

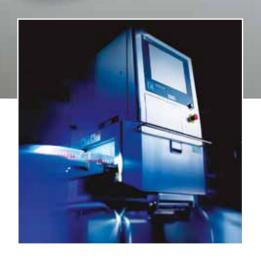






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Welcome

Welcome to this special edition of What's New in Food Technology & Manufacturing — our What's New in Packaging issue.

Packaging!

What would the food and beverages industries do without it? Packaging serves so many functions, protects the contents, maintains quality, extends shelf life, informs consumers about the product, makes items transportable...

But it also gets so much bad press. The mainstream media is so keen to blame industry for its wasteful, non-sustainable habits with packaging, but this criticism is only sometimes justified. Yes, on the whole, there is certainly room for improvement in the food and beverage industries' sustainability report cards. At the same time improvements are constant and hopefully accelerating.

However, no man or company is an island. To get the most from your investment in packaging and labelling technology and equipment you have to know what is out there and where you can get it.

Liaising with like-minded companies and individuals is a great way to know what is going on in any industry and there are two associations that are particularly pertinent to the packaging industry — one for individuals, the Australian Institute of Packaging, and another for companies, the Australian Packaging and Processing Machinery Association. If you are not already a member of one or both of these associations why not have a look at what they can offer?

Australian Packaging and Processing Machinery Association

The Australian Packaging and Processing Machinery Association (APPMA) is a voluntary non-profit organisation of Australian companies that manufacture and/or import packaging and processing machinery and allied ancillary components and provide related goods and services. Member companies are encouraged to work together to solve common problems, engage in joint activities and contribute to the association; all of which are designed to improve the knowledge of the industry among its many markets.

The APPMA's objective is to promote, integrate and foster participation and development at all levels of the packaging and processing machinery side of the industry. Members include manufacturers, distributors and importers of packaging and processing machinery who are suppliers to industries such as food, beverage, dairy, meat, poultry, seafood, confectionery, bakery and snacks and fresh produce.

The APPMA has links with like-minded associations all around the globe:

- China Food & Packaging Machinery Industry Association
- VDMA Food & Packaging Machinery Division
- Italian Industry of Automatic Packing and Packaging Machinery (UCIMA)
- Japan Packaging Institute (JPI)
- Japan Packaging Machinery Manufacturers Association (JPMMA)
- AMEC ENVASGRAF (Spain)
- Processing and Packaging Machinery Association (PPMA)
- Packaging Machinery Manufacturers Institute(PMMI) (USA) www.appma.com.au

Australian Institute of Packaging (AIP)

Founded in 1963, the Australian Institute of Packaging (AIP) provides a professional identity for individuals within the packaging industry. This professional body caters for packaging technologists, engineers, designers and any other individuals who are a part of the packaging industry in Australasia. The primary function of the institute is to offer education, training, and personal and professional development for individuals within the packaging industry; as well as cross-functional networking opportunities.

As the only association in Australia and New Zealand designed to recognise, educate, train and develop the individuals who make up the diverse packaging industry, the AIP is at the forefront of packaging training and education in Australasia.

www.aipack.com.au

What's New in Food Technology & Manufacturing

Hopefully this special issue, as well as our regular issues of What's New in Food Technology & Manufacturing, also provide lots of useful information to food and beverage companies.

Designed to coincide with the AIP's National Conference, this magazine highlights just some of the equipment and services available to packaging consumers in Australia and New Zealand.

Register now to attend the conference — more details are on pages 6-8.



READ

This issue is available to read and download at www.foodprocessing. com.au/magazine

Regards, Janette Woodhouse Editor



NEWS

Biological sensors could detect food spoilage

'Intelligent' packaging that can identify if a product is beginning to spoil is being developed by researchers from Clemson University.



The packages use biological sensors which detect the signals cells send to one another when they begin to break down. Known as quorum sensing, this communication between cells uses signalling molecules (autoinducers) which the sensors would identify in packaged foods.

"The idea behind the quorum sensing is that it makes use of a biological process that microorganisms normally do," said Kay Cooksey of the Clemson Food, Nutrition and Packaging Sciences department. "The idea is to take what the microorganisms do naturally, put that with being able to sense that they are starting to create a food spoilage situation and build that in to a sensor."

Cooksey and Claudia Ionita aim to use the US\$100,000 grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture to improve current food spoilage detection methods. They will create a biosensor array which monitors the development of microbes that can cause food spoilage and detect it as soon as it begins.

Colour-changing labels or materials are often used to detect food spoilage in meat, but Cooksey suggested they have a number of downfalls; they are not a direct indicator of spoilage and usually signal too late.

"By the time the colour change occurs, the human nose can just as easily detect the aroma of the volatiles," Cooksey said. "Results from the proposed research will serve as a foundation for biosensors and ultimately intelligent packaging to effectively monitor changes in food and, in turn, improve food quality and safety."

The researchers hope that sensors such as this one could also help reduce waste caused by food spoilage.

Heat and Control opens Spray Dynamics facility

Heat and Control has opened a new facility in Union, Missouri. Fabricating Spray Dynamics equipment the factory also includes a demonstration/trial centre that provides comprehensive testing capability across a wide range of Heat and Control products.

This site offers the ability to test an integrated line of processing, conveying, coating and packaging equipment. R&D teams can perform a test from start to finish or for an individual process as required with the direct assistance of Heat and Control expertise. The 15.24 x 22.86 m² room features an analysis and instrumentation space for product attribute testing during trials, a walk-in refrigerator and freezer and a temperature control system that can mock plant conditions.

Around 55 employees currently work at the location and the company can expand to more than 100 employees.

"Recognising opportunities to bring innovation to food processing gave Heat and Control its start, and nearly 70 years later, it is still at our core. We found the same spirit within the Spray Dynamics team and are excited to work together to integrate the latest technology into the next generation of food processing equipment," declared Heat and Control President Tony Caridis.

Spray Dynamics has brought engineering and manufacturing solutions for controlled application of liquid and dry ingredients to the Heat and Control catalogue. Spray Dynamics solutions includes applicators for oils, seasonings, vitamins, tack and release agents, chocolate, syrups and candy coatings,

antioxidants, polishing wax and anti-clumping agents. This line-up complements Heat and Control's industrial processing and packaging technologies for food and non-food industries.

GunnLab builds new laboratory

GunnLab has relocated to Bayside in Melbourne and is building a brand new laboratory.

GunnLab Plastics Testing Pty Ltd provides independent consultation services and testing of plastic packaging (eg, soup pouches, drink bottles, meat trays, film wraps, etc) for food producers, packaging manufacturers and suppliers. It tests, analyses and verifies the performance of packaging products.

Situated in Black Rock, Melbourne, this purpose-built lab is designed to improve its operations and increase accessibility to its customers.

While the company builds, it has moved to an interim site just a few doors up the road from the permanent location.

The company's services are continuing as normal during this period, but it advises customers to note the address and contact details below.

Postal address: PO Box 403, Black Rock, VIC 3193, Australia Street address: 78 Bluff Road, Black Rock, VIC 3193, Australia

Email: bruce@gunnlab.com. au website www.gunnlab.com





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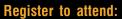




What: 2018 AIP National Conference

When: 2 and 3 May 2018

Where: Marriott Hotel, Surfers Paradise, Queensland







Australia's leading packaging conference

With 24 international speakers from 19 countries and 56 speakers spanning two days, the 2018 AIP National Conference is the place to be on the 2nd and 3rd of May.

esigned for packaging designers, technologists, engineers, sales and marketing people, the biennial Australian Institute of Packaging (AIP) National Conference is the largest packaging and processing conference of its kind in Australia and New Zealand. Run by industry for industry, the AIP National Conference has been leading the way in professional and personal development for decades and is a part of the annual Packaging & Processing Week.

In 2018 member countries from the World Packaging Organisation (WPO) will be heading to Australia to speak and participate in the week. The AIP is also hosting the prestigious international WorldStar Packaging Awards and the 2018 PIDA Awards as the gala dinner for the conference, a Women in Industry Breakfast Forum and five international editors from the International Packaging Press Organisation (IPPO) will be guest speakers during the two days. It is anticipated that over 30 countries will be heading to Australia, making it a truly international must-attend educational event.

A quick sample of just some of the speakers and topics:

- Nigel Garrard, Orora, A global view of packaging trends, issues & innovations
- Bettina Kurnik, Euromonitor, Global packaging sustainability: turning necessity into opportunity
- Andrew Manly, Active & Intelligent Packaging Association, Thinking smart: a new era in intelligent packaging
- Steven Chapman, Shine, Getting ready to shine: How an Australian startup created a new category of drinks (smart drinks) in their kitchen & got it into 1000 stores in 18 months
- Brooke Donnelly, Australian Packaging Covenant Organisation, Newly-released nation-wide packaging recycling label program
- Michael Lee, MLA Donor Company, What is new in the world of packaging: an Australian red meat industry view
- Antro Säilä, Finnish Packaging Association, The role of packaging in sustainability in Europe



- Karli Verghese, RMIT University, Food fight: Packaging's role in the national consortium on fighting food waste & fraud
- Shelley McMillan, Mintel, Major trends set to influence the food & drink sector worldwide in 2018, including implications for consumers, brands, & manufacturers

The International Packaging Press Organisation (IPPO) is contributing to the conference by sending out five editors and journalists from around the world, who cover packaging from various perspectives, to speak at the conference. The five peer-reviewed journalists include: Pat Reynolds, Packaging World (US), Steven Pacitti, Plastics in Packaging (UK), Lindy Hughson MAIP, PKN Packaging News + Food and Drink Business (ANZ), Des King, The Write Stuff (UK) and Andrew Manly, Active & Intelligent Packaging Association (UK).

2018 PIDA Awards and 2018 Worldstar Packaging Awards

The 2018 AIP National Conference dinner will be unlike any other as the AIP will be hosting the 2018 PIDA and World-Star Packaging Awards as the gala dinner for the evening, with all of the packaging world in attendance.

The Packaging & Processing Innovation & Design Awards (PIDAs) are designed to recognise companies and individuals who are making a significant difference in their field and are coordinated by the AIP, the APPMA and the Packaging Council of NZ. The PIDAs are the only awards program in ANZ developed to recognise materials/packaging and also machinery/equipment.

The PIDAs are the exclusive entry point for a number of the categories for the WorldStar Packaging Awards. As the AIP will be hosting the prestigious and international annual WorldStar Packaging Awards for the World Packaging Organisation alongside of the PIDAs, the 2018 event will be an international gala dinner with over 40 countries anticipated to attend. 2018 winners will be announced during the gala dinner on 2 May.

Women in industry breakfast

On 3 May, executive coach and author Belinda Brosnan will deliver the keynote session on personal leadership, followed by a panel discussion featuring influential and inspiring women working in the food, beverage and packaging industry. The panel will explore why diversity matters in the workplace, best practice approaches to building inclusive teams, obstacles to be overcome to increase gender balance in line management roles and how diversity can enable growth and value creation. The event will not only be an ideal networking opportunity, it will also be an insightful forum demonstrating how women in our industry navigate their roles and responsibilities and make a positive contribution to the workplace. You don't have to be a woman to attend — everyone is welcome!

Fundamentals in packaging technology interactive residential training

Needing to fill knowledge gaps in your packaging expertise? Need a broad introduction to packaging? This session is an exclusive once-in-a-lifetime opportunity to meet one of the US-based trainers from the Fundamentals of Packaging Technology Course, which is now available online throughout Australasia through the AIP. The FPT course is designed as bite-sized modules and is set up for the convenience of busy working professionals, and the training platform is functionally intuitive.

Jane Chase, CEO of the IoPP in the US, will be presenting three of the most popular modules during the day to help you better understand the FPT course and available units and lessons.

The session will include:

- •FPT03-1 Paper and paperboard materials
- •FPT03-03 Corrugated fibreboard
- •FPT07-01 Bottle design criteria

For further information on attending the 2018 AIP National Conference, visit www.aipack.com.au or contact the AIP on +61 7 3278 4490 or info@aipack.com.au.

Australian Institute of Packaging www.aipack.com.au



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Wraparound cartoner

PAKSMART's PB60 Wraparound Cartoner is suitable for food businesses that rely on quick and efficient ready meal packaging operations.

The equipment is designed to accommodate the sleeving or banding of ready meal trays, pots and tubs. The machine can produce product in two different styles, one being a tight-fitting tray and the other a sleeve tack glued to a tray. It is typically used for creating convenient meal packaging that only needs heating, easing consumption for users.

The product is made of stainless steel and

anodised aluminium components that provide resistance to corrosion. There is easy machine access for operators and maintenance personnel, with a hygienic debris fall-through design. It has 100 mm ground clearance and full cleaning access.

All components are sourced in Australia. By design, the equipment aims to maximise production rates and aid packaging processes for workers in the food and beverage industry.

Paksmart Machinery

www.paksmart.com.au



Self-adhesive labelling materials

UPM Raflatac supplies high-quality paper and film label stock for consumer product and industrial labelling.

At the 2018 AIP National Conference, the company will show-case its latest self-adhesive labelling materials for various end uses and sustainable labelling solutions. It invites attendees to meet its label experts at the conference to find solutions for their business needs.

UPM Raflatac Pty Ltd www.upmraflatac.com



E.coli and coliform testing

The 3M Petrifilm Rapid E.coli/Coliform Count Plate can be read after only 18 to 24 hours of incubation, providing next-day *E. coli* and coliform test results. The all-in-one chromogenic solution is easy to use, easy to read and easy to interpret.

Each plate is ready to use, with no time-consuming agar prep, no pH adjustment for matrices pH>5 and no special equipment such as UV light, for enumeration.

The test plate system is claimed to be reliable, with proven accuracy for a broad range of foods compared to Violet Red Bile Lactose Agar with MUG and TBX agar.

3M Food Safety

www.3m.com.au



Remote connectivity for continuous inkjet coder

insignia's Domino Cloud maximises uptime through remote connectivity for the Domino Ax-Series Continuous Inkjet Coders. This is achieved through access to real-time printer and ink performance reports to increase OEE, remote diagnostics, event alerts and email alerts.

A vast array of data on printer operation is collected in real time — from running performance to ink and make-up levels, to wear and tear on components. This data can be accessed through the Cloud dashboard where it can be viewed by the user at any time, regardless of their location. Additionally, this data incorporates OEE calculations and printer usage changes to provide insights for line improvement.

Faults can be diagnosed from a distance by the insignia Help-desk team and either fixed remotely or through an insignia service technician who can resolve the problem on-site.

Moreover, streams of information for OEE calculations and cost structures can be closely monitored to maximise efficiency, resulting in reduced downtime and increased production.

insignia Pty Ltd www.insignia.com.au







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Metallic BOPP film

Taghleef Industries' Titanium LTZ 62 is a metallic BOPP film for the injection-moulded label (IML) market.

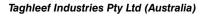
It delivers a mirror-like reflective appearance post moulding and offers a visual appeal for brand owners looking to differentiate their products with high-impact designs.

The product enables easy converting for both offset sheet feed and rotary presses, as

well as moulding operations designed for static charge label placement in-mould, which is claimed to be a hurdle for some competing products in the market.

ICE

The film can be used for a multitude of applications, including large industrial pails, nutraceutical products, stadium cups and foodstuffs.



www.ti-films.com



Reducing energy use in compressed air systems

The energy efficiency module MSE6-E2M from Festo makes energy saving in compressed air systems simple. This intelligent service unit measures, controls and monitors the consumption of compressed air in production and makes important data visible. It ensures compressed air is supplied according to needs and helps to detect and rectify leakages. As compressed air is only supplied when it is really needed, the energy efficiency module can save up to 20% of the current energy demand in machines.

During downtime, the compressed air supply to the machine is shut off, thus preventing any air escaping through leakages on the machine. The module also has an option whereby the compressed air supply can be switched on and off manually. In the case of particularly complex production processes, automatic standby detection can be deactivated so that plant operators can specify themselves via a PLC whether a machine is in production operation or not.

A further advantage of the energy efficiency module is active condition monitoring. This feature gives plant operators access to energy- and process-related data at all times. The

module can be integrated fully into a machine control system via Profibus and exchanges important data such as energy consumption and machine availability.

This module is suitable for new, energy-efficient machines and also, thanks to the simple connection of the sensors to a PLC, can also be used as an easy retrofit on older installations which now need to operate more energy efficiently.

Festo Pty Ltd www.festo.com.au



Electronic forms and workflow software

OFS-Flow software uses events that occur on and around the production environment to generate the variety of forms needed to record and quality check operations.

The software uses events, including those made available from the OFS-X Operational Excellence solution, to trigger electronic forms and workflows. Simple use cases include a shift handover form that appears on an OFS terminal at precisely the right time, or a quality form after 500 units (for example) have been made.



Being electronic, the workflow can be built into the form, so a quality engineer can be alerted (via SMS, email, etc) if a check is missed, should a time limit be reached without the form being completed, or during fails.

OFS-Flow 2.0 adds numerical validation and colour highlighting of fields, mainly used in quality forms: forms that are unique to individual SKUs; and forms which are manually or time-triggered and operate as free-standing forms which are independent of the specific activities associated with a particular production line, essentially making the paperless factory a reality. Examples include a paper form that a truck driver dropping off raw materials at the site needs to complete, a health and safety observation or an incident report.

OFS - Operations Feedback Systems

www.ofsystems.com





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Consumers confused over 'organic' and 'non-GM' food labels



esearchers found that many consumers have difficulty distinguishing the difference between foods labelled as "organic" and "non-genetically modified", with some viewing them as synonymous.

In June 2016, Congress approved the National Bioengineered Food Disclosure Standard, which gave companies two years to label genetically modified (GM) food using text, symbol or a quick response (QR) code. Therefore, consumers could either scan QR codes — a machine-readable optical label that displays information — or read plain text labels such as "contains genetically modified ingredients" to distinguish the contents of a product.

The study was conducted by Brandon McFadden, lead author and a UF/IFAS Assistant Professor of food and resource economics at the University of Florida, and Jayson Lusk, Purdue University agricultural economics Professor, and was published in the journal Applied Economics: Perspectives and Policy.

Since labels have a strong influence over consumer purchasing choices, McFadden and Lusk researched the best ways to communicate whether a food has GM ingredients. A national survey of 1132 respondents was carried out to establish how much consumers were willing to pay for food labelled as "USDA Organic" compared to "non-GMO Project Verified". Food labelled "USDA Organic" must not contain any GM material, whereas "Non-GMO Project" labels mean the food contains 0.9% or less GM characteristics.

The study looked specifically at how much consumers were willing to pay for a box of 12 granola bars and a pound of apples, identifying granola bars as a manufactured food commonly differentiated by its absence of GM material, while apples were defined as a fresh fruit that requires companies to tell if they contain GM material.

Results showed that consumers were willing to spend 35 cents more on granola bars labelled "non-GMO Project" than for the boxes that had the label "contains genetically engineered ingredients". With the "USDA Organic" label, consumers were willing to pay 9 cents more.

With apples, respondents were willing to pay 35 cents more for those labelled "non-GMO Project" and 40 cents more for those labelled "USDA Organic".

As a result, McFadden concluded that consumers cannot distinguish the definitions of the two food labels. He said: "For example, it's possible that a product labelled 'Non-GMO Project Verified' more clearly communicates the absence of GM ingredients than a product labelled 'USDA Organic'."

Researchers also looked at the impact of QR codes on foods, and how much consumers were willing to pay for food labelled as GM if that information came from a QR code. They found that consumers were willing to pay more for GM food if the information was provided by a QR code.

McFadden said that if all respondents scanned the QR code there would not be a significant difference in their willingness to pay, but the fact that there was a large difference led him to assume many respondents failed to scan it.

This raises a crucial issue concerning the use of QR codes. Not only are many consumers confused about the difference between plain text labels but many fail to take into account QR codes at all.

"However, it is important to remember that this study is really a snapshot, and it is possible that over time, consumers will become more familiar with QR codes and be more likely to scan them," stated McFadden.





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CONTACT

CBS foodtech 2/7 Jubilee Avenue Warriewood, NSW 2102 info@cbsfoodtech.com.au





Rotating ring wrapping machine

OMS's AVR900 is an automatic rotating ring wrapping machine suitable for all applications where high production rates are required, especially in the beverage sector. It can be easily inserted into packaging lines.

The rotating ring is designed without sliding electrical contacts. This is said to offer reduced maintenance, electrical consumption, overheating and risks of electric shock, consequently increasing the overall safety of the machine.

The model can be equipped with one or



At the end of the cycle the film is not heat-sealed (thus avoiding emission of harmful fumes); rather, it is put through a system where the queue of film is positioned under the previous wrap.

The prestretching carriage provides a stretching ratio of film up to 300%, without the use of additional motor or electrical contacts. This is said to result in more supportive packaging, load stability, reduced film consumption and less maintenance.

The wrapping machine can be equipped with a top-sheet device which protects the wrap from pallet dust and water.

There is also an accessory for companies wishing to put their brand on the packaged product; this option is integrated into a special reel holder unit where the roll of advertising band is positioned. The advertising band can be applied at any point of the packaging using a special ring vertical reading system, programmable according to the required height.

OMS Australasia Pty Ltd

www.omsaus.com.au





Jar-shaped pouches

Omniverse Foster Packaging Group's Jar Shaped Pouches allow products to stand out on the shelf. It enables users to save on the shipping and logistics costs associated with glass jars, as well as material costs.

Technology surrounding digital printing allows for the elimination of MOQ barriers, with no minimum order quantity for a fully printed pouch. For those wanting larger print quantities, the company offers gravure printed, shaped pouches. It also caters to clients want-

ing labels on their pouches with its off-the-shelf range of jar-shaped pouches.

Shaped pouches are suitable for displaying products in a range of industries and are said to create a point of difference on the shelf amongst competitor products.

Omniverse Foster Packaging

www.ovgroup.com.au



Cloud-based authentication platform

IDlocate's cloud-based platform enables consumers to verify authenticity, receive brand engagement content and check recall status every time they scan an individual product.

Conscious that other traceability solutions were not consumer-led and were cumbersome for shoppers to use, the IDlocate platform was created to put shoppers' needs front and centre.

The platform uses a product's source data to deliver engaging and relevant traceability and marketing content regarding authenticity and providence to drive consumer preference and trust.

Location-based product information is sent directly to global consumers anytime and anywhere in the world. By simply scanning the QR code from each pack, not only is the product verified as authentic (important for export markets), traceability and marketing content allow the shopper to experience virtual farm or factory tours; usage suggestions such as recipes and purchasing offers; and much more.

The system also includes a customised dashboard so distribution, marketing and sales teams can track each interaction and scan received right back to an individual product via GPS mapping and contact data.

Result Group www.resultgroup.com.au







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* World Packaging Organisation Worldstar Winner 2016



Contact Glenn Drake +61 418 564 208 glenn.drake@bonson-savpac.com





Automated slicing and packing

MULTIVAC has released a slicer line for the automated slicing and packing of products such as cheese, ham and other sliced products.

The line consists of an SL 800 slicer, an R 245

thermoforming packaging machine, a horizontal loader and a compact L 330 conveyor belt labeller. An H 130 handling module is used to load the packs into boxes.

The SL 800 slicer is equipped with fully automatic central loading and offers a high slicing speed of up to 800 slices/min. The product infeed is carried out in a highly controlled and compression-free process using servo-driven product infeed units. The portioning system on the machine can perform virtually any portioning task — from precise placement of slices in shingled portions and straight or offset stacks, through to the shingling of wafer-thin cut product, and right up to the folding of individual slices. The servo-driven portioning system, which can be raised and lowered, enables stacks up to 80 mm high to be produced, as well as tall shingled portions and large bulk packs of product.

The Horizontal Loader is designed to ensure that a wide range of sliced portions can be transferred efficiently from the slicer to the cavities of the thermoformed packs.

An L 330 conveyor belt labeller is used for labelling the packs of sliced products. This model is designed in the IP69K protection class and is designed to meet the highest hygiene requirements in food processing companies.

The coordinated line components can be controlled easily and with good process reliability via the open IPC control and user-friendly HMI 2.0 of the packaging machine.

MULTIVAC Australia Pty Ltd

www.multivac.com.au





Specialty polymer distribution

eXsource — Qenos's specialty distribution arm — offers a direct channel to a range of local and international specialty polymers. It supplies a wide range of polymers manufactured by Qenos, Bluestar, LyondellBasell and others. These polymers and additives are used in flexible packaging films, injection moulding, blowmoulding, hot-melt adhesive applications and polymer and wax modification.

The product range features a number of polymers that add functionality and enable light-weighting in flexible packaging films.

For the food market, it offers LyondellBasell Toppyl polymers for easy peel and reclosable packaging. Resealability offers improved portion control and product life after opening.

In industrial packaging, examples include LyondellBasell Catalloy polymers that provide flexibility, stretchability and toughness. These properties are suitable in applications such as stretch hood film where eXsource can offer film formulations for all pallet types. Catalloy can also be used to create a 'soft-touch' feel for rigid packaging to give products a premium feel.

Qenos Pty Ltd

www.qenos.com



Electric pizza oven

Moretti Forni has launched Neapolis, an electric oven able to reproduce the authentic Neapolitan pizza.

It was designed to reproduce the taste of pizza cooked in a wood-fired oven and to meet the demands of the fast-paced pizza industry, which is always looking for a fast service and low energy consumption.

The modern and slender design integrates with the frenetic style of modern catering, while the vintage touch brings users back to tradition.

The oven makes use of the company's technology, software and materials. It is able to reach a temperature of 510°C in a short time and to keep it uninterrupted.

