelnik, Munich.

Backtech's expanded portfolio revolves around the Grubelnik Bavaria dough divider and moulder which employs a drum dough moulding principle.

Like Backtech's own Austrian built machines, the Grubelnik range of roll forming, moulding, dusting and panning units are modular in their design, so allowing a user's particular production requirements and any architectural limitations to be catered for in the design of the complete installation.

The Bavaria divider/moulder is available with a range of quick change moulding drums, from three to eight rows across, giving a production rate of 1500 to 22,000 dough pieces an hour.

Rolls of 30-300g can be produced, depending on the moulding drum fitted, while moulding speed is infinitely variable to suit the dough being processed, which can be from soft roll to hard 60 per cent rye.

According to Mono, one user of Backtech-Grubelnik Bavaria roll systems is producing 500,000 kaiser rolls a day.

**More information - enter 117**