

MACHINERY *update*

The machinery only journal for processing and packaging

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READY MEALS, CONDIMENTS AND SAUCES



Ready meals – exploring the recipes for success

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Robotics gets PPMA and BARA treatment



Anuga FoodTech Review

Pouches steal the show



New Machinery

Faulty pharma labels removed at speed

Plus:

Installations

Regulations

Coding, Marking, Labelling

Components



Editor: **Mary Murphy**
Sales Manager: **David Chadd**
Production Manager: **Bill Lake**
Production: **Janine Berriedale**

PPMA A PPMA
Publication
PPMA Ltd,
New Progress House,
34 Stafford Road, Wallington,
Surrey SM6 9AA
Tel: +44 (0) 20 8773 8111
Fax: +44 (0) 20 8773 0022

E-mail addresses:
publishing@ppma.co.uk
show@ppma.co.uk
technical@ppma.co.uk
Web site: www.ppma.co.uk

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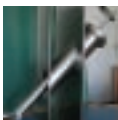
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It's an automatic conclusion



With ever increasing pressure to respond to the global market and the inexorable growth of the low overhead economies, the need for UK machinery suppliers to innovate and differentiate themselves from world-wide competition has evolved from being a preferred option to an essential.

Add to this, the increasing pressure from the environmental lobby, and the recession that the tabloids are likening to the great depression of the last century and one is drawn to an inevitable

conclusion – if there is an opportunity to reduce the overheads associated with high energy costs, a disproportionately costly workforce and the ever increasing burden of UK regulations, UK industry would be irresponsible not to at least consider it!

This was the primary premise of an initiative that has seen the PPMA welcome the British Automation & Robotics Association (BARA) into its membership as an integrated sub-group that combines and integrates the two associations.

The benefits of industrial automation are widely recognised and the hackneyed criticisms that were once cited as excuses for resisting the trend towards its adoption are viewed as restrictive practices more akin to unionist protectionism than rational business management.

Modern robotic technology is not disproportionately expensive and in most cases the ROI is worth the initial outlay with much shorter capital recovery periods. The technology is well past the 'pilot-stage' and MTBF figures in excess of 100,000 hours are common place. The ability to handle delicate products is clearly demonstrated while more and more automation products are designed for the stringent CIP standards demanded by food and pharmaceutical markets.

Product and package handling on automated lines is kept to an absolute minimum whilst reproducibility, consistency and speed of throughput are beyond anything that a human operator could hope to achieve. Such machinery also operates at temperatures well below the legal minimum for a human workforce resulting in significant energy savings and they do so 24 hours a day, seven days a week without the need to comply with employment law or the expensive demands of Health & Safety regulations governing human operators.

The presence of BARA as an integral part of the PPMA represents a positive move by the two associations to recognise current market trends and it will augment the PPMA membership to provide a community of like minded suppliers better equipped to address the challenges that face them.

For the end-user community the move will help to maintain and preserve a strong supplier base able to provide the machinery and innovative technology required to keep British manufacturing in a position to compete on the world stage.

A handwritten signature in black ink, appearing to read 'Christopher Smith'.

Chief Executive, PPMA

BARA and PPMA link puts spotlight on automation

The growing importance of robotics to the PPMA members' customer bases and the need to compete in a global economy has led to the amalgamation of the British Automation & Robotics Association (BARA) with the PPMA.

The move will help maintain a strong supplier base for the end user community and provide access to technical support from the membership.

The reasons behind the move included the recognition of the role robotics and automation play in an increasingly globalised market, while the associations also share a similar customer base, aspirations and values.

"Combining the strengths of



Professor Ken Young of BARA (left) and Chris Buxton, CEO, PPMA shake on the deal

both parties gives us a real opportunity to address the technical, commercial and environmental challenges faced by industry," explained Chris Buxton, CEO, PPMA.

BARA will become an integrated sub-group of the

PPMA, have its own council of representatives and a director of automation and robotics. The associations believe that the resources of the two associations – people, knowledge and finance – will make a real difference to the promotion of the technical advantages of robotic solutions to the end user community.

President of BARA Mike Wilson, who will become the director of automation

and robotics, said: "The combination is much more than the sum of the parts. It is particularly important in this current difficult environment that the automation message is spread to as many people in industry as possible."

Exports grow but don't get carried away

Exports of UK packaging machinery in 2008 showed huge gains, according to preliminary figures from the PPMA. Weighing equipment also gained ground and despite processing equipment showing a slight downward trend, total exports for all categories grew by 18 per cent on figures for 2007 to reach £425.1m.

However, the PPMA's CEO Chris Buxton cautioned: "The major impacts of recessionary changes are unlikely to show until the end of the first quarter in 2009."

Buxton added, "Despite the Government's recent introduction of the Working Capital Scheme, Enterprise Finance Guarantee and the Capital for Enterprise Fund, there is little evidence that it has been effective in making capital more available for investment.

"Many of our members are reporting that customers are deferring purchasing decisions which does not bode well for at least the early months of 2009."

Packaging grew by 21 per cent to £224.9m (£178.1m), with the US maintaining its position as the strongest export market in 2008 at £34.2m – a growth of 12 per cent. In fact the top five markets of the US, Irish Republic, France, Netherlands and Germany all showed gains.

Weighing equipment rose by 19 per cent to £46.9m with Germany taking over the top spot with a staggering growth of 48 per cent to reach £6.2m. Imports fell collectively by 4 per cent to £478.8m with processing imports the only group to show an increase at £140.2m (3 per cent down on 2007).

Standard of living to boost demand

Spurred by rising economic output and an improved standard of living, resulting in increased consumer spending, world demand for packaging machinery is forecast to grow 5.2 per cent annually to \$39.8bn by 2012.

The study from the Freedonia Group also states that market gains will be affected by a deceleration in global fixed investment expenditure growth.

However, the introduction of better performing equipment will lead to the replacement of older units by new packaging machinery that is faster; more flexible; energy efficient; and minimises waste.

Sales in developing areas will outpace the developed world. China will register the largest gains, expanding by more than

\$3.3bn from 2007 to 2012.

China will also surpass the US to become the world's largest market.

Increases are also expected in India and Russia, as well as in lower-volume markets such as Ukraine, Iran, Indonesia, Malaysia, Saudi Arabia, Mexico, South Africa and Turkey.

However sluggish packaging machinery demand will impact on developed nations with the UK, Germany, Italy and Japan expected to be the hardest hit.

Labelling and coding equipment will record the strongest gains driven by rising consumption of label-intensive nondurable goods, a growing need for tracking techniques and increased labelling regulations.



Demand for wrapping, bundling and palletising equipment will also rise fuelled by improvements in machine design. However, filling and form/fill/seal equipment will remain the most widely used type of packaging machinery, accounting for close to 25 per cent of the 2012 market total. www.freedoniagroup.com

IN BRIEF

The Food Machinery Company has been appointed the UK and European representative for the Taiwanese JENG YUH range of Vacuum Cooling equipment.

It has just installed its first system at TAIKO Foods in London, a Sushi manufacturer.

Chilling times for 50kg of rice from 95°C to 20°C are just over four minutes, the company claims.

T: +44 (0) 1634 272345

E: sales@foodmc.com

Friedheim International has been appointed the exclusive agent for the UK and Ireland by Pfankuch Maschinen GmbH.

The appointment covers sales, service, spare parts and training for the company's range of collating and wrapping systems.

T: +44 (0) 1442 206100

E: info@friedheim.co.uk

GEA Pharma Systems, a global technology leader for pharmaceutical processing solutions, has signed an agency representation agreement with ACE Technologies, of Mumbai, to sell its range of GEA Courtoy tablet presses throughout India.

The development adds an important sales channel for GEA Pharma Systems and is expected to have a positive effect on the company's market growth in the region.

T: +44 (0) 2380 267131

E: info@geapharmasystems.com

US group CC Industries Inc (CCI) has created a new company, Provisur Technologies, to sell its range of food processing equipment.

Provisur will be home to Formax® forming and slicing equipment, Weiler® grinding and mixing equipment, Beehive® meat recovery equipment, and the Young and Associates forming equipment.

Fresh look at food mixing creates efficiencies

Increased productivity is the main advantage of a partnership between Cryogenic solutions provider Air Products and mixer-grinder specialist Weiler.

Air Products has combined its Freshline® Liquid Nitrogen Injection Solution (LIN-IS) with Weiler's mixer and mixer-grinder range to deliver fully integrated food mixing, grinding and cooling solutions.

"Pooling our knowledge and experience means we can offer processors the best of both worlds," commented Dave Stone, general manager – Europe, Africa & Middle East, Weiler Beehive.

"We can now respond to some of the most difficult technical and processing challenges, resulting in a more efficient and cost-effective manufacturing process and an improved bottom line for our customers."

Claimed to offer benefits across a wide range of food processing applications, the combined technologies are suited to red meat applications while in the future it may also be applicable for the poultry, fish, seafood and vegetable markets.

The advantages, explains Weiler, are that products are quickly blended into an

homogenous mix while being cooled consistently and rapidly using the LIN-IS's cryogenic technology.

Both the Freshline LIN-IS and Weiler's mixer-grinders are designed to the latest hygienic standards and can be connected to a CIP (Clean-In-Place) system. Operation, cleaning and maintenance are simplified through full software integration.

Air Products:

T: +44 (0) 800 389 0202

E: jacksomc@airproducts.com

Weiler Beehive Europe:

T: +44 (0) 1454 320900

E: sales@weilerinc.co.uk

Simply the Best in processing

PPMA members came up trumps in the recent Food Processing Awards 2009 taking four of the 10 awards on offer.

Automated Packaging Systems was voted company of the year for its innovative, consistent approach to packaging, epitomised by its FAS Sprint.

Industrial Washing Machines (IWM) won the award for Best Environmental Initiative in recognition of its achievements in producing the EDi range of washers, the first utensil washers to appear in the



Industrial Washing Machines won Best Environment Initiative – Carl Hollier, managing director IWM (left) collects the award

Government's Water Technology List, and also in installing a tray washer system

for A F Blakemore & Son, which has resulted in a dramatic 89 per cent reduction in waste.

The award for packaging solutions went to PFM Packaging Machinery for its full range of machinery for reclosable bags, in various styles including the new Steelo stand-up four-corner-seal pouches.

KUKA Automation + Robotics took the Robotics Award for its high-speed palletising solution and its ability to palletise bulk products such as food processing ingredients.

National Skills Academy

CenFRA (Centre for Food Robotics & Automation) has been appointed the UK's Strategic Champion for robotics and automation within food and drink manufacture, by the National Skills Academy (NSA).

It will offer impartial advice,

training and project management solutions for the food and beverage sector and CenFRA will be working in conjunction with the NSA to develop a range of online learning packages.

CenFRA has also set up a

Technical Advisory Group (TAG) to provide the food sector with access to the latest technical knowledge and support and provide assistance in linking collaborative research programmes.

www.cenfra.co.uk



Automation strategy reduces risk and boosts competitiveness

Market demand for complete automation solutions has led Bosch Rexroth to launch a business strategy that in effect turns it into a sole supplier which, it claims, will help UK machine builders be more competitive in the global market.

The automation strategy, according to Trevor Osborne, UK Automation sales manager, is directed towards minimising time to market, production time, overall cost of ownership and the risks that machine builders face in the marketplace.

The strategy creates automation solutions on a sole

supplier basis by interlinking a variety of technologies – hydraulics; electric drives; pneumatics; safety; controls; conveying and mechanics – which have traditionally been split into individual offerings.

Based on the premise that no single technology can meet all efficiency and commercial targets, Bosch Rexroth believes that by reducing the supplier base the cost of procurement will be significantly lowered and management processes made easier.

Considerable savings, not least in the crucial area of energy consumption, can be

made by the intelligent interlinking of a variety of technologies to make UK machine builders' solutions more competitive and attractive, explained Stuart Williams, UK automotive manager.

Another plus, says Bosch Rexroth, is that common mechanical standards across many technologies provides ease of operation and reduces the risk to OEMs as responsibility for their operation lies with Bosch Rexroth and not the machine builder and a broad supplier base.

T: +44 (0) 1480 223200

E: info@boschrexroth.co.uk

Sewtec invest in the future

Automated solutions specialist Sewtec Automation is investing £500,000 to expand and upgrade its premises in Dewsbury, West Yorkshire.

The 10,000 sq ft expansion to its current space will provide room for additional equipment; give a smoother work flow through the factory and help to increase response times, says Sewtec.

The investment responds to

continuing strong demand for automated equipment for handling and packing for industries including food, tobacco and pharmaceutical, explains the company.

"In tough economic times, it is all the more important for manufacturers to maximise production efficiencies and throughput. This investment programme will ensure that we are well placed to respond

quickly to develop equipment and systems to meet specific customer requirements," commented Sewtec managing director Bernard Meehan.

The expansion plans also include increased office accommodation for the administration, control and electrical engineers, and design teams.

T: +44 (0) 1924 494047

E: sales@sewtec.co.uk

Disabled machinery causes death

Naturediet Pet Foods has been fined £157,500 following the death of a worker who became trapped in packaging machinery. The conviction followed an incident on February 1 2006 when 40-year old employee, Marcus Snow, was working in the packing department of the company in Chiddingfold, Surrey.

The accident occurred when a semi automatic machine used to transfer finished cartons of dog food onto a conveyor became jammed. In an attempt to clear the fault Snow entered the machine and became trapped when a pneumatic pick-up unit descended and pinned him to the stack of trays leading to his death by asphyxiation.

The accident was blamed on a faulty safety mechanism and the failure to ensure approved safety measures were in place.

Photoelectric light curtains were wired out allowing Snow full access to the machine. The interlock on the hinged access gate to the machine enclosure had also been bypassed.

Gross negligence manslaughter charges were dropped when the HSE accepted a guilty plea from the company on a Health and Safety at Work Act charge. Naturediet has since moved to new premises which have undergone a full HSE inspection.

(HSE's job is to protect people against risks to health or safety arising from work activities.)

www.hse.gov.uk

Health & Safety legislation discussed in this issue – see page 37

PPMA Show hosts awards

The PPMA Machinery Award of Excellence, part of Starpack 2009, has extended the entry deadline to April 17. The awards will be presented at a gala dinner and awards ceremony during the PPMA Show 2009 (Sept 29 - Oct 1).

PPMA members and their customers are urged to enter and show off their technical excellence to visitors.

Machinery Update editor Mary Murphy said, "This is a golden opportunity for members to show off their technical prowess. Judging by the clever systems which appear on our pages, technical innovation is alive and kicking, and it would be a great shame if members did not take up this opportunity."

Companies will be rewarded for advances in machinery design or development which improve the performance of a machine or system and provide customers with flexibility, reliability, better performance, and sustainable production techniques.

For more information or to enter visit www.starpack.uk.com
Or contact: Rachel Brooks
T: + 44 (0) 1476 513885
E: Rachel.Brooks@iom3.org

Tapping into Asian markets

End of line manufacturer Cermex has opened a South Asian subsidiary in Bangkok – Cermex South Asia-Pacific.

The company now has more than 400 machines installed in Asia. It recently opened a plant in Beijing to manufacture shrink-wrappers, case packers and palletisers.

Cermex SAP:
T: +66 (0) 2678 5190

Exports and product launches boost sales

Optimism rules at Allen Coding Systems, a unit of Illinois Tool Works (ITW), which is expanding into new export markets and planning a range of launch products into both contact and non-contact coding markets.

Allen Coding's exports from the UK already stand at 50 per cent but with an increasing focus on Eastern Europe and Asia this is set to grow substantially. As part of this strategy the company has recently appointed Forintek as its sole distributor for Russia, where it will represent Allen's complete range of high performance thermal transfer and hot foil coding solutions, plus associated consumables.

The company will also be widening its portfolio of both non-contact and contact coding systems and although details are still under wraps, managing director Adrian Shepherd said, "We are anticipating adding two new products to our current laser range during Q2."

In the UK and Western Europe the company believes it is in a good position to track the retailing trends that are emerging during recessionary times. "As the major retailers move into lower cost products

they will start to consider more financially attractive options," states Shepherd.

"Differentiation of products will be among the keys to growth during difficult economic times. We have to adapt to these trends while also serving an emerging group of smaller manufacturers. This will hinge on our ability to provide quality products but from a low cost manufacturing base," he added.

Shepherd cited the success of Allen's 53LTI system, an entry-level thermal transfer coder launched in 2008. "Interestingly", said Shepherd, "this cost effective coder, initially aimed at providing food industry users of traditional hot foil coders with the opportunity to upgrade to a more versatile but economic system, is also having success in Asian markets where it is viewed as a top end coder."

Shepherd sees market growth in sectors such as tea, coffee, food and spices; and will be actively expanding into Asian markets such as Malaysia, Korea, and Taiwan. The company will also be looking for lower cost manufacturing bases to augment its operations which include ITW Betaprint, Spain. ITW also has a number of



Adrian Shepherd, managing director, Allen Coding

coding companies based in the Americas which provide opportunities to share technologies around the world.

A major benefit for Allen Coding Systems is that it operates with complete autonomy but within a large organisation that provides excellent R&D facilities and back-up, believes Shepherd. "As part of ITW we can operate cost efficiently and at speed, while being infinitely adaptable to market needs. This gives us real differentiation in the market."

T: +44 (0)1707 379500
E: info@allencoding.co.uk

Profits up – demand stable

A good performance by the pharmaceutical division helped the Optima Group to an 11 per cent increase in consolidated turnover for 2008 to €190m.

Innovations and new developments offer real potential but Optima warns that there may be a slow down in investment in the present economic climate.

However order books remain full with strong forecasts for the rest of 2009.

The group believes that its focus on the pharmaceutical and consumer sector (food products, chemicals, air and water filters, and cosmetics) and nonwovens (paper hygiene) which cater for basic human needs will ensure

demand for its products remains stable.

Optima Group opened the first of three planned manufacturing facilities in China with a facility in Jiading, Shanghai, where it manufactures packaging machines for non-woven paper products.

www.optima-ger.com

NOTICE BOARD

Community action

An initiative to create a research and networking platform for the packaging supply chain – thepackagingcommunity.org – was announced at the show. Its founder Charles Reuland said it would be a centralised source of information and data focused on the needs of marketing, development, procurement and legislative decision making.

Partners include the European Brand Design Association and EUROOPEN, the European Organisation for Packaging and the Environment.

One of its first activities was to undertake a survey of 650 key packaging professionals across Europe to discover what will drive decisions in 2009.

Conducted with brand owners, retailers, regulators and NGOs the survey found sustainability is now a major factor in 70 per cent of decisions.

Environmental criteria are top priority in retail packaging, with protection of the product and speed of fill lower down the agenda.

www.thepackagingcommunity.org

Fresh standard

FEFCO, the European Federation of Corrugated Board Manufacturers, announced a new Europe-wide standard for corrugated trays used for fresh produce.

The aim is to make the logistics along the retail supply chain more efficient. The Common Footprint standardises the base size and interlocking tabs to guarantee safe stacking of boxes from different producers and countries.

Base dimensions are designed to fit on a standard Euro pallet with the height being adjustable to suit different products.

E: information@fefco.org

Food companies view latest technologies

If there was any need for confirmation that the 'pouch is king' in the food world these days then it could be found at Anuga FoodTec which took place in Cologne – March 10-13. From soups to spaghetti and tapenade to tapioca the display shelves were full of examples of just how successful this type of packaging has become.

The star of the show was the Ecolean, a new lightweight aseptic pouch system for liquid food products. The other major



talking point was the absence this year of major players such as Tetra Pak, Elopak and SIG.

However, the event still had

plenty to offer both food processors and packagers with almost 1,200 exhibitors from 39 countries and a host of new ideas, some of which *MU* showcases here.

In these cautious times it was good to see so many innovations and with an audience of around 34,000 turning out it proves that food companies that want to remain competitive in the teeth of a recession must continue to invest in the latest technology. *More about pouches pp32-35.*

Ecolean lightens the environmental load

The distinctive pack-style of the Ecolean pouch and a new 'Air' aseptic packaging system was unveiled. The easy to grasp pouch comes with a strong environmental message with savings of 40 – 50 per cent less material than standard liquid food cartons or bottles being claimed.

The new Ecolean Air Aseptic system provides ambient distribution of low acid liquid food, particularly long shelf-life products. Made from Calymer™ – a flexible multi-layered polymer film – the lightweight pouches are pre-sterilised and hermetically sealed prior to arriving at the customer, where the Ecolean EL3 filler can accommodate 500ml, 750ml and 1,000ml packs.

Maximum filling temperature is +30°C and distribution temperature is up to +45°C.

New to the industry is the

company's choice of a dry, chemical free alternative for the pack sterilisation process. The system ensures the food contact surfaces are never exposed to any chemicals during manufacturing or filling; and the sterilisation process is completely separate from the filling machine.

The electron beam treatment is performed with a system of electron accelerators. A heated tungsten filament generates free electrons, which are drawn away from the filament by means of high voltage and accelerated through a passage in a high vacuum.

The resulting beam is rapidly moved sideways by a magnetic field to form a curtain of electrons that finally exit the accelerator through a thin titanium foil.

According to managing director Peter Nilsson the



resulting pack produces 50 per cent less waste than an aseptic carton and less than 25 per cent of an aseptic HDPE bottle, while energy used in manufacture is also correspondingly less.

"Ecolean's ambition is to offer a modern aseptic packaging system that is easy to operate and that satisfies the demands of consumers," said Nilsson. www.ecolean.com

SHOW BRIEFS

Mettler-Toledo Garvens was presented with a silver European FoodTec Award during the exhibition for its X-ray CombiWeigher XS3 AdvanChek.

Judges said the main advantage of the system is its dynamic control scale, employing EMFR weighing cell technology. This allows dynamic and accurate weighing and meets all national calibration requirements. The system is combined with an X-ray foreign body detector.

T: +44 (0) 116 235 7070
E: enquire.mtuk@mt.com

Gerhard Schubert says its TLM thermoform/fill/seal machines are the first to use ultrasound for sealing and punching. The company is devoting 2009 to developing its ultrasonic technology which, it says, delivers shorter sealing times; a cold tool for energy saving; simultaneous sealing and punching; validation of seal quality even with soiled edges; no sharp punch contours; and quick tool changes. The TLM also features continually running film transport for continuous filling and longer gassing times.

T: +44 (0) 1676 525825
E: contact@schubert-uk.co.uk

Heuft pakCheck is a new leak detector for cartons containing sensitive contents such as fruit juice or milk. It analyses the fill height and the tightness of the containers, examines the closures and checks the 'best before date' all in a single step, says the company.

The fill level is detected by means of a radiometric inspection which compares the results with the container measurements. Closure, colour inspection and barcode verification can be added to the modular, non-contact leak detector.

T: +44 (0) 1827 717002
E: uk@heuft.com

Next generation tray sealer set to clean up

The first of a new generation of machines from Multivac – the T700 tray sealer – combines high performance with a new sanitary design which simplifies cleaning, claims the company.

The sealer outputs at up to 60 packs/minute using a 4-up die and standard trays.

The sanitary design is based on strict hygiene requirements defined in ISO 14159 and also meets similar US standards.

These require cleaning down to a microbiological level, easy access for inspection, and avoidance of 'dead' spaces, as well as design measures to prevent the accumulation of



liquids. Multivac paid close attention to the inside of the machine where attachments and components have clearance between them and hoses and cables have been reduced to a minimum and routed through frames and separated by spacers.

Traversing movements can be adapted exactly to the tray

and product and stored in the recipe. This, according to Multivac, makes the T700 suitable for a wide variety of applications including very delicate contents such as liquids or lightweight products.

The company also showcased the B310 which, it says, is the first conveyor belt chamber machine with a tilting lid. The patent-pending lid arrangement has advantages for both ergonomics and hygiene while setting the sealing height and cleaning the interior are also quicker and easier.

T: +44 (0) 1793 425800
E: sales@multivac.co.uk

Carrots get Radix treatment

The latest Autosort MC-C72 from Radix Systems uses a laned vibratory conveyor and chute to singulate and align carrots for presentation to the inspection cameras. The system inspects the product in the



round, something which the human eye cannot accommodate, to ensure that any defects are detected quickly and easily.

The four fast scanners inspect for colour and shape in combination with a rapid sequence of light to obtain 'more than colour' information.

Even very similar colours can usually be differentiated and the infra-red capability improves detection of soft rot and foreign

bodies. Cameras above and below the product means the MC-C can efficiently sort for defects showing only from one aspect.

Crown defects are identified separately and size and shape parameters can be pre-set by the operator. The sorter is capable of handling up to 15,000kg/hour based on 100g per carrot average.

T: +44 (0) 1794 830240
E: info@radixsystems.co.uk

Tub filling for dairy products

The new FLEXLINER XL one lane tub filling unit has been designed with the dairy industry in mind, says Herbert Grunwald. The flexible machine can fill tubs between 1 - 20kg and seal them using reel-fed film before applying a snap-on lid.

Changes between tub formats

can be achieved in less than 10 minutes. The line is also equipped with a laminar flow cabin and CIP filling station which incorporates a self-checking weighing unit, enabling highly accurate product weights.

Tubs are sealed at one of two sealing/cutting stations which

means there is no need to wait for one sealing head to cool down or warm up before installing a different size or tub format. Leaking or underweight tubs are automatically rejected at the outfeed conveyor.

T: +44 (0) 1529 414999
E: info@grunwald-uk.com



New nozzle from Niro

GEA Niro launched a new nozzle system for spray driers. The nozzle position can be easily adjusted so that the operator can decide the direction of the atomised cloud and can move the position during operation. This

allows the operator to design the powder particle structure inside the dryer.

The nozzles are placed on short, lightweight lances fitted into the side of the air disperser, at the top of the drying chamber. This makes

them easier to reach than top mounted nozzles and to be positioned more accurately. Previously the dryer had to be shut down to make these adjustments, leading to loss of production. www.niro.com

Debut for case packer

Focke introduced its HFP flexible case packer for fragile products, such as potato chips, pretzels and pasta, in bags or boxes. Product can be packed into a variety of case styles, including RSC, HSC, wraparound and trays in any orientation, says the company.

The patented HFP system guides the case to the product using robot arms. It is then lifted turned and lowered. The flat-lying product is then loaded into the top of the case which is turned sideways on.

No pressure is placed on the bags which can be packed by the introduction of gas or inflation. Up to 15 cases/minute can be filled.

T: +44 (0) 1483 756094
E: fockeuk@btconnect.com

Check it out

Marel Food Systems' exhibited its new M-Check RF8 checkweigher which has an open, hygienic and sturdy construction, making it particularly suitable for the wet food industry.

Integrating the M-Check RF8 with Marel's Innova software system ensures real-time monitoring and control of performance indicators such as traceability, says Marel. It can be used for pre-packed products, as well as open units such as trays and cans.

www.marel.com

SHOW BRIEFS

ACMA has combined its filling and capping technology with the extrusion blow-moulding expertise of Techne to produce the Unika® combination machine which produces and fills bottles, both mono and multi-layer, from 80ml – 1litre.

It is, say the companies, the first 'combi' in the HDPE market suitable for both food and applications such as personal care products.

The machine uses 35 per cent less energy than a traditional hydraulic packaging line and has a smaller footprint. T: +44 (0) 1420 593680 E: integrapak@integrapak.co.uk

FrymaKoruma, part of the Romaco Group, showcased its MK 95 corundum stone mill for the manufacture of liquid, viscous and highly viscous products.

The mill's rotor-stator system generates high energy density during milling to give high product throughput, says the company.

The company also displayed its MaxxD vacuum process machine for the production of emulsions and suspensions in a wide range of viscosities. www.frymakoruma.com

Wolke Inks & Printers showed its latest m600 printer system – the basic – which was specially developed for the food and beverage sectors.

The very small unit has a keypad which is oriented towards the keypad function of a mobile phone. A maximum of two print heads can be connected.

For Track & Trace functions the m600 advanced is now capable of receiving complete database contents and processing them in real-time mode.

T: +44 (0) 1942 677664 E: info@travtec.co.uk

Slice, weigh and get near the edge

Bizerba demonstrated its latest slicing machine the A510 in combination with a fully automatic GLM-E weigh price labeller, allowing slicing, fanning, stacking and weighing of meat, sausage or cheese in one process, it says.

"The A510 responds to the increasing need for smaller footprint areas in customers' factories," according to Andreas Gmelin, head of food processing markets at Bizerba.

"The machine slices more rapidly than our previous model and is robust enough to cut

large quantities over long periods so is ideal for catering companies, airlines and other volume producers."

The GLM-E is available fully integrated or can be retrofitted. Two models are available, the GLM-E 40 with an internal operating terminal for throughputs up to 50 packs/minute and the GLM-E 50, which features an external operating terminal, for 50-70 packs/minute.

Bizerba also showed its new Near-Edge printing unit which, says the company, provides a cost saving thermal transfer

printing solution. The forward displacement of the print head reduces the distance to the edge to 4mm compared with 10mm for classic printing units.

The head always lifts up when no printing is required, giving potential savings of 50 per cent in both materials and wear parts. Up to now the thermal strip and counter-pressure roll were always in contact. Up to 70 packs/minute can be achieved with a print speed of 250mm/second.

T: +44 (0) 1442 240751 E: info@bizerba.co.uk

Robotgrader weighs in for meat

The Aetna Group showed off the Robotgrader the latest product in its Robopac range. The Robotgrader weighs, sorts and packs food, such as defined weights of chicken fillets into retail packs.

Capacity ranges from 100 to 250 packs/minute depending on whether one, two or three robot heads are used. Between 15 and 22 trays are available and

the three head machine can pack more than 60 trays/minute, says Aetna. Currently the machine is aimed at the poultry sector but can be applied to more general meat products or other foods packed by weight.

Dimac presented a continuous orientation system for cylindrical packs, including pots and cans. The system ensures cans, including those with easy open

ends, are oriented for bar code or label identification. Because the system works on continuous motion it can match high levels of production speeds.

The orientation movement is mechanical and does not require registration/contrast marks as the detection system recognises label colours.

T: +44 (0) 1234 825050 E: colin.barker@aetna.co.uk

Direct but gentle

German processing equipment company, Stephan Machinery, launched the Combitherm CT 800, which uses direct steam injection technology, for the efficient and economic processing of dressings, purées, baby food, spreads and paté. According to the company it can handle batch sizes of 800, 1,200 and 1,600 litres at the rate of two to three batches/hour.

The company says that the gentle process uses applied vacuum technology and direct steam heating to ensure that aroma and colour are preserved, the structure of the food optimised and damages such as burn-on are avoided, while the quality of the food is increased by the fast heating process.

www.stephan-machinery.com



ON THE SIDE

SOCO SYSTEM has developed a 'plug-and-play' palletising concept - the 'Robot-In-A-Box'. Simple to operate it is placed at the end of the production line, connected to the conveyor belt, and is ready for use, claims Soco System.

When the first case arrives at the robot the case dimensions are automatically registered, the computer calculates the optimum pallet pattern, and palletising starts.

It is extremely flexible and it does not require running-in or special training, says the company.

The palletiser includes a height adjustable infeed conveyor for simple connection to the production line, computer control and touch screen.

It can be connected to wireless network, web cam, and a remote assistance hotline.
T: +44 (0) 1782 274100
E: info@socosystem.co.uk

Logopak International has updated its keg labelling machinery with a new range offering 10 per cent higher throughput and easier maintenance than previous units, it says.

The first two models in the range are the 500 Tkeg, handling up to 900 kegs/hour, and the 400 Tkeg, a compact unit giving speeds up to 500 kegs/hour for smaller breweries and lower speed kegging lines.

Both machines are smaller than their predecessors and use fewer parts.

The new keg labellers can be run as standalone units with product data held in memory for automatic calculation of consecutive numbers, production dates, best before dates and shift identifiers or can be connected directly to a host system to receive labelling data in real time.

T: +44 (0) 1904 692333
E: salesonweb@logopak.net

Wine wins with new filler

A new generation of **OPTIMO FILL** filling machines for wines, alcohols and spirits has been launched by Newtec filling systems, the filling division of the Newtec Packaging Group.

The new filling machine, which can achieve rates of 3,000 - 20,000 bottles/hour, is the result of research and development studies to meet the needs of oenologists for conservation of the bottled product, says the company.

The system has eliminated the stage in which the product is pumped back into the tank, thus running the risk of contamination by dissolved oxygen and has the advantage of operating without the need for a partial vacuum in the vat,



thus preserving alcoholic strength.

There is no joint in the run-off circuit; and the transmission construction components have been simplified so that the liquid feed is synchronised by an electronic shaft.

The machine is equipped with new filling systems with a racking cock fitted to a level detector which directly monitors

the pourer closing system to give a consistent filling level. The racking cock drops down into the bottle and filling begins.

Once the required level is reached, the detector passes on the information and the filling operation stops.

This **OPTIMO FILL** uses an independent motor to drive the

various components of the single-unit system (rinsing machine, filling machine, corking machine and capping machine).

The single unit becomes a synchro-unit, which simplifies the mechanical construction of its transmission system by doing away with the spiral bevel gearboxes and universal joints.

T: +44 (0) 1673 844534
E: filling@newtec-group.com

Load and lid combo for shelf ready packs

Cermex has developed the **BC50** combined tray packer and lid fitter in direct response to the growth in demand for shelf ready packaging.

The **BC50** benefits from a monobloc construction which allows a smaller footprint. It can perform product collation, tray forming, tray loading and lidding operations.

The lower tray magazines provide a better ergonomic position for the operator when reloading trays. And the cantilever design allows improved access to the machine.

It is able to handle cartons, tubes, cans and bags, as well as other pack styles, with the same quality of squaring, even when the product batch provides no

counter pressure, says **Cermex**. The loader/lidder is also flexible with options to handle full wrap-around cases with short flaps, trays with ledges, tray only and tray plus lid.

All types of lid can be handled, including U-shaped,

cross lid, glued or inserted. Lids can be both internal or external.

The company says the machine is a high speed solution capable of running at upto 26 trays/minute.

T: +44 (0) 1480 455919
E: sales@cermexuk.com



Faulty labels exit at speed

A Faulty Label Removal (FLR) System that responds to demands from the pharmaceutical sector for a system that reliably and efficiently removes labels prior to container application has been developed by Newman Labelling Systems.

The key to this significant technical advance is the removal of faulty labels prior to being placed on a container, rather than the wasteful method of waiting and rejecting both the label and container.

Claimed to be an improvement on existing systems for faulty label removal,

the FLR (patent pending) module removes faulty labels recognised by its PLC control at production speeds.

If the system does not receive 'good signals' from the scanning devices in use (including bar code reader, missing overprint detector, OCV camera and 2D matrix code reader) the faulty label is efficiently removed from the label web prior to application onto the container.

Faulty labels are then transferred to a paper roll for batch reconciliation and inspection.

It can handle both paper and clear labels that can be validated

at speeds up to 550 containers/minute, states Newman.

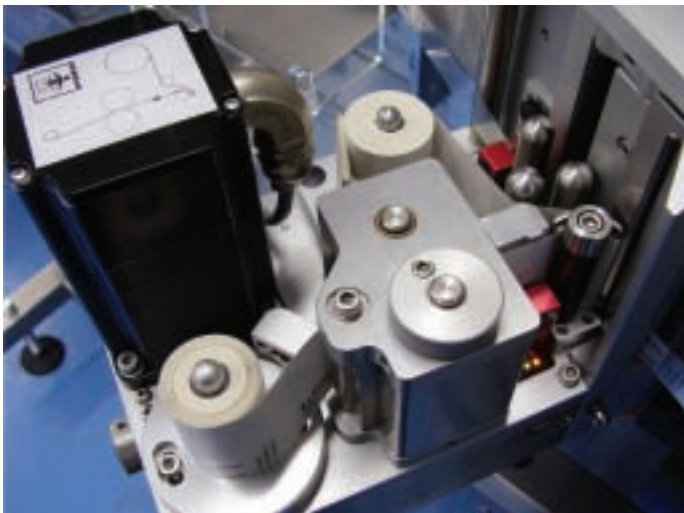
"The system is already proving popular and several leading pharmaceutical suppliers have placed orders. We have one system already installed at Wyeth Pharmaceuticals," said Chris Lindley-Smith, European sales manager.

Newman Labelling Systems' managing director John Clayton said: "Newman isn't the first to introduce a system to remove faulty labels, but we have spent longer in R&D and designed a system that we believe is superior.

"The problem with systems currently in the market is that many have to slow down the labelling machine to remove the faulty label prior to application and some systems accumulate faulty labels on top of each other on a sleeve, making physical reconciliation impossible."

Available for use on Newman's full range of pharmaceutical standard labelling systems the FLR System meets the highest GMP Standards.

T: +44 (0) 20 8440 0044
E: sales@newman.co.uk



ON THE SIDE

The latest addition to KIEFEL's speedformer range for plastic packaging, the KMD 60 B Automatic Pressure Forming Machine, provides a smaller alternative to its existing models.

The KMD 60 has a forming surface of 580 x 440mm with tooling space of up to 600 x 460mm in size, and the forming surface is optimised at 580 x 440mm. It can run through all movement sequences at a dry-running rate of up to 80 cycles/minute.

Represented in the UK by Anchor Plastics Machinery.

T: +44 (0) 1895 824301
E: info@anchor-pm.co.uk

Mecaplastic has introduced the S 3000DPL double step automatic tray sealer, which has been developed for in-line production.

It is equipped with two independent tooling systems which can work simultaneously or separately, while two vacuum and gas systems and the ability to supply different gas mixes, ensure throughput is maximised, says the company.

It is suitable for use with a variety of accessories such as de-nesters, feeders, depositors and marking units.

T: +44 (0) 2476 351300
E: info@mecaplastic.com

Packaging machinery exports from the US increased by 9.5 per cent in 2008 to \$950m, according to PMMI.

The increase on 2007 figures is attributed to growth of consumer packaged goods in emerging markets.

Exports to China rose 38.29 per cent, while exports to India increased by 45 per cent.

However, the slowdown in the domestic market began to affect imports, which rose by only 0.27 per cent to reach \$2bn.

www.pmmi.org

Hot Rod superseals but saves power

Proseal has launched a high-efficiency, water-protected tool heating system which is claimed to meet the demands for lower seal times while delivering a 25 per cent reduction in electricity consumption.

Developed to maximise production throughput yet maintain seal quality, the Hot Rod is particularly suited for use with smooth wall foil trays which are extensively used in food markets. Many foil tray designs make sealing difficult as the

aluminium draws heat away from the sealing areas.

The major innovation, explains Proseal, is that the heat is able to remain focused on the tray rim so that sealing can take place quickly and efficiently. This reduces seal times to give faster tray throughput.

Plus, as a result of this accurate control of the heating area, the wattage of the Hot Rod is half that of conventional heat systems, says Proseal. As well as being specified for new

tooling, the system can also be retrofitted into existing tool sets.

Another advantage is that the main body is resistant to water. This facilitates cleaning and minimises downtime due to accidental water damage. Proseal also claims that the robust construction of the new tooling system means that the life of the tool will be at least double that of existing heat delivery sources.

T: +44 (0) 1625 856600
E: info@prosealuk.com



Easy going for prunes

An high-speed Ishida RS-Series weigher with 14-heads was recently installed at Maître Prunille a leading European producer of dried fruit and nuts and the world's third largest supplier of prunes. Half of its 50,000 tonne annual production takes place at its Casseneuil site, located in southwest France, where it packs both soft-dried and dried fruit into stand-up bags.

The RS is a mid-range model incorporating the latest combination calculation hardware and software for high speeds. Because the RS makes more weight combinations available during each weigh cycle it is very accurate and will seldom need to select a weight outside the specified range, thus guaranteeing - within small margins - the same weight in each bag, claims Ishida.

The weigher is fitted with a ring gate in the discharge chute to ensure that all product discharges reach the bag maker in short, concentrated doses.

The plant handles over 4,000 products making frequent product changeovers inevitable. The machine is designed to avoid product and debris build-up, making cleaning very easy, which is important to optimise products' taste, says Maître Prunille.

T: +44 (0) 121 607 7700

E: info@ishidaeurope.com

Evo-Fold demo is a wrap for Tunnock's teacakes

A demonstration of the Evo-Fold wrapper from Marden Edwards (ME) at the PPMA Show 2008 has led to an order from Scottish confectioners Thomas Tunnock to wrap its teacake products.

The machine is the third ME wrapper to be purchased for the company's Uddingston, Glasgow facility, where the well-known 'snow ball' and caramel wafer biscuits are also manufactured.

"Thanks to advances in our component technology the new machine has a higher specification than the one it replaces, yet price comparisons are very similar and the Evo is our 'entry level' machine these days," explained ME marketing director Jeremy Marden

The machine, which replaces a 10 year old wrapper also supplied by Marden Edwards, is wrapping display boxes of 36 teacakes and while output fluctuates according to seasonal

demand it produced more than 40,000 packs in the month prior to Christmas deliveries, working on a double shift.

Depending on pack size the Evo-Fold can wrap at up to 45 packs/minute, according to Marden Edwards.

Boyd Tunnock CBE, grandson of the founder Thomas, runs the company today, said: "I am

particularly impressed by the new guarding which enables total visibility during packing. We had looked at other suppliers and tested other machines, but the demonstration of the Evo at the PPMA Show convinced me this was the perfect machine for our needs."

T: +44 (0) 1202 861 200

E: sales@mardenedwards.com



Pallet wrapping for safety and savings

Two major drinks producers - Carlsberg UK and AG Barr - have taken delivery of a Robopac Rotoplat 507 semi-automatic power pre-stretch pallet wrapper from Aetna Group UK.

Purchased as part of Carlsberg UK's commitment to health and safety and improved process efficiencies, the latest purchase adds to the 27 Rotoplats already in operation at 11 of the brewing and bottling company's locations throughout the UK.

Carlsberg UK's logistics business expert Tony St Pier, said, "Now, for our 'One Man' deliveries each individual pub or club order is loaded onto a dedicated pallet, which is then

wrapped. Hand loading and wrapping was a time consuming and potentially hazardous process and we concluded that machine wrapped pallets were safer," said Mr St Pier.

AG Barr has seen film usage shrink by up to 70 per cent following the delivery of two new Rotoplat 507s according to Colin Gransbury, depot manager at Barrs.

The machines are wrapping drinks from the company's full product range, including Irn Bru, Tizer, Strathmore and Rockstar. Each machine has the capacity of up to 20 pallets/hour.

Maximum pallet load is 2,000kg and load height 2,200mm. Film thickness can be

between 17 and 35 micron. The Rotoplat 507 features a chain and sprocket system for consistent and reliable turntable performance during rotation.

The pre-stretch facility has a ratio between zero and 250 per cent. The tower incorporates an anti-fall device for the spool carriage. Operators can control rotation speed, upward and downward spool carriage speed and pre-stretch from the easy to use panel.

The load always stops in the same position it occupied prior to wrapping which, says Aetna, greatly improves times and costs of the process

T: +44 (0) 1234 82 50 50

E: colin.barker@aetna.co.uk

Big Bag filler gets high on accuracy

A 'Spirofil' Big Bag Filler, from Spiroflow is being used at the world's first industrial scale carbon nanotube manufacturing facility in Sambreville, Belgium.

The customer, Nanocyl S.A. required a high accuracy machine due to the value of the product which it sells as pellets, powders, liquid dispersions and film.

Traditionally Spiroflow offers the machine with weighing platforms using weigh-scales or load-cells, typically achieving accuracies of +/- 1kg. To meet the customer's requirement for a weighing resolution accuracy of +/- 20g the company adopted the 'hang-weighing' principle.

This meant that the highly sensitive load cells could be mounted high up in the structure of the filler. Not only does the 'Spirofil' equipment weigh the contents of Big Bags - it is so accurate that it is also used to fill 2kg bags.

Big bag filling takes place under a nitrogen blanket. A folded, flat bag is rigged onto the filler and the bag is inflated with nitrogen.

The ambient air around the filler is 78 per cent nitrogen (by volume) and the displaced nitrogen is vented through a



special filter unit into the atmosphere.

During filling, the base of the machine intermittently rises to vibrate the bag. The bag is given a final vibration once the target weight has been achieved and recorded. The vibration is critical to ensure that the contents of each bag are consolidated to render the bags in a stable and safe condition for handling and storage.

The specially designed control box has a high accuracy weighing instrument that receives signals from the load cells. These support the bag hanging frame complete with its

quick release bag loop hooks. The weighing instrument is connected to a printer for batch records.

Carbon Nanotubes typically have a diameter ranging from 1nm to 50nm with a length between several microns up to the centimetre range. They are used to provide exceptional mechanical strength in carbon fibre, which is used in sports rackets, windmill blades and aerospace and automotive applications as well as for the transmission and storage of energy and electricity.

T: +44 (0) 1200 422525
E: sales@spiroflow.com

SIDELINES

Cheese packer Tom Walker & Sons, Stockton-on-Tees, has increased its flow-wrapping capacity for cheese slabs and wedges with the addition of a new **PFM** Tornado inverted web machine, fitted with a LVA system to handle random length product. The machine is also equipped for modified atmosphere packaging and is regularly packing up to 60,000 units a week for portions of between 125g and 300g at 80 packs/minute.

T: +44 (0) 113 239 3401
E: sales@pfmuk.com

A new confectionery company, based in Denmark has chosen a micro liquorice extrusion line from **BCH** for its start up production needs. The company, Lakrids, is now able to tap into the rapidly growing market for traditional Danish liquorice products, says managing director Johan Bulow.

As well as being designed for companies with smaller sales volumes the line can cope with 100 per cent fruit and vegetable extrusions to suit the expansion in natural and organic snacks.

T: +44 (0) 1706 852122
E: info@bchltd.com

AEW Delford has supplied Lusamerica Foods of California with a WPL8060 weigh price labeller which is simultaneously handling four different fish product lanes.

The dedicated lanes of cod, salmon, Dover Sole and catfish are linked to a product converger which releases individual trays on a first come first served basis.

The weigh price labeller is programmed to identify what fish product is arriving at the weigh cell and is achieving rates between 48 and 80 trays/minute.

T: +44 (0) 1206 849200
E: colchester@awdelford.com

Slam shut turnkey cartoner

Kliklok has built one section of a complete turnkey solution incorporating two of its CELOX 'bag in box' end loading cartoners which is to be installed at a global bakery company.

The system will be fed by multiple VFFS machines and includes: full product handling

and conditioning with uncut bag or unsealed bag reject; low level, ergonomic, extended powered carton magazines with large capacity and low level feed; servo programmable Kliklok Rotary carton feeder which is able to run all packaging material grades at up to 325 cartons/minute; three

dimensional servo size change with minimal change parts for changes in less than five minutes; and a 'Slam Shut' and unglued flap detect and reject system incorporated in machine footprint.

T: +44 (0) 1275 836131
E: m.tatum@kliklok-woodman-int.com

ready meals, condiments & sauces

Consumers lead the charge for the right combination

There may be happy news ahead in these times of consumer austerity, according to recent research from the IGD (Institute of Grocery Distribution) shoppers may be looking to packaging to save the pound in their pockets.

Interestingly instead of being the bad guy packaging was highlighted by consumers as a means to help them out of financial difficulties, while also having a positive effect on sustainability through the prevention of household food waste. For example, smaller portion sizes (36 per cent); resealable packaging, which increased 8 per cent since 2007 to 37 per cent; and better food planning, which also increased from 43 per cent to 49 per cent, were all seen as major pluses offered by packaging.

Consumer choice has an obvious impact on the packaging and processing machinery sector, and although it is to be expected that innovative new consumer products may sit on the back burner for a while yet, the market is not starved of developments that fit snugly with the consumer's wish list; particularly in the ready meals sector.

Line efficiency has a huge bearing on profitability and down time is expensive whether caused by the need for product changeover or a machine fault. And single-source supply is also a growing trend to ensure optimum interfacing of the different packing functions to help maximise efficiency.

There is, of course, a continuous requirement to increase manufacturing efficiency in order to remain competitive, but in the current economic climate manufacturers have to face the further dilemma of cuts in capital expenditure.

Cutting costs is the top priority for food and drink manufacturers in 2009, according to a Deloitte report that outlines strategies companies can adopt to stay ahead in challenging economic times. A survey of 90 leading manufacturers, retailers, and food service companies around the world found that 31 per cent of respondents had made cost reduction their number one priority, with 73 per cent of businesses reporting substantial input cost rises in the last 12 months.

Food retailers, says Deloitte, are struggling to hold the line on food price increases, which means they either absorb a reduction in margins

or, more likely, pressure their suppliers into absorbing a reduction in margins.

Just recently and unsurprisingly Sir Terry Leahy, Tesco's chief executive, called on suppliers to keep prices down to help the cash strapped consumer. How's that for magnanimity!

If retailers or suppliers do choose to raise prices with impunity, several criteria need to be met, including clear product differentiation, strong brand equity, innovative products or services, and, in the case of retailers, a superior customer experience, the report continues.

Good news can, however, be found as pressure on the pound in one's pocket is likely to drive consumers away from eating out into the arms of the food and ready meals market.

This does not dull the need for flexibility, minimised costs, and an efficient supply chain.

Packaged foods of all types are particularly challenging markets for the supply chain calling for mass efficiencies and special demands for hygiene, process and packaging safety. Just how the packaging and processing machinery sector is shaping up to these demands can be seen by the latest developments on pages 24 – 35.



READY MEALS CONDIMENTS & SAUCES SPECIAL FEATURE INDEX

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ready meals, condiments & sauces

Chilled foods put it right

The Chilled Food Association (CFA) has welcomed the Waste Resources & Action Programme (WRAP) decision to change its definition of food waste to separate 'store bought' ready meals from takeaway waste.

The CFA, believes the change in terminology will lead to more accurate information and improvements in minimising food waste.

CFA had criticised WRAP for linking food waste associated with ready meals manufacturers with takeaway restaurants as misleading and damaging to the perception of ready meals.

The disputed figures appeared in WRAP's *The Food We Waste* report on domestic food waste in which it was claimed that 440,000 ready-made meals were thrown away by consumers. A figure that did not marry up to market data, said the CFA.

Revised estimates state that of the total 215,000 tonnes, around 81,000 tonnes represents waste from store-bought ready meals and 88,000 tonnes from takeaways; the rest could not be determined.

● Waste minimisation initiatives being undertaken by the CFA include a shelf life research programme to better understand and explore the shelf life of chilled foods through reduced energy heating processes that enhance quality without compromising safety.

It is also funding research at Sheffield Hallam University that is comparing energy usage and waste arising from domestic and industrial production of lasagne, and another at Cranfield/IGD that is looking at the impact of trade relationships on waste.

www.chilledfood.org

Efficiency and the recipes for success

The right automation and technology are essential ingredients for the ready meals market particularly when everyone involved is looking for economies of scale.

Multipond, for example, has noted that ready meals lines are becoming ever-more complicated with the inclusion of a multitude of different components. For instance these days a meal is likely to consist of not one or two main components, but also several more expensive ingredients. Currently these 'extras' are often hand placed as the requirement could be for a single piece or a small number of pieces.

This is where the filling and weighing sector comes into its own. For instance there has been an increased demand for reliable but ever more accurate in-line product weight inspection systems. However, the trick according to OCS Checkweighers, is not only to be able to provide this but importantly to do so with a significant reduction in the total cost of ownership.

"For us it is clear that the Ready Meals market will invest in the right automation to reduce giveaway and to get proven data for both their and their customers' protection," explained Ingolf Latz, of Wipotec, of which OCS Checkweighers is an operating division.

Food preservation technology is instrumental in satisfying consumer desires for less waste and healthier eating and Modified Atmosphere Packaging (MAP)

meets these demands by extending product shelf-life and the ability to use fewer preservatives. Integrapak for example says: "In comparison with more conventional techniques, i.e. air or vacuum-packing, MAP constitutes the best way to preserve food, without sacrificing the attractiveness of traditional packaging."

Synchropack, part of the Integrapak range, produces several fully electronic flow-wrapping machines designed specifically for MAP applications, where robust, reliable hermetic seals with laminated and co-extruded barrier films and high-speed throughput are required.

But Chris Holland, managing director of Holmach, believes that there was a steady trend away from MAP during 2008 to the use of retorts. "MAP does not give any real advantages on combination meals as there is no single gas that will retard microbial growth when meat, sauce and vegetables are mixed.

"However, short/sharp thermal processing can extend life to in excess of 30 days without affecting quality."

He claims that there are now 50 Lagarde Retorts for REPFEDS – refrigerated processed foods of extended durability – in daily operation producing extended shelf life ready meals.

Their use at a time when Sterling is weak has assisted UK manufacturers to export ethnic foods to feed growing demand from European retailers, Holland added.

The continuous requirement to increase manufacturing efficiency in order to remain competitive has not escaped Headland Food, one of the UK's largest producers of frozen ready meals, which has been investing steadily over recent years.

It produces more than two million meals/week at its Flint and Grimsby sites, and has invested £15m at Grimsby.

Projects included a £5.1m investment in processing machinery part of which was for a line producing 110 lasagne meals/minute, which is claimed to be the first fully automated pasta line in the UK.

The investment also included a sophisticated £1.5m, start-to-finish tray line handling all stages



Synchropack's Pack 600, part of the Integrapak range, designed for MAP applications

ready meals, condiments & sauces



Holmach believes retorts are the future

from cooking to packing. The filling line project managed by **Raque Food Systems** is running at 100 packs/minute filling frozen ready meals.

The single lane line features a continuous motion system comprising a tray denester, rice/spaghetti filler, multihead weight controlled filler for proteins, and piston fillers for sauce. This is followed by the latest design of heat seal machine with 'trim film', which significantly reduces the amount of film used.

The finished packs are checkweighed before being evenly distributed on a freezer belt for optimal utilisation.

Headland Food's CEO Mike Russell praised the successful installation and said, "The equipment supplied for the project has proven to be extremely reliable and is achieving the planned efficiencies. The detailed planning allowed a faultless installation in just three weeks."

Installations include **Multi-Fill's** MPF depositor, featuring a PLC-controlled pneumatically operated volumetric filling head, to fill cooked chilled rice and spaghetti at speeds of up to 100 packs/minute.

Notoriously difficult to fill, the system is capable of depositing this type of product in precise portions into trays, cartons or pouches.

The depositor has been upgraded with an adjustment to the filling head, making it much easier to adjust for line height variation. Another technical advance is a dual-drive belt system that allows positive traction of the conveyor belt. All these new features can be retrofitted to older machines.

Represented in the UK and Ireland by F. Jahn, Multi-Fill can

also offer clients a customised product distribution system that allows its MPFSC120-01 automatic depositor to work with multi-lane machines, such as thermoformers or tray filling/sealing lines.

One MPF filling head can now deal with up to eight containers in various combinations or patterns.

Alternatively, the distribution system can be used as a stand-alone unit working, for example, directly under a multi-head weigher.

The right checkweigher will survive the most rigid hygienic cleaning requirements and HACCP compliance.

For example, **OCS**, has supplied Headland Food with its HC-WD checkweigher to meet these requirements. The OCS HC-WD met Headland's specific requirements for precise weight control.

It also provides HACCP compliant design and IP 69K rating, and ensures cleaning to a strict and repeatable high standard in 'High Care' areas.

The HC-WD is manufactured from 100 per cent stainless steel, has no flat surfaces (with the exception of the conveyors), zero cavities and runs at speeds of up to 300 packs/minute.

Also available is the HC-WD-MDi, which has a metal detector included on the same base frame.

The checkweigher's robust hygienic construction and IP69K rating, mean that customers can enforce strict cleaning and hygiene practices (using jet washers and foaming agents) without the fear of costly down time. And its Electromagnetic Force Restoration Weigh Cells helps to prevent product giveaway.



Multi-Fill's MPFSC-120-01 automatic depositor

FURTHER INFORMATION

F. Jahn & Co – Multi-Fill
T: + 44 (0) 20 8977 8822
E: sales@f-jahn.co.uk

Holmach
T: + 44 (0) 1780 749097
E: sales@holmach.co.uk

Integrapak
T: + 44 (0) 1420 593680
E: integrapak@integrapak.co.uk

Multipond
T: +44 (0) 1494 816644
E: info@multipond.co.uk

OCS Checkweighers
T: + 44 (0) 1993 701970
E: info.uk@ocs-cw.com

Raque Food Systems
T: +44 (0) 1905 642820
E: sales@raque.co.uk

The big freeze!

The global market for retail frozen foods was up 5.8 per cent to £4.8bn to November 2008, according to figures produced for the British Frozen Food Federation (BFFF) by the TNS Worldpanel. The market has now enjoyed 10 consecutive quarters of accelerating growth.