Euroquip Food Service Equipment www.euroquip.com.au

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- Tested by professional chefs, bakers and commercial kitchens

For further information, pricing and a Product Data sheet contact our National Food Service Business Manager: Geoff Cooke on 0417 867 447 or contact him via email at: gcooke@peerlessfoods.com.au







Touchless turner

What used to take two machines can take one with the Intralox OMNI-DIRECTIONAL Turner. The company claims the turner aligns and turns in less space, at up to twice the previous throughput rate, compared to previous technology.

Capable of turning packages 90° to the left or right on demand, the turner allows for touchless, impact-free product turning and multiside product labelling. It has the ability to run large or heavy packages at high speeds,

with efficient throughput (up to 80 ppm). The compact size translates to up to 30% footprint savings, according to the company, and the combination of turning and aligning in one machine further reduces space requirements.

Intralox Australia Pty Ltd www.intralox.com



Tamper-proof flip-cap closure

Delivering product with extended shelf life, such as vitamins, powders, honey, dried fruit and nuts, in packaging that is tamper-proof but easy to open is a huge challenge. Ozipack's flip-cap closure with ring-peel induction seal liner has been designed specially to address these concerns.

The company has developed a 63 mm diameter closure with lift-force removal on the flip-cap designed for ease of opening while maintaining the integrity of the closing seal. The ring-peel induction seal liner provides a barrier to oxygen and moisture, keeping freshness of the product and tamper evidence for retailers and consumers.

It has been designed to fit a standard 63 mm container neck, with the height of the closure extended to cover the tamper bead on tamper-evident containers. The flip-cap has ribs around the outer closure wall for ease of automated cap application on existing packaging machinery. The induction seal is made using a laser-assisted tear line in direct alignment with the orifice opening.

On initial opening, consumers flip the lid and peel the seal liner using the ring pull. The flip cap offers effortless open and close, particularly for the elderly and physically impaired.

West Wadding

www.westwadding.com.au





Photoelectric sensors

SICK has streamlined its W16 and W26 photoelectric sensors by introducing new technologies.

The BluePilot operating and display concept is an assistance system that enables the sensors to be set up easily, accurately and quickly. Depending on the type of sensor, BluePilot sends a message confirming the sensing distance that has been selected and the reception signal. It also allows different operating modes to be chosen.

The patented TwinEye technology provides operational safety in the case of high-gloss, contrasting and uneven surfaces, using one sender and two receivers.

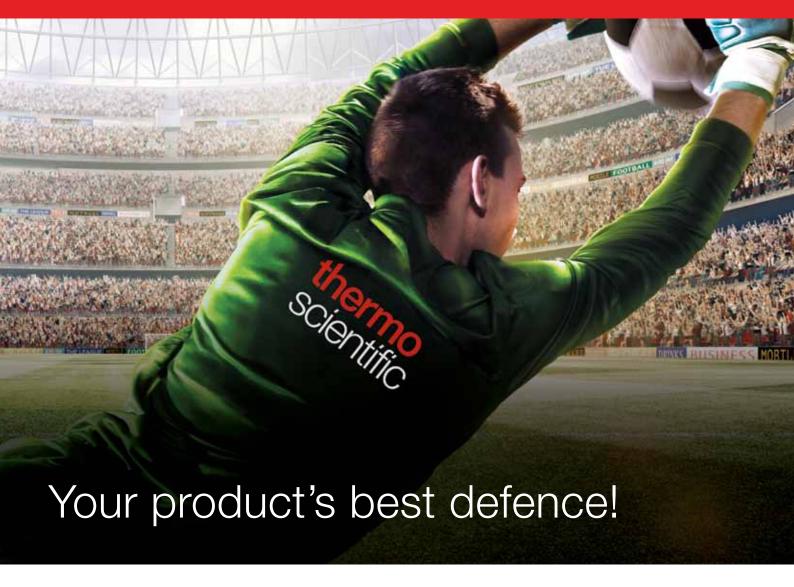
LineSpot technology is designed to ensure that perforated, textured and uneven objects, in particular, can be reliably detected. The light spot, which has been extended to form a line, allows optical information to be provided about irregularities, such as gaps or rough surfaces.

In the case of transparent objects, ClearSens technology gives perspective. If dirt produced during the production process reduces the amount of light emitted by the reflector, AutoAdapt technology compensates for this by adjusting the switching thresholds.

SICK Pty Ltd

www.sick.com.au

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Wheelie bin washers

Rhima wheelie bin washers are entirely constructed in stainless steel and are built to food-grade standards.

They can wash wheelie bins of the following sizes: 120, 240 and 480 L.

The units can be fitted with auto loading systems. The machines wash with hot 65–75°C detergent water followed by a fresh water final rinse, which can be cold or hot — preferably 82°C. A sanitiser can also be injected during the

final rinse.

The company offers a large range of bin washers for 200 and 600 L euro bins, big and mega boxes, custom bins, IBCs and other types of production vessels. Machines can be either single units or fully automatic systems with destacking and stacking systems.

Key features include: gearbox-driven wash arms that clean both internal and external parts of the bin, including the wheels; complete with safety cage; exhaust fan that starts up as door opens to remove possible infectious fumes; bin cleaning in a closed environment; no manual lifting; and gasketless door seals.

Rhima Australia Pty Ltd

www.rhima.com.au



Power pallet movers

Manual pallet jacks can make physical demands on operators in confined areas, particularly when heavy loads have to be pulled or pushed using muscle power alone. This often results in high rates of back-related injuries.

An effective way to reduce back injuries is to minimise or stop the use of manual hand pallet jacks when moving heavy loads. If moving loads greater than 500 kg, Mitsubishi's battery-powered version can be considered.

The Mitsubishi PREMIA PBP16-20N2 series European-built power pallet movers have been developed to perform in challenging environments and to offer a comprehensive solution to safe horizontal movement of pallets.

The pallet mover's maximum lifting height of 135 mm allows for easy handling on steep ramps and loading docks, even with damaged pallets. A sealed chassis offers protection against dirt, dust and other particles to reduce wear, while an oil-filled sealed transmission is designed to ensure reliable and quiet operation. The trucks also have a high-efficiency

electronic system that features waterproof components for maximum reliability.

Electric power pallet movers are said to be safer and more cost effective in the long run. With the right equipment specification and operator training, the electric power pallet movers reduce the risk of operator injury, reduce fatigue, improve operator performance and increase the efficiency of the operation.







Starch mogul

tna has upgraded its NID M3000 starch mogul to improve operational efficiencies and ensure the equipment adheres to the highest hygiene and safety standards.

Any internal parts of the feeder and stacker that are in regular contact with starch trays are manufactured in stainless steel for hygiene and consumer safety. The moguls were engineered to achieve full compliance with the EU's latest ATEX directive on the use of equipment in explosive environments. This has resulted in the incorporation of ATEX-certified electrical devices, temperature sensors and the repositioning and redesign of key mechanical components to mitigate the hazards associated with the handling of starch.

The tray turntable is equipped with a vibration mechanism to ensure the starch is fully discharged when trays are emptied, as well as a hopper with automatic starch gate and starch level sensors for advanced control over the tray-filling process. A mechanism for the automatic tray insert/eject station enables the insertion and removal of weight control trays without stopping the machine and can also be used to eject inadequate trays, delivering product quality assurance and a more continuous production process.

tna solutions Pty Ltd www.tnasolutions.com



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Celebrating the best, the most innovative, the most creative...

The Packaging & Processing Innovation and Design Awards (PIDA) recognise companies and individuals who are making a significant difference in their field. At the Australian Institute of Packaging Conference in May the winners of the 2018 PIDA Awards will be announced. Let's have a little look at last year's winners just to get in the mood.

2017 Design Innovation of the Year Award — Food Category

Materials & Packaging: Australian Wholefoods for Levodo Grain Thin Crackers



The Levodo clear plastic packaging is an innovative and unique design for the healthy biscuit category, which is traditionally dominated by cardboard boxes or plastic sleeves. The product is clearly visible at the point

of purchase and the carrier tray reduces product breakages during transportation (tall container). The design of the Levodo packaging is beneficial to product shelf life once the tamper-proof seal has been broken. The tube can be used as a storage container for the remaining crackers and by returning the packaging lid, the product will remain fresh without having to transfer contents to a separate storage unit, providing ease of use for consumers. As the pack stands up, it is also easier to find in the pantry and the branding is always clearly visible to the consumer and not destroyed when the pack is opened like traditional flow-wrapped products.

Materials & Packaging High Commendation: Nestlé Health Science Australia and qDesign Enterprises for Nestlé Health Science Resource ThickenUp Hydration range with Innovative Sipper Lid.

Machinery Equipment: Heat and Control for E-FLO

The E-FLO is an innovative machine designed to benefit the food processing industry, in particular potato product producers. It increases efficiency, reduces long-term costs and allows



producers to develop a healthier product for their customers by lowering the amount of acrylamide in potato products. The patented E-FLO uses Pulse Electric Field (PEF) processing, or electroporation, to perforate the cell walls of potatoes, creating micro holes that allow asparagine and reducing sugars to be washed out of the potato in a cold water wash. It provides numerous benefits and, in most cases, eliminates the need to blanch the product.

Machinery/Equipment High Commendation: Robotic Automation for the Multi-Product Robotic Packaging Solution.

2017 Design Innovation of the Year Award — Beverage Category

Materials & Packaging: CHEP Australia for CHEP Retail Display Pallets (RDP) and Beverage Trays (BT)



RDP and BT provide an alternative merchandising solution for the beverage category. A fully stocked RDP can hold 240 bottles of 1.25 L soft drink and replaces the 20 cardboard cartons that would normally be required to move them through the supply chain. The RDP can be filled at the manufacturer and then be moved right through to the shop floor and used to display the product as opposed to the

traditional shelving that would be used.

Machinery/Equipment: Intralox for ARB Technology

Intralox's Activated Roller Belt technology brings the benefits of modular plastic belting to complex package handling processes like sorting, merging and aligning. The result is an auto-



mated conveyance platform that enables critical improvements where it was previously cost-prohibitive or overly complex.

Stainless-Steel Angle Seat Valves



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The Stainless-Steel Angle Seat Valve VZXA provides maximum flexibility and simplifies maintenance for applications such as highly viscous media, liquids, gases and steam in factory and process automation. The carefully thought-out product architecture with its easy-to-clean design means valve bodies and actuators can be freely combined. The modular product concept makes it easier to modify and maintain systems without having to remove the entire valve. For more information visit www.festo.com/vzxa or alternatively call 1300 88 96 96 (Toll free).

www.festo.com

2017 Sustainable Packaging & Processing Award

Materials & Packaging – Transport: Woolpack Australia for Woolcool



Woolcool aims to reduce oil-based packaging use with an innovative product where the thermal insulation component is waste wool. Woolcool is made of 100% sheep's wool, a renewable resource that is biodegradable, sustainable, natural and compostable.

Materials & Packaging – Retail Primary Packaging: Pact Group for the rPET Moisturelock Meat Tray



Pact Group developed, designed and manufactured the rPET (Recycled Polyethylene Terephthalate) Moisturelock Tray that comprises 50% recycled material and is accepted by every kerbside recycling scheme. It is made from clear

plastic, not black, so it can be easily separated in the recycling centres. The real innovation, however, lies in the tray's ability to capture fluid in the base. The little 'dimples' in the bottom of the tray hold the fluid there even when tilted or turned upside down, meaning customers don't have to worry about any meat fluids sullying their shopping or having to remove and dispose of the unsightly blood soaked pad prior to preparing their meat.

Materials & Packaging – Retail Primary Packaging: Plantic Technologies for the PLANTIC R Packaging Material

Plantic Technologies PLANTIC R is a bio-based ultra-high barrier material that is renewably sourced, high clarity and certified. Thin layers of polyethylene terephthalate (PET) are adhered to a core layer of renewably sourced, ultra-high barrier PLANTIC



HP sheet. PLANTIC R is very versatile and suitable to most thermoforming and tray sealing applications.

Machinery/Equipment: Omni for the Omni Pallet Wrapping Solution

The Omni Stretch and Pallet Wrappers can reduce the amount of film used to wrap a pallet by up to 70%. Through cutting-edge resin advancements, Omni has developed high-performance films that are less than half the micron of conventional films with superior puncture resistance and load containment. Used in conjunction with the Omni Wrappers Power-Pre-stretch technology, the Omni Films have a stretch yield over 400%.

2017 Save Food Packaging & Processing Award

Fresh Technologies Ltd and Sealed Air Food Care for Fressure and Cryovac Freshness Plus

The combination of Fresh Technologies' Cold High Pressure

Processing (CHPP) and Cryovac Freshness Plus Active Barrier packaging has enabled Fresh Technologies to achieve a chilled shelf life of 90 days for its avocados, which is a 60-day extension over existing passive high-barrier packaging technology.



Processing Award High Commendation: Woolpack Australia for Woolcool.

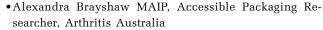
2017 Industry Packaging & Processing Professional of the Year Award

- Paul Haberland Dip.Pkg.Tech. FAIP, Packaging Manager, Nestlé Australia
- •Lester Nichol, Managing Director, Matthews Australasia

2017 APPMA Scholarship

• Michael Van Dord, Technical and Design Engineer, Caps and Closures (pictured)

2017 Young Packaging & Processing Professional of the Year Award



•Nina Cleeve-Edwards Dip.Pkg.Tech. FAIP CPP, Manager-Oceania Innovation Acceleration Team, Nestlé Australia

2017 Design Innovation of the Year Award — Health, Beauty & Wellness

Materials & Packaging: Nestlé Health Science Australia and qDesign Enterprises for Nestlé Health Science Resource ThickenUp Hydration range with Innovative Sipper Lid.



 ${\it Machinery/Equipment:}\ {\it HMPS}\ {\it for\ the\ HMPS6000}\ {\it End\ Load}\ {\it Cartoner}$



PERFECT YOUR PROCESS



Are your packaging artwork processes up to scratch?

When you consider that your artwork development and review process engages almost every function inside the company, not to mention an ever-increasing range of external stakeholders, it is likely there are problems or inefficiencies somewhere down the line.

There's a whole raft of improvements to the process that putting a digital packaging solution in can help with.

Want to learn more? Talk to Esko.





Demand charges based on kVA (or apparent power) are a more accurate measure of the impact a user's peak demand has on the respective network, relative to a tariff based on kW (or real power). This pricing change provides an opportunity for the user to take steps in improving the efficiency of electricity used on site and therefore reduce their bill. This can be done by improving the overall power quality.

Power factor

Apparent Power reflects the true amount of current flowing through the electrical infrastructure and determines the capacity of the lines, cables and transformers required to supply electricity to different end users. Apparent power is a vector representation of real power (kW) and apparent power (kVAR). As you improve your power factor, the angle within the triangle reduces. This means that the kVA (or apparent power) reduces resulting in lower demand charges, hence why it is now important to improve your power factor on site

Harmonics

The second major contributor to poor Power Quality is Harmonics. The adoption of non-linear load devices such as variable speed drives, LEDs, PV solar inverters and uninterruptable power supplies has introduced harmonic current 'pollution' in the form of damaging harmonic orders.

Some examples of linear systems include motors and heaters. Non-linear loads such electronic devices used to power systems are common in modern industry. These loads affect the true power factor of a site.

For example a Total Harmonic Distortion (THDi) current of approximately 60% effec-

tively reduces the true power factor by around 10–15%. Any system that reduces harmonic currents will improve the true power factor of a site.

Harmonic currents also have a negative impact on the true power factor at sites containing a high percentage of non-linear loads. Passive Harmonic filters will reduce harmonic currents, however only those which have been set manually. Active power filters dynamically mitigate harmonic orders from the 2nd (100 Hz) to the 50th (2500 Hz) simultaneously. This allows sites to achieve very low harmonic THDi% levels and to meet IEEE 519 regulations.

Capacitor banks are one way to target displacement power factor issues, however they do not remove harmful harmonic currents.

Some of the solutions available

Delta has a range of solutions, including:

PQC Modular APF – This solution is suitable for situations in which harmonic currents are present, along with a poor power factor. The PQC APF also has the ability to correct load balancing issues to ensure the highest power quality is present on site.

PQC Modular SVG – This solution is an alternative to the traditional capacitor banks. Its focus is to correct displacement power factor only. The benefit it has over capacitor banks is it has the ability to balance the loads. This ensures a high standard of power quality for sites which have minimal harmonic current concerns. The modular nature also ensures flexibility

APF2000 – This solution is suitable for many scenarios in the industrial sector, whether it be for harmonic currents and/or a poor power

factor and load balancing. This solution starts at 50 Amps all the way up to 300 Amps. Up to 6 units can be placed in parallel, which can provide up to a total of 1800 Amps.

SVG2000 – This solution is suitable for large heavy industrial sites with the primary issues being a poor power factor. This solution is sized in kVAR's and has two variants, the 300kVAR and the 500kVAR unit. Up to 6 units can be placed in parallel using the same CT's which allows up to 3000kVAR. The SVG2000 also corrects harmonics from the 2nd order to the 13th order and provides load balancing.

Confused? Help is available

Delta has aligned with skilled contractors and partners across Australia and New Zealand. These relationships allow the end user to gain expertise from very beginning discussion; all the way to post installation and commissioning of the power quality solution.