The frozen ready meals market has shown something of a renaissance with a value increase of 3.4 per cent, following a decline of 3.8 per cent the previous year. The pizza sector has made significant growth at 6.3 per cent, while savoury foods have shown continued growth and are now growing annually at 8.6 per cent by value. The vegetables sector is now growing faster in value at 9.7 per cent year on year, more than any other sector

BFFF's Director-General, said: "Consumers are turning to frozen in vast numbers attracted by the locked in nutrients, minimal waste and terrific value." He expects 2009 to show even more growth and the market to surge over £5bn.

● The BFFF Health & Safety Working Group has launched a Health & Safety Pledge to demonstrate members' commitment to employees.

The Pledge emphasises the importance of complying with health and safety legislation and of striving to improve standards through continuous improvement.

More than 30 members have already signed the Pledge including Ardo UK, Associated Packaging Technologies, John Bean Technologies, Birchall Catering Supplies, Freshpack, Headland Food, and many more.

Visit www.bfff.co.uk

ready meals - weighing systems

Shuttle improves dosing speed and accuracy

A dosing system that allows the speed and accuracy advantages of multihead weighers to be applied on multi-lane thermoformers and tray sealing lines used for ready meals has been developed by Italian manufacturer PFM Packaging Machinery.

The PFM Shuttle, with an integral multihead weigher installed above the line, is mounted on castors to allow the unit to be moved from line to line. It is particularly suitable for applications where high value ingredients are being added to ready meals trays.

"Multiple lanes present speed and feeding difficulties for linear weighers, which traditionally use one on each lane," said PFM sales and operations director Chris Bolton.

"However, multihead weighers are faster, provide much higher and consistent accuracy and with the Shuttle, up to six lanes can be handled while bringing product giveaway under much finer control."

In place of the conventional single discharge of a multihead weigher, the Shuttle

employs a series of additional product buckets set at right angles to the direction of the host packaging machine. These are dosed individually by the weigher, one after the other to allow high accuracy, and then discharged into the trays below in a single operation.

The PFM Shuttle is also able to index in the direction of the machine to allow two or more rows of trays to be dosed sequentially within the overall cycle of the thermoformer or tray lidding line, typically at speeds of 80-100 trays/minute.

For high accuracy, the Shuttle system is fed by one of the new C series PFM multihead weighers with up to 24 heads depending on the speed required. The C series incorporates software that cuts the time needed to replenish each weigh hopper with product, allowing the contents of more hoppers to be combined for a more accurate dose at higher speeds.

T: +44 (0) 113 239 3401

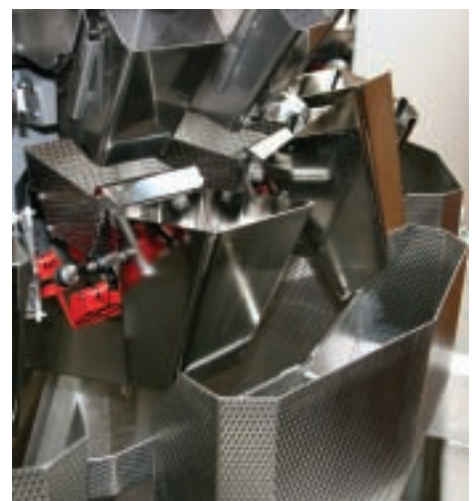
E: sales@pfmuk.com

Bite size solution for meal time

Multipond has launched a fully-automatic multihead weighing solution for single piece weigh counting – the S5R option (individual head reject system). The weigher is designed to handle a small number of pieces or alternatively small target weights.

It is claimed to be a perfect solution for today's complex ready meals industry for which a meal might consist of one or two main products and several more expensive ingredients. Currently these are usually hand placed. The S5R is a fully-automatic weighing solution for these applications.

Based on a standard twin memory hopper weigher, the S5R option is available on a number of Multipond multihead weighers from 16 – 36 heads. The outer memory hopper is replaced by a second pivoting funnel which can either deposit product into a 'good combination' or divert it to a reject position. Multipond claim that there is no loss in weighing efficiency as rejects are evacuated on an individual head basis while



the rest of the weigher can continue weighing resulting in no missed cycles.

The rejected product can be manually or automatically fed back into the system.

T: +44 (0) 1494 816644

E: info@multipond.co.uk

ready meals - round-up

Mash is in from the cold

Frozen mashed potato is growing in popularity among consumers but up to now has been an energy intensive process involving water as the heat transfer medium to pre-cook and initiate starch gelatinization, a cooling step to retrograde the starch and a final cook followed by mashing.

However, a newly adapted adiabatic process from ABCO Food Processing Machinery, represented in the UK by Walsall Engineering, is an energy efficient process which can replace this energy intensive three step process used for fresh and frozen mashed potatoes.

The process applies a minimal amount of steam to the surface of the product and cooking continues as the product is held. Using its knowledge of

existing Heat/Hold blanching technology, ABCO adapted this process for mashed potatoes. The process is controlled by altering the Heat/Hold ratios, the number of Heat/Hold cycles and the total cook time.

Studies have shown that the steam processed mashed potatoes were significantly more uniform, brighter and lighter in colour than the water processed samples and the heat transfer medium had no significant effect on the final product's adhesiveness or cohesiveness. The steam processed product was also perceived to offer a stronger potato flavour.

T: +44 (0) 1922 405355
E: sales@weg2001.co.uk

Sandwiches up to the mark

Buckingham Foods has recently installed six Domino V200 high quality thermal transfer printers (TTO) to provide the necessary coding flexibility to accommodate changes in packaging requirements in the competitive sandwich manufacturing market.



that costly recalls are eliminated by monitoring that the correct sandwich is placed into the correct pack and that the barcodes on the packs are readable, explains Domino.

The V200 also features Domino's patented Ribbon Economy feature, which allows ribbon savings of up to 60 per cent without

Replacing existing thermal transfer printers, the V200s are being used to code flow wrap packs of sandwiches following a move away from thermoformed wedges.

The installations at Buckingham Foods' sites in Milton Keynes and Tamworth are complemented by Domino data integrity packages to help ensure

compromising print quality, states Domino.

Powerful printer control and on-board label creation are provided by the V-Series controller, which can be networked for remote operation.

T: +44 (0) 1954 782551
E: enquiries@domino-uk.com

It's the 'Good life' for automation

Goodlife Foods has installed automated end-of-line equipment from Astec Conveyors to help cope with demand for its branded and own label meat-free products and quick frozen ready meals.

The handling solution feeds food products through a new flow wrapping machine, X-ray machine and an automated cartoner. Due to space restrictions Astec designed and installed a loop conveying system incorporating slat band conveyors and a 180° belt bend.

The 7.5" Flextop stainless steel food quality slat

conveyors, incorporating 90° and 180° bends, transport product through the various end-of-line machines. Just prior to the auto cartoner, the slat band conveyor is fitted with a simple pre-diverter which enables product to be manually stacked.

At the end of the slat conveyor, product is transferred onto a 180° belt bend which is controlled by the automatic cartoner, to provide regulated feed into the machine.

T: +44 (0) 1283 210333
E: sales@astecconveyors.com

Chill out for Premier Foods

Chilled ready meals manufacturer RF Brookes, part of Premier Foods, has installed four tray-sealing machines and tooling from Proseal.

Proseal supplied its latest automatic tray sealer, the GT1, which was specifically developed for demanding food production environments. The sealer maintains high throughput speeds thanks to its servo-driven infeed conveyor and high accuracy tray positioning system, explained Proseal.

Intelligent film feed provides enhanced control of the sealing operation for improved seal quality with easy film threading and dynamic control of the film throughout the film feed cycle.

Proseal's Auto-Tool, which allows tool changes to be carried out in about two minutes, and the GT1's innovative Touch Screen Control user interface, designed to optimise fast, intuitive retrieval of all recipe settings are also being utilised.
T: + 44 (0) 1625 856600
E: info@prosealuk.com

Salad days

The importance of efficient line development is demonstrated by an Ishida Europe installation at the Dutch salad processor Tuinderij Vers. The custom-built line includes a Tray denester, RS series multihead weigher with 3 litre hoppers, the rapid tool change QX-775 traysealer, IX-GA 4075 x-ray inspection system and a DACS-W checkweigher. Trays are produced at 40-50 packs/minute and giveaway is massively reduced, says Tuinderij.

T: +44 (0) 121 607 7700
E: info@ishidaeurope.com

ready meals - round-up

Food hygiene gets the CSL treatment

Conveyor Systems Limited (CSL) has installed a tailor-made product handling system for film-wrapped individual and/or stacked pizza bases at a leading producer and distributor of fresh chilled foods.

The system transfers the pizzas between high and low care food quality areas, operating across three classifications of food hygiene and transport of goods from the first floor level down to the ground floor.

In the high risk area located on the first floor, conveyors interface with two film wrappers and transport a range of pizza bases in diameters from 8 – 14 inches via an overhead conveyor in a high care area into a low care ground floor Packing Hall.

CSL designed a special modular plastic matt declining conveyor, fitted with FDA approved high friction gripper inserts to prevent the film wrapped pizza bases slipping during their descent down from the first floor.

The conveyor was constructed in food quality stainless steel. A single frame carrying two individual lanes of modular matt conveyor provide maximum flexibility and enable each flow wrapping line to operate independently.



In the high care area, the modular plastic matt conveyor has a long overhead run, designed with high-level strengthened supports to ensure an open operating environment with minimum obstructions to workflow and access. Once wrapped the pizza bases are conveyed through a wall down to the 'low care' packaging hall. At floor level, the single frame conveyor splits to feed two, two tier packing stations.

Downstream of the packing stations, powered roller conveyors include integrated metal detectors, case weighers and case sealers.

T: +44 (0) 1283 552255

E: sales@conveyorsystemsLtd.co.uk

Spreading the message

Calder Foods has installed a Riggs Model 1000 depositor, two lid pressing units and two metering pumps, which are to be integrated into existing production lines at the company's premises in Cumbria.

The machines are being used for a wide range of mayonnaise-based sandwich fillings and salads and the upgrade of the equipment has helped Calder Foods to meet growing demands, increase productivity and improve efficiencies.

The Riggs Autopack machines give Calder Foods the capability to fast fill large particulates without damage, while effectively



handling the products to maintain high quality standards and minimises wastage, states Riggs Autopack.

The Model 1000 features fast changeover times, and by multi-cycling can easily deposit into different size tubs during the same batch run from 70g – 10kg buckets, states the company.

Replacing a manual process, the accurate metering pump transfers

mayonnaise from pallecon containers directly into product mixes.

T: + 44 (0) 1282 440040

E: riggs@autopack.co.uk

ready meals - pouches & stickpacks

Saucy alternatives advance with style

Pouches and stickpacks are seen as some of the most user friendly and sustainable packaging styles of today. This is being re-enforced by the ever expanding range of products for which they can be used thanks, in part, to advances in aseptic and materials technologies.

Since stickpacks were introduced to western markets from Japan, more than 20 years ago, they have become synonymous with powder and granulated products such as sugar, milk and coffee. Indeed you rarely see these products for single portion consumption in anything else today. Increasingly, however, there are more and more liquid foods being packed in sticks and this, says one of the pioneers of this format, is the future of 'stickpacking'.

The advantages of sticks are well established. They are easier to open than sachets, look more attractive, use up to 40 per cent less material, are easier to pack in cartons and take less space on pallets, in storage and on the shelf. But problems with technology has restricted its use for liquid forms until now.

Today aseptic machines are appearing (Hassia, Volpak and Unifill have them) and the breakthrough seems to be in the area of milk and other dairy products. Hassia is packing yoghurt drinks in sticks for a French manufacturer, while Unifill has packed soft cheese snacks. The first aseptic stick for milk was made in the UK 10 years ago and



produced a shelf life of four months. But it was probably ahead of its time and was not very successful but the dairy industry now seems ready to adopt the format.

Elsewhere the easy open, single dose design of a stick is now being applied to pharmaceutical products such as antacid preparations and headache powders. But with the availability of liquid machines, single doses of cough medicines and other remedies are being explored.

Pouches have come into their own with retortable qualities widening their use for soups, sauces and desserts. Initially pouches took the juices market by storm but with the Doypack's stand up design and stability, and the advances in filling technology markets are widening.

For instance, the petfood market is now dominated by the pouch. And with the advent of recloseable pouches and in-built pouring devices the pouch is ideal for soups and sauces, even those products with solids in suspension.

The lightweight pouch is also seen as 'greener' in some quarters than the equivalent can or 'bric' style carton. However some issues over recyclability of the materials remain but in terms of use of material and transportability it wins hands down.

Between them stickpacks and pouches seem set to conquer new markets, replacing more traditional packs where portioning and easy opening are key factors.



ready meals - pouches & stickpacks

Tasty pouch a hit at Asda

The new range of ready meals from Asda, launched in September under the 'Fresh Tastes' banner, is packed in clear, microwaveable, stand-up pouches produced by Schur Flexibles Europe. This range of 20 meals caters to the trend away from frozen or long-shelf-life ready meals towards short-shelf-life products. All the meat and vegetarian recipes are produced by Bakkavor's Hitchen Foods in Wigan and 10 seafood varieties produced by a seafood specialist.

Both production companies are using Schur®Star 2040-C equipment and pouches from Schur Flexibles Europe. This was the optimum system for automatic filling of sauce combined with manual filling of a wide variety of ingredients on the same machine, says the company. The flexibility and rapid changeover of the system facilitates production of multiple varieties on a daily basis. The machine also presents the pouches to operators fully opened, and keeps them open, for ease of filling.

The packaging is new for this type of product. The stand-up Doypack style pouch gives much more shelf impact than conventional ready meal trays, while the clear packs also give all-round visibility, claims Schur. Convenience is a main feature – the 'easy-tear' top allows consumers to tear open 2cm for venting, without the need for scissors. After microwaving and cooling, the top rips off, again without scissors, ready for dispensing.

This pack will make a significant contribution to Asda's declared aim to reduce overall packaging weight. The pouch is 60 per cent lighter than a typical combination of tray + lid + carton sleeve.

T: +44 (0) 151 522 0312

E: eha@schur.com



ready meals - pouches & stickpacks

Pouch filler cleans up...



House full

One of the UK's biggest suppliers of soups, sauces and recipe dishes to the food service and manufacturing industries Bar and Restaurant Foods, has purchased a volumetric depositor from Riggs Autopack which sits above a Rovema bag-making machine. The combination fills sauce sachets in a wide range of weights.

This latest installation gives Bar Foods a virtual full house of Riggs' depositors, says Bill Beaumont, operations manager at the company.

Last year Riggs supplied the company with two eight-head depositors for use with a Multivac thermoformer.

T: +44 (0) 1282 440040
E: riggs@autopack.co.uk

Thimonnier of Lyon, France, which specialises in the manufacture of filling and sealing equipment for the Doypack pouch has launched an updated and completely redesigned version of its TD range of filler/sealers for pre-made pouches. The company is represented in the UK and Ireland by F Jahn & Co.

The new THD800 is an automatic rotary indexing system, taking empty pouches from a magazine to different stations around the turret for opening, inflating, filling and sealing. The operating rate of the THD800 is up to 65 cycles/minute, with the output in terms of pouches/minute dependent on product and pouch size.

The machine combines simplicity of operation with a robust, compact design and ease of access to all areas for cleaning and maintenance, according to the manufacturer. The THD800 is constructed entirely in stainless steel for use in

the food industry to meet the sector's stringent hygiene practices.

Changeover times for different pouch sizes are quick, with the adjustment for pouch width being made by a handwheel, without the use of tools.



...and pouch handler stacks up

A recent installation by LAN Handling Systems for a major food manufacturer in Scandinavia, which makes prepared meals in thermo-formed pouches, takes the packs from the thermo-former conveyor and automatically loads them into special retort trays by means of a pick and place unit.

These trays are then stacked and transferred into the retorts for a pasteurisation process. The trays are then taken from the retorts, de-stacked

and the pouches automatically unloaded and conveyed to a packing area, where they are placed manually into plastic crates for storage prior to final packing in cartons. The system includes an automated stacking system for the plastic crates.

LAN equipment is represented in the UK and Ireland by F. Jahn & Co.

T: +44 (0) 20 8977 8822
E: sales@f-jahn.co.uk

ready meals - pouches & stickpacks

Triple stick solutions

Several companies represented by Springvale Equipment offer stickpack solutions.

A multi-lane stickpack machine, (4 to 6 lanes), is available from Boato Pack which allows sticks of different widths/lengths to be accommodated using minimal parts changes. Stick widths range from 17mm – 100mm.

The company now makes machines for a wide range of liquid products such as ketchup, mustard, mayonnaise and dressings.

Langenpac has developed an innovative style collation for stickpacks, providing the ability to



pack any number into a carton, and is not dependent on the count being a multiple of the number of lanes of the stickpack machine. Running successfully at a leading coffee producer, it can be applied to work with any multi-lane stick or sachet machine.

Unifill is now able to deliver single serve portions in the

Qwikpak soft flexible bottle. Available in soft or rigid format, with or without a spout or cap, the lightweight pack is aimed at 'on the go' markets.

T: +44 (0) 1420 542505

E: springvale@springequip.co.uk

Pouches and Doypacks get a head

Chesapeake Packaging Systems, part of the Chesapeake Corporation, has developed and installed a new automated machine system for applying a board header card to any style of pouch pack or Doypack, using adhesive technology. The header card enhances the pack's shelf presence and provides valuable space for product information, whilst allowing excellent product visibility, says the company.

The header card format is a flexible and cost effective alternative to direct printed packs with advantages such as short runs and promotions;

no printed pouch stock to manage; fast product change on line using a generic pouch material; highest quality graphics, including embossing and foiling; while the header card style, shape and material can be customised

Chesapeake was able to provide a solution by first sourcing and testing a hot-melt adhesive capable of performing at the required temperature levels. A gluing and mechanical handling solution was successfully developed.

T: +44 (0)1635 290514

E: sales.cps@chesapeakecorp.com

Nifty nozzles a cinch for liquids

New developments in nozzle design are enabling 'membrane' pouches, in which a 'two in one' pouch design can hold two products separately. It is suitable for liquids or a combination of liquid and dry products, according to Volpak.

The company has developed specific nozzles for a variety of applications, including sauces, soups and dressings. The pouch filling process maintains product integrity using a non-drip system which avoids splashes. Other nozzles can be used for particulates in suspension.

For foaming liquids the nozzle features the latest Volpak submerged filling technology which incorporated a suction system to prevent product dripping at the tip.

The company has also developed an aseptic filler to complement its standard range of hot and cold filling machines

The fillers can achieve speeds up to 15,000 pouches/hour, depending on the application.

T: +44 (0) 1420 593680

E: integrapak@

integrapak.co.uk

European Safety Standards - 20 years old and going strong



DOC MARTIN

Martin Keay
Ensure Consultancy Limited
T: +44 (0)20 8149 0325
E: martin.keay@en-sure.net

The process of writing European safety standards for packaging machinery has now been going on for some 20 years.

The technical committee which guides the work of writing these standards, CEN/TC 146, met for the first time in Milan in February 1989 and 20 years to the week CEN/TC 146 met again for its annual review of progress.

Some things have changed quite significantly in 20 years – for a start the English of all the delegates is now so good that there is no need for translators. The other marked change is that delegates now understand how to write standards and are thoroughly familiar with the Machinery Directive.

The tone of the discussions has also improved. In 1989 delegates were concerned about defending their national positions and to achieve its objectives, the UK used to field

a three man team from the British Soft Drinks Association, the Health and Safety Executive and the PPMA.

But today the national delegations are much smaller, partly due to cost but also because countries have learned that they can rely on one delegate to represent their views effectively and that the CEN process will eventually produce good quality standards.

Bureaucracy

But some things have not changed. The CEN bureaucracy is still impenetrable, standards still take much longer to write than even the greatest pessimists imagined and the UK delegate is still asked to translate 'Euro- English' into understandable English at every stage in the proceedings.

Work is nearly complete on EN 415-9 *Safety of packaging machines*, Part 9: *Noise*

measurement, which should simplify the process of noise measurement on individual packaging machines and packaging machine lines.

Work is also nearly finished on EN 415-10 *Safety of packaging machines*, Part 10: *General requirements*, which incorporates clauses used by EN 415 parts 5 to 8. Part 10 will also apply to packaging machines not covered by the other parts of EN 415.

The writing of part 10 represents something of a triumph for CEN/TC 146 delegates because work started on this project in 1989 but was abandoned in 1998 because delegates did not have the knowledge of packaging machinery nor the understanding of how to write safety standards to complete the task.

However the most urgent work for the committee is to revise two of the published standards EN 415-2 and EN 415-4 to not only improve them from a technical point of view but also to make sure that they reflect the essential health and safety requirements of the new

Machinery Directive 2006/42/EC.

The revision of the palletisers and depalletisers standard EN 415-4 is viewed as being particularly important by the Health and Safety Executive, not only because it excludes machines that use industrial robots, which now includes a high proportion of machines, but also because there have been **three deaths** in the UK involving this type of machinery in the past three years.

Reducing risk

CEN/TC 146 working group 3, led by Italy's senior delegate Paolo Capelli, is responsible for revising EN 415-4. The working group is paying particular attention to the standard's measures to reduce the risk of these machines being started accidentally while someone is still inside them.

Currently EN 415-4 recommends the use of presence sensing devices and trapped key interlocking devices to minimise this risk, but it is likely that safety key systems which are in widespread use in the UK will be added to this list.

And how long will you have to wait for these standards to be revised? CEN now has a strict three year rule for the development of standards and if this is exceeded the work item is cancelled. Work started on revising parts 2 and 4 in spring 2007 so the expectation is that they will be published in spring 2010. **But don't hold your breath!**

There are now eight published standards in the EN 415 Safety of packaging machinery series:

EN 415-1: 1999	<i>Safety of packaging machines</i>	Part 1: <i>Terminology and classification for packaging machines and associated equipment</i>
EN 415-2: 1999	<i>Safety of packaging machines</i>	Part 2: <i>Pre-formed rigid container packaging machines</i>
EN 415-3: 1999	<i>Safety of packaging machines</i>	Part 3: <i>Form, fill and seal machines</i>
EN 415-4: 1998	<i>Safety of packaging machines</i>	Part 4: <i>Palletizers and depalletizers</i>
EN 415-5: 2007	<i>Safety of packaging machines</i>	Part 5: <i>Wrapping machines</i>
EN 415-6: 2007	<i>Safety of packaging machines</i>	Part 6: <i>Pallet wrapping machines</i>
EN 415-7: 2007	<i>Safety of packaging machines</i>	Part 7: <i>Group and secondary packaging machines</i>
EN 415-8: 2007	<i>Safety of packaging machines</i>	Part 8: <i>Strapping machines</i>

ON THE SIDE

Jammy solution

Premier Labellers has recently won an order for the sixth Premier P200 labelling machine at Wilkin & Sons factory in Tiptree, Essex.