The detailed stages followed:

- Obtain the sites power quality data via a site audit performed by industry leading and recognised partners.
- 2. Provide a professional analysis of the data by a team of qualified engineers.
- 3. Propose a complete power quality solution to the user including various payment plan options.
- 4. Provide a complete professional installation and commissioning package for the client, ensuring a smooth process.
- Provide a professional post installation site audit to ensure all targets have been met for the user.

Delta Energy Systems www.delta-es.com.au



Semiautomatic palletiser



The Compact Modular Palletiser (CMP) from Fibre King is a semiautomatic palletiser developed for low- to mid-speed palletising applications. It features a small footprint (3.0 x 1.9 m) making it suitable for facilities with space limitations. The modular nature of the design allows it be purchased in semiautomatic trim but can be easily upgraded to fully automatic when required. There are two options over the standard machine to make the CMP fully automatic.

Option one is a dual-level infeed and outfeed conveyor. Pallets are loaded onto the low-level infeed conveyor, cycled through to the palletising station, then exit on the high-level outfeed conveyor. This option is suitable for higher speed applications to minimise the pallet changeover time.

Option two is a fully automatic pallet handling solution with automatic pallet dispenser and integrated pallet conveyors. This option is suitable for systems which require an integrated automatic stretch wrapper.

The palletiser uses a pick-and-place vacuum gripper controlled by a multiaxis servo system, and this allows precision placement of cases for a neat and uniform finished pallet.

Fibre King Pty Ltd www.fibreking.com

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More and more consumers are expressing distrust in the food industry comparing its actions and ethics with the tobacco industry.

Janette Woodhouse

he Center for Science in the Public Interest claims that "the public health community is concerned with both diet and tobacco use for a very good reason: over the course of a lifetime, poor diets and smoking both cause serious health problems, like diabetes, heart disease, and cancer. And the similarities between unhealthy food and tobacco go beyond the health effects. When it comes to corporate responsibility, executives at some of the nation's largest food and beverage companies seem to have learned a lot from their counterparts at Big Tobacco in aggressively promoting consumption and, in the same breath, blaming the consumer."

Sugary drinks are the single biggest source of calories in the Australian diet and prime culprits when it comes to diabetes, heart disease, obesity and other health problems. Yet the food industry goes to great lengths to muddy the waters and obscure the connections between soda and disease.

In 2016, the International Life Sciences Institute (ILSA) released a scientific review which stated that evidence in favour of guidelines recommending limits on added dietary sugar was not only "low quality", but didn't "meet criteria for trustworthy recommendations". It is statements like these that fuel public distrust in the food industry.

ILSI is a non-profit organisation that, according to its website, "advances and disseminates science for public benefit". It is funded by 400-plus corporate members including Coca-Cola, PepsiCo, Nestlé, Unilever, DuPont, Chr Hansen, Cargill and ADM.

According to its website, ILSI convenes "scientists from public, private and academic sectors to address scientific issues that are relevant to human health and environmental sustainability. The results of those discussions are disseminated through publication, capacity building education and stakeholder engagement.

"ILSI's mission is to improve public health and well-being by engaging academic, government, and industry scientists in a neutral forum to advance scientific understanding in the areas related to nutrition, food safety, risk assessment, and the environment."

It further identifies Four Global Issues: biotechnology, functional foods, obesity and risk assessment. ILSI conducts original research, publishes research and organises scientific conferences to achieve its mission.

However, there is controversy about whether ILSI is a science research organisation or a corporate lobbyist for the food industry. It seems that the latter may be more accurate as Mars has announced it will quit the industry-funded science group by the end of 2018 and will instead support research, regardless of results. Preparatory to this the company has published its science policy.

By stating publicly that the company will:

- publish research findings, regardless of how the outcome impacts them
- fully disclose any potential conflicts of interest
- maintain funding without linking it to specific research
- disclose sponsorship and support studies that can be freely published regardless of results

Mars is attempting to increase transparency and hence improve consumer trust in the food industry.

The pharmaceutical industry has had disclosure and conflicts of interest guidelines for many years and the wheels have not fallen off Big Pharma - so perhaps the food and beverage industry could follow Mars' lead and be honest with consumers too.



Rotary filling and sealing machine

The Jet Technologies FS 7000 Tronic is a food and beverage filling and sealing machine equipped with an automatic turntable. It is suitable for medium and high productions, as the machine can run three cups per cycle. The machine is designed to package liquid and doughy products such as yoghurt, cheese, butter, jam, sauces and soups.

The innovative design means the machine is compact and easy to access due to the transparent doors, which can be opened from all sides. This makes maintenance and cleaning operations easy and fast.

It is primarily constructed of stainless steel, which makes it suited to work in aggressive settings. A simple and quick change-over helps to reduce production downtime. On request it is possible to program the machine to dose three products with different density/viscosity, all at the same time.

The colour touch screen allows operators to set and control all functions quickly. The main working stations are mechanically driven. The Tronic dosing is electronically controlled, which offers high precision in filling.

A wide range of options are available to meet the user's needs, including a clean-in-place filling system, a laminar flow cap, a snap-on lid device, UV lamps, sterilisation by peroxide and more.

Jet Technologies

www.jet-technologies.com.au





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Bioplastic for FFS

NatureWorks' Ingeo is a naturally advanced plastic made from renewable resources.

The Ingeo-based transparent packaging is for form, fill and seal (FFS) dairy and dessert packaging. These FFS cups have high transparency, provide stiffness for break-apart applications and source less material than polystyrene (PS).

The Ingeo-based EarthFirst UL by Plastic Suppliers is an ultrathin, bio-based sealant web used for food packaging applications such as single-serve pillow pouches, coffee packs, gusseted stand-up pouches, frozen foods and multiwall bags. It forms seals at lower seal initiation temperature. It also has an effective aroma barrier and grease-resistant attributes.

NatureWorks

www.natureworksllc.com



Inkjet technology for regulatory compliance

Kodak's high-speed Stream Inkjet Technology can assist the packaging industry to add compliance data directly to the package or label as an integrated part of existing printing or packing workflows.

The product will help users manage excessive packaging and labelling inventory levels, meet regulatory compliance requirements and manage obsolescence and stock write-offs for packaging when origin statements and ingredients need to change. The technology can work at production speeds of over 150/min or 400+ packs/min.

Kodak's experience in delivering variable content at high resolution and high speed in the publishing and commercial print market is now available to packaging printers and packaging users.

Using the diverse range of S-Series print-head components, Kodak designs bespoke solutions for printing, packaging and labelling supply chain applications, enabling up-to-date delivery of compliance data to customers and consumers.

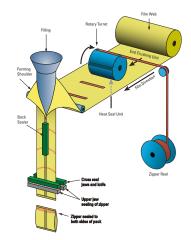
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www.kodak.com/AU/en/corp/default.htm



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Portion cup

Bonson-Savpac designed the 110 mL portion cup to satisfy 'hot fill and chill' products for both foodservice and retail applications. The portion cup includes an IML decoration option for on-shelf

Chocolate

retail presence, as well as incorporating design features to help foodservice users who may have a dexterity impairment handle and use the cup.

The sculptured sides of the cup make it easy to grip and use, with some added ribbing features to provide additional tactile feedback and strength.

Bonson-SavPac

www.bonson-savpac.co.nz



Electrical and mechanical contracting professionals

One of the critical elements to be competitive in both the food technology and packaging industries is to ensure the machinery and equipment is operating at peak efficiency and that downtime is minimised. EFI Group provide highly qualified professional electricians, electrical engineers and mechanical tradespeople who work as an integral part of the team to maximise the efficiency

The staff will detect issues that may affect operation and offer solutions such as technology or equipment which could provide ongoing improvements to operations.

Regardless of whether it is providing programmed maintenance, responding to a breakdown or installing equipment, the company's goals are to keep downtime to a minimum, improve operational efficiency and deliver savings.

EFI offers flexibility of staffing arrangements based on need, the guarantee of safe work practices, work undertaken to industry best practice, access to the latest technologies, and outcomes managed within established reporting and management systems.

The company also has experience in providing solutions to the packaging industry through the integration and maintenance of vision system technologies which amalgamate computer and camera technologies to automate quality assurance, product tracking and control processes on production lines. Some of these are standard requirements for production line efficiencies while others are bespoke solutions developed and tailored to address a specific issue.

EFi Group

www.efinow.com.au

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VFFS and HFFS machines

The TS Packaging Division of Robino & Galandrino SpA offers semiautomatic fillers that pack the product starting from preformed bags, both vertical form fill seal (VFFS) and horizontal form fill seal (HFFS). The fillers also have the facility to operate from reel stock for HFFS.

It provides complete lines for packaging the product or for the inline production of small batches of flat, stand-up or shaped pouches.

They are suitable in the following industries: food — dry and wet, high

care and consumer; beverage; cosmetics; chemical; pharmaceutical and para-pharmaceutical; medical and biomedical; horticulture; and pet food.

Equipment and packaging, such as the One Glass pack for wines in Australia, can be sourced through the company's Oceania and South East Asia partner, The Australian Pouch Company.



www.auspouch.com.au



Bandsaw technology

Bandsaws are an essential tool in the meat processing industry, but they also pose a high risk to the health and safety of operators. SCOTT, in collaboration with Meat & Livestock Australia, developed BladeStop.

The bandsaw technology is designed to reduce the risk of injuries

for employees in the meat processing sector, while decreasing lost production time and compensation claims from injuries. The technology has also improved overall sustainability of the meat processing industry.

Key features include: stops the blade in 0.009 s; fast reset/restart capability; no bending of the blade after an emergency stop; and multi-industry compatible — not limited to meat processing.

It is available worldwide and is designed to stop the meat saw blade when the unit senses that a person, glove or both have come in contact with the blade, reducing the

number of injuries.

Scott Automation & Robotics Pty Limited

www.scottautomation.com





Life cycle assessment tool

Owned and developed by Lifecycles, PIQET (Packaging Impact Quick Evaluation Tool) is an easyto-use tool for comparing the environmental impacts of packaging designs.

It takes packaging designers, marketing professionals, environmental managers and anyone who understands their packaging 30 min to complete an assessment.

The tool also includes streamlined product life cycle assessment to allow a fully integrated analysis of product with its packaging.

Using a life cycle assessment methodology, the tool assesses the environmental impacts and resource consumption profiles of different packaging options over the whole product life cycle.

It can be used to measure and improve packaging's environmental performance by: identifying hotspots throughout the supply chains; benchmarking design options and improvements; using multiple indicators and outputs for internal and external reporting; communicating environmental benefits; and building capacity in teams to integrate sustainability into the business

The product is customisable for repeat inputs such as transportation and materials, has multiuser management functionality and takes into account the impact of wasted product, highlighting the role of packaging in preventing product waste.

PIQET

www.piqet.com





Industrial gear unit

NORD Drivesystems' MAXXDRIVE industrial gear unit provides high output torques from 15,000 to 250,000 Nm and is suitable for applications such as agitators, conveyor belt drives, mixers, mills, drums or crushers.

The helical gear unit provides power from 1.5 to 4000 kW and is available in 11 sizes. These are supplied with various output shafts to ensure optimum connection for any application. In addition, they can also be supplied with double or triple input shafts, IEC input flanges for direct connection of electric motors, output flanges and a range of suitable torque arms.

The bevel unit can be used under extreme conditions as it can withstand fluctuating ambient conditions due to a tempera-

ture management system. Various cooling and heating options are available and for maximum flexibility, the gear units are fitted with easily accessible back stops for quick and simple changes to the direction of rotation. Taconite sealing on the input and output shafts offers a robust shield against dusty or wet environments and accessible greasing points ensure maintenance can be undertaken efficiently.

NORD DRIVESYSTEMS (Aust) Pty Ltd

www.nord.com





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Serial interface unit

Flexible and compatible with a range of manifolds, SMC's modular EX600 serial interface offers a full suite of diagnostics and programmable parameters to meet stringent requirements.

The product is available in digital input, digital output and analog input unit options, and available protocols

include PROFIBUS-DP, DeviceNet, CC-Link, Ethernet I/P and EtherCAT. A QuickConnect function has been introduced, which enables the machinery to power up efficiently and to join the EtherNet/IP network.

Allowing for ease of maintenance and reduced labour time, the unit offers self-diagnosis functions and is said to have reduced wiring. It can be paired with the com-

pany's SY series of valve manifolds and can achieve up to 200 million cycles when using a metal seal version.

SMC Australia | New Zealand www.smcworld.com



X-ray inspection machines

Peco InspX Corporation has released its SHIELD range of X-ray inspection machines.

Suitable for high-speed production lines, the technology is available in topdown, side-view and pipeline versions, which have



been designed to detect foreign materials in glass jars, metal cans, plastic containers, food trays, pouches/bags, cartons and bulk products. The machines offer image resolution, minimal false rejects, easy product set-up (less than 5 min), a tool-less conveyor belt change and the option of sanitary/hygiene models.

Features include: advanced software algorithms; an industrial-grade fanless PC; a category 4 safety system and HDRX high-resolution detectors; maximum uptime using dual power supplies and hard drives; a 17" monitor; remote diagnostics; phone and online support available 7/24/365; and high-speed reject systems.

HBM Packaging Technologies

www.hbm.com.au



Multihead weighers

The Ishida CCW-RV series of multihead weighers can be incorporated into new or existing packaging lines for products such as frozen French fries, snack foods, salads and chicken nuggets.

Fast, accurate, easy to use and environmentally friendly, the weighers build on the company's R-series weighers.

For sanitary applications, IP69K, IP66 and IP67 rated RV weighers have water-resistant construction. Sloped self-draining surfaces prevent bacteria traps and simplify sanitation. Models for dry, fresh and frozen foods feature automatic set-up, fast product delivery and wireless operation, making them operator-friendly and efficient.

The main body, components and seals have been redesigned for resistance to wear and to water ingress. IP69K water-proof specification and improved accessibility work together to reduce cleaning time, maximising weigher availability.

Control and monitoring performance are provided by enhanced graphics, optional USB camera, rapid auto set-up, master presets for fast changeover, and wireless access for remote control and monitoring.

The weighers have strong green credentials, with power management options and environmentally friendly materials throughout. These include a reduction in power consumption and compliance with the strictest industry standards (FDA, RoHS, IP69K waterproof machines).

It has controllable 'door' acceleration and deceleration profiles, resulting in effective hopper opening times, with reduced product sticking.

Filtering of the weigh signal from the load cell speeds up stabilisation. Because of the reduced settling time, more heads are available for inclusion in the combination calculation. This increases the range of weight options, improving accuracy.

Heat and Control Pty Ltd www.heatandcontrol.com



Magnetic mixer

SPX Flow has announced the release of a magnetic mixer, the MagMixer MBE, from its Lightnin brand. The mixer has been designed for good operation and regulatory compliance in life science applications.

The unit has no shaft penetrating the tank and so requires no mechanical seals, which re- duces the risk of leakage or microbial contamination. It provides high torque capacity with easy cleanability and, with bottom-mounted magnetic agitators, is suitable for low-viscosity blending, dissolving solids and solid suspension in sterile applications.

Engineered using computational fluid dynamics (CFD), it utilises Lightnin A281 three-blade hybrid axial/radial impellers in an open construction that maximises flow while facilitating easy cleaning and sterilisation (CIP and SIP). Alongside optimising product flow, the impellers contain strong magnets which produce high levels of torque capacity in a compact form.

The magnetic impeller removes the need for shaft and seals. Strong, oversized ceramic bearings reduce the risk of breakage, are product lubricated and produce good mixer stability and performance. The mixer further ensures low-maintenance overheads as the bearings can be easily replaced on-site and there is no need for a spare impeller. Magnetic lifting of the impeller reduces the load on the surface of the bearings and enables the mixer to continue to run until the mixing vessel is completely empty.

The product is controlled by a variable frequency drive (VFD). The series covers a wide power range from 0.09 to 7.5 kW (0.12 to 10 Hp), with operating speeds of between 200 and 1000 rpm. A range of options are available, including different bearings, O-rings, drive and body materials.

SPX Flow Inc

www.spxflow.com/au







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CEIA metal detectors pass the Zandvliet Vleeswaren

test

Quality and product innovation are two key pillars for Zandvliet Vleeswaren, a meat producer from the Dutch city of Delft. The family-owned business has a firm focus on the future — not only by responding to the latest developments, but also by continuously looking at what it does well and striving to do it even better. One example is its state-of-the-art metal detection system by the Italian supplier CEIA.

In addition to sliced cooked meats, Zandvliet Vleeswaren also produces meat-based appetisers and meal components such as chicken strips and ham cubes. The company's specialities are cooked sausage and grilled sausage. "Our company dates back to 1929. All the knowledge has been passed down over the years, resulting in balanced recipes and flavour formulations. We combine that with today's know-how to make tasty, traditional-style sausage products on an industrial scale," commented Ben Verhoork, one of the company's directors.