The latest machine is part of an on-going replacement programme of all of the company's wet-glue labelling machines.

It has achieved faster, cleaner production by eliminating the excessive clean down-time associated with wet-glue labellers, claims Premier.

Product changeover times have been minimised with the use of the Premier machine's product database which stores and recalls all label set-up information at the touch of a button.

T: +44 (0)1255 553822

E: sales@premierlabellers.co.uk

Marshalling the art

The Kendo (one line print) and Judo (two line print) hand label printers from Sato share a range of improved features including larger font sizes (5mm).

The Judo XL prints extra large, bold print, especially useful for sales promotions and product coding, in font heights up to 7.6mm. Label sizes are up to 12 x 26mm (Kendo) or 16 x 26mm (Judo). They can be used with all standard label styles – rectangular, wavy edged, punched and perforated. The new and more efficient feeding mechanism makes it quicker to load and change label reels, says Sato.

T: +44 (0)1255 240000

E: enquiries@sato-uk.com

Cott's get clever solution for restricted space

A purpose-built duplex print and apply labelling station from Logopak, which allows the output from a new twin-lane case-packer to be labelled in restricted space, has been installed by contract soft drinks filler Cott Beverages.

To suit factory layout, cases leaving the case-packer are immediately directed via two lanes around a 180° conveyor bend, leaving no line space available for pack turning and conventional labelling by floor-standing equipment.

Logopak's solution is based on a pair of 515F print & apply labelling machines, mounted on a gantry over the case-packer outfeed. Each pack is labelled on the front as it leaves the case-packer using specially designed carbon-fibre arms equipped with blow-on applicators, at speeds up to 80 cases/minute (40/lane).

"Front-of pack labelling, usually involves head-on physical contact with the pack



Cott Beverages has installed two purpose-built, gantry mounted Logopak print & apply machines

and imposes considerable mechanical strains on equipment," explains Logopak UK general manager Wilson Clark.

"However, carbon-fibre for the arm provides additional strength, while the blow-on label applicator avoids all but minimum contact with the pack. Carbon-fibre also makes the arms much lighter allowing them to be accelerated rapidly to

swing up and down to operate in the 400mm space between one case and the next."

Equipped with jumbo size reel holders for extended running periods, the two Logopak 515F machines are mounted on slides that allow them to be drawn back from the case-packer outfeed when label stock needs to be replenished.

T: + 44 (0) 1904 692333

E: salesonweb@logopak.net

Four heads are better than one

Sovereign Labelling Systems has developed a four head labelling system for cardboard sandwich packs.

The system is linked to a Trepko 412S sandwich machine and packs are fed in two lanes from the Trepko machine. The Sovereign unit then collates the packs into a single lane.

The four head all stainless Monarch labelling unit has two labellers on the top and two labellers on the base. It features Auto changeover of label reels.

Markem thermal transfer coders are fitted to the top

heads. The inline system features pack orientation between the base labellers and the top labellers ensuring that the required faces are presented for labelling.

Sovereign has also completed delivery of four c-wrap labelling systems to handle a range of square salad pots.

A shaped label is placed on the lid of the pot, down the side of the pot and wiped onto the base.

The system was designed for the customer's needs and features a split belt conveyor

and hand wheel adjustable side drives. The all stainless steel Monarch labelling head units are fitted with clear label optics and an anti-static unit for clear synthetic labels.

To ensure that labels are presented accurately before application a vacuum device holds the free end of the narrow edge leading label.

Machines operate in a harsh environment at speeds of up to 80 products/minute.

T: +44 (0) 1206 304182

E: sovereign@sovereignlabellingsystems.co.uk

IN BRIEF

Providing building blocks for machine builders

Connected Components, launched by Rockwell Automation, will benefit machine builders by combining a simple, yet powerful control core, with a full suite of associated components and a dedicated set of application development tools, says the company.

Steve Pethick, EMEA director of components and power control, said: "We recognise that machine builders are under pressure to add sophistication to their machines, while helping to reduce costs and shortening the time to market.

"Connected Components allows them to concentrate on machine design and performance rather than the necessary, but time consuming preparation work and structural details such as gathering documents and drawing diagrams."

Built around a core of MicroLogix PLC's, PowerFlex 4 class drives and the newly developed PanelView Component HMI, Connected Components includes Building Blocks to provide pre-written blocks of application code for the PLC; these can be modified to

help meet the precise needs of a given machine.

Additionally, claims Rockwell Automation, pre-written HMI programs make setting up the operator interface easier; and pre-configured drive parameter files take the strain out of implementing speed control tasks. The Building Blocks also help with product selection, panel layout and wiring diagrams, and with generating a bill of materials for the project, the company explains.

T: +44 (0) 870 242 5004
E: ukmarketing@ra.rockwell.com

Engineers can now adjust the required gas mixing ratios for MAP from their mobile phones thanks to Windows-based mobile phone software developed by **Witt Gas**.

The facility is available on its latest KM100-2MEM+ and KEM100-3MEM+ automated gas mixing system which can be used with up to three technical gases.

The gases are mixed using a motorised mixing valve, giving them an accurate mixing capability with adjustments in increments of 0.1 per cent, says the company.

T: +44 (0)1925 234466
E: carl.long@witt.co.uk

'Static' controller breaks new ground

An innovative technology that breaks new ground in the field of electrostatic control and helps customers significantly increase their process productivity and profitability is claimed by Meech International.

The new 977CM Pulsed DC controller is said to provide the first true closed loop static control system and incorporates a range of features to make it easier for the user to sustain optimum performance and

extend the cleaning interval.

David Rogers, international product manager, said: "Optimising static control makes it possible to improve finished product quality, whether this is on an unwind/rewind or slitting unit, a packaging line or printing press."

The new system can continuously monitor output from the ionising bars and automatically adjust input voltage to compensate for the

adverse effects of contamination, it is claimed.

If contamination exceeds preset levels further deterioration in bar performance will alert the operator, via local audible and visible warnings and remote alarm signals, says the company.

The 977CM Pulsed DC controller will be available from April 2009.

T: +44 (0)1993 706700
E: sales@meech.com

German automatic handling specialists Beewen has chosen **Lenze** MCS synchronous servo motors for customised telescopic conveyors in its storage and retrieval systems.

The conveyors are fitted with MCS motors up to 4kW in power and Lenze 9300 servo drive controllers are mounted on of the stacker crane.

T: + 44 (0)1234 321227
E: gspear@lenze.co.uk

Two new industrial PCs from **Lenze** feature customisable specifications and, it is claimed, that integration into factory systems is made easy by an extensive range of standard interfaces – 2 Ethernet and 8 USB.

This can be extended with up to 5 PCI and 1 PCI Express interfaces.

New storage technology is fitted with a fast 60 GByte SATA hard disk plus an optional Raid system, ensuring that they can handle even the most intensive computational tasks with ease, says Lenze.

T: + 44 (0)1234 321227
E: gspear@lenze.co.uk

Beam monitor takes curtain call

The limitations of standard 'muting' light curtain safety guards are claimed to be overcome by SICK's new C4000 light curtain.

The development is claimed to help meet the latest ISO 13849 and IEC 62061 requirements with reduced costs and improved reliability.

Suitable for applications such as palletisers and



de-palletisers, strapping machines, stretch wrappers and robotic and automated cells, the C4000's intelligent beam monitor accurately distinguishes between production objects and people eliminating the need for additional muting sensors and lamps.

T: + 44 (0)1727 831121
E: info@sick.co.uk

Framework for solar power

A state-of-the-art solar simulator facility developed by the Centre of Sustainable Technologies (CST) at the University of Ulster includes a mobile frame from Bosch Rexroth's sales partner Automation Manufacturing Systems (AMS).

The robust modular frame is built from standard aluminium extrusions, coupling products and accessories in the Rexroth mechanical elements range.

Dr Aggelos Zacharopoulos from the University of Ulster's Centre for Sustainable Technology said: "The most important benefits were undoubtedly the modularity and flexibility provided by the Rexroth system. It's very easy



to make modifications, and there is no mess or inconvenience involved. That certainly wouldn't have been true for a fabricated steel frame, where any but the most trivial modification would have involved welding."

The frame is mounted on castors to allow it to be moved easily, and the necessary vertical motion for the solar simulator is provided by two MKK ball-screw linear motion modules, one on each side of the frame. A small motor is fitted to drive the linear motion modules. Provision is made to tilt the simulator by means of a simple hand-wheel assembly.



Roy Mercer



Christian Traumann

Who's done what and gone where...

AEW Delford

Roy Mercer has taken over as managing director of AEW Delford in the UK. He succeeds Asgeir Asgeirsson, who will now devote his time to his position as Marel Food Systems' director of product development.

Roy was previously corporate sales and service management advisor working closely with Asgeir on the management of SSUs. He was previously general manager at Scanvaegt UK.

Multivac

Christian Traumann, managing director, Multivac, has been appointed president of interpack Processes and Packaging 2011. His deputies are Friedbert Klefenz, president, Bosch Packaging Technology, and Bernhard Borgardt, a representative of RPC Group.

Campden BRI

Dr Steven Walker has been appointed Director-General

Designate of Campden BRI. He will assume the role on the retirement of Professor Colin Dennis who was awarded a CBE in the New Year's Honours' list for services to the agri-food industry.

During his 22 years with Campden BRI the organisation has grown from a turnover of about £2.5m to more than £18m in 2008. Steven has worked as a microbiologist, director of research and latterly director of the Cereals and Cereals Processing Division.

Dr Caroline Walker has been appointed Director of Brewing at the Nutfield site by Campden BRI. The appointment follows the retirement of Mark Kierstan. Caroline joined BRI 10 years ago and was appointed a director in 2006.

• *Campden BRI was formed last year from the merger of the Campden & Chorleywood Food RA and Brewing Research International.*

////BOOKSHELF////

Campden BRI's strategic document *The scientific and technical needs of the agri-food and drink chain* is organised around six strategic themes: raw materials and ingredients; manufacturing and supply; product quality and innovation; food & drink and the consumer; food & drink safety; and knowledge management.

The document is aimed at fostering partnerships between industry, funding bodies, and science and technology providers. Activities will include R&D, scientific and technical services and knowledge transfer.

Free copies available from Carol Newman
E: pubs@campden.co.uk

Machinery safety training courses and the schedule for January to June 2009 are available from Pilz Automation Technology. Courses available are regulations and standards, and others that are specific to Pilz machinery safety products.
E: training@pilz.co.uk or visit www.pilz.co.uk

DATES FOR THE DIARY

11 - 15 May
Hispack 2009
Barcelona, Spain
www.hispack.com

21 May
Starpack Summit 2009
1 Carlton House Terrace,
London SW1
www.starpack.uk.com

16 - 19 June
Auspack
Sydney, Australia
www.auspack.com.au

17 - 20 June
ProPak Asia 2009
Bangkok, Thailand
www.propakasia.com

8 - 11 July
PackPlus 2009
New Delhi, India
www.packplus.in

15 - 17 July
Propack China
Shanghai, Cina
www.propakchina.com

10 September
**Machinery Risk Assessment
PPMA Seminar**
Marriott Hotel, Northampton
www.ppma.co.uk

29 September - 1 October
PPMA Show 2009

NEC, Birmingham
www.ppmashow.co.uk