Entire process

Nowadays, the company has four different production plants, two of which work with pre-cooked semi-finished products only. "That was a conscious decision," said Verhoork. "We wanted to keep the raw meat products well away from the cooked ones for food safety reasons, so the semi-finished products are made in a different facility from where the slicing and packaging takes place. That gives us full control over the entire process from beginning to end, enabling us to keep a tighter grip on quality and to also work to customer-specific requirements — in terms of portion size, shelf life and sliceability, for example. As a result, we can meet our customers' needs very quickly."

Latest developments

One of the people helping Zandvliet Vleeswaren to stay on top of the very latest developments is the company's product developer, Robin Forman, who is responsible for new products in response to market demands. "One project we've recently completed was to reduce salt levels. We played a proactive role in establishing the new standards. We're now transitioning to the Beter Leven ('Better Life') quality mark for meat. That's not always easy in terms of the availability of raw materials, and it's a big step from the product perspective too." A unique collaborative project with an industrial designer even resulted in 3D-printed meat and lasered sausages. Verhoork added: "We're continuously looking at the market proactively. We don't always need to develop completely new products. Sometimes it's enough to make improvements and adjustments, such as to the size, shape or ingredients."

Even better

"We always want the very best," stated Verhoork firmly. The topic of food safety is no exception, so Forman investigated whether they could do any aspect of the metal detection activities even better. "Metal contamination is never a standalone incident," he said. "It's often caused by a combination of events — of a bolt breaking off, for example, allowing two metallic parts to wear as a result of friction. All metal detectors will find that bolt, but the slivers of metal that can continue to be produced for a long time afterwards are often much harder to detect."

He read up on the subject in trade journals and visited trade shows to find out more. The Italian supplier CEIA sparked his interest with its multispectrum technology. The family-owned company initially developed this technology to detect the



newest generation of land mines, which contain less metal. Whereas a regular metal detector works with just one frequency at a time, multispectrum technology utilises multiple frequencies simultaneously while maintaining maximum sensitivity. This makes it better at detecting smaller particles and at filtering out interference caused by things like minerals or moisture in the ground.

CEIA's benefits

"Multispectrum technology is perfect for the meat industry too, because meat is an organic material product with a high moisture content and varying temperature and composition," claimed sales engineer Tim Keizer from Heat and Control, a CEIA partner in the Netherlands. "This presents a challenge to standard metal detectors that have to be set to a lower level of sensitivity, but CEIA's technology manages to detect contaminants effortlessly." Forman can testify to this. He regularly tests the metal detector by adding tiny fragments of metal to a test batch of products, and the CEIA machine spots them all every single time.

"Not only that," added Forman, "we also have fewer false positives plus the very best fail-safe solution. The CEIA detector itself takes care of removing contaminated batches from the process. It maintains control with its integrated ejection system, even if the power supply is interrupted or the compressed air system is deactivated. Last but not least, the detector head is extremely waterproof and its higher protection class ratings (IP66 and IP69K) make it an improvement over other inspection equipment."

Feedback with solutions

Robin and his colleagues are happy with the CEIA solution and now work with single-frequency and multispectrum metal detectors at various stages of the process. If they have any ideas for improvements, they share them with Keizer, who values their input. "That way, at least we know what a customer really needs. They also appreciate the feedback at CEIA, where they are very R&D-driven. We have really short lines of communication with Italy." Summing up, Forman said: "By providing feedback and suggestions, we push each other to the next level and strive for the very best quality.

"We have far fewer false positives now." Reproduced with permission from Voedingsindustrie.

Heat and Control Pty Ltd www.heatandcontrol.com





Hygienic robot

The KUKA Agilus Hygienic Machine's (Agilus HM) design and materials allow it to be used in applications that involve direct contact with fresh food and even pharmaceutical substances.

It is complete with corrosion-resistant surfaces, lubricants that are compatible with food and stainless steel parts.

It is further designed so that deposits can't form on surfaces or screws, thus increasing food safety assurance.

The materials used can be cleaned with industry standard cleaning agents, while the important electrical connections come from underneath and so can be fully protected.

To ensure it has a long life, the IP67 rated product has inbuilt purge to maintain positive pressure, so the possibility of moisture getting in is reduced even further.

Wall, floor and ceiling mount are all possible, along with high repeatability, and the standard operating temperature down to zero makes the product suitable for meat and dairy

The machine is designed and built by KUKA in Germany and supported by KUKA

KUKA Robotics Australia Pty Ltd www.kuka.com.au





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Production-grade presses

Fuji Xerox Australia offers two production-grade presses that cater specifically to the demands for shorter run lengths, variable (versioned) print and in some cases, one-to-one marketing.

Complementing 'traditional' flexographic processes, digital platforms allow businesses to offer alternative high-value products which can increase speed to market and open more opportunities for piloting or market testing.

The Xerox iGen 5 is able to produce folding cartons using up to 530 GSM/610 μ m stocks, using a maximum sheet size of 660 x 364 mm. Suitable for short run jobs, versioning or testing packaging innovations, this press also replaces 90% of the Pantone chart with the ability to create on-brand colours, to meet user demand.

The Durst Tau 330 UV Inkjet Label Press is offered in Australia through exclusive distribution rights and offers cutting-edge label technology for a variety of industries and applications. With up to seven colours including

high opacity white, optional low-migration inks suitable for primary food and package printing, the press can be configured with a wide range of accessories. Users can create high-quality finished rolls up with 330 mm web widths ready for use on product, on time, on brand and on target.

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Servo motor

The Rockwell Automation Allen Bradley Kinetix VPC servo motor provides high continuous torque at high speeds over long periods of time.

Its interior permanent magnets allow for field weakening, which reduces electromagnetic resistance so a machine can carry loads continuously and well above motor-rated speeds. This allows manufacturers to keep web lines and winders running at high speeds and constant power.

A cooling fan and cooling fins on the motor provide increased torque and power output. In addition, encoder options with improved resolution and accuracy provide more precise and responsive control, which is especially valuable for the printing industry.

The product uses larger, more robust bearings to improve L10 bearing life by up to 60%, according to the company. An optional single cable for power and feedback helps reduce installation, set-up and maintenance time compared to dual-cable motors. In addition, a quick-change fan is field-replaceable, which helps maintain maximum machine uptime.

The motor line meets or exceeds IE4 efficiency ratings. An integrated foot-mount option for the motor provides an alternative to the traditional, flange-mount method. This is beneficial in many applications where foot mounting is preferred.

The product is programmed using the Software Studio 5000 design environment. This integrated design approach can help speed up machine deployments and reduce the likelihood of manual errors.

Rockwell Automation Australia

www.rockwellautomation.com.au

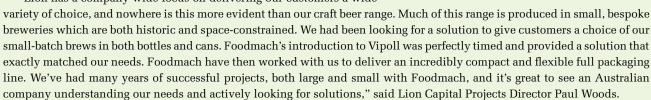
Fill glass, aluminium and PET on one line

Vipoll has released a filler that is able to run glass bottles, aluminium beverage cans and PET bottles through the one machine.

The Vipoll Visitron will be installed as part of a major line upgrade at one of Lion's iconic craft breweries. The filler is a monoblock rinser/filler/ capper/seamer and delivers Lion the flexibility to run both bottles and cans in less than half the footprint separate fillers would have required. The use of universal grippers allows for fast changeovers from cans to bottles (less than 30 min) and between bottle sizes as required.

The filler, supplied by Foodmach, will be one of the first of its type installed globally and will be in operation by the end of the year.

"Lion has a company-wide focus on delivering our customers a wide



"I have watched with keen interested Vipoll's developments over the last 7 years. They have excellent references in major beverage companies, but bringing a new supplier into the Australian market is always difficult. When we learned of the pending release of the Combifiller during Interpack in Dusseldorf, I knew it would be game-changing technology. We made high-level introductions between Lion and Vipoll at that show. A larger delegation from Lion then visited Drinktec in October and were able to see a Combifiller on display. We've worked with Lion and Vipoll since then to develop an integrated line solution that will produce a wide variety of packaging formats. Its ability to change over quickly from one run to the next suits true craft







Pallet wrapping

Stretch film was previously only available in 20 to 25 micron thickness with low stretch yield and strength. Omni has developed thinner, stronger and longer stretch films so users can wrap more pallets using less film.

The Omni Pallet Wrappers and Omni Stretch Wrap have been engineered together to minimise the required amount of stretch film to wrap a pallet while maintaining optimum load containment.

The pallet wrapper's power pre-stretch technology can increase the yield of stretch film to 400%, the company claims. This means a 2000 m roll of stretch film can be increased to over 8000 m in length. This is equivalent to 6 rolls of conventional stretch film.

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Turnkey vibratory motion blending system

The roflo 3 turnkey vibratory motion blending system by tna combines speed, continuous vertical motion and mass flow technology to deliver blend accuracy, precise recipe control and reduced ingredient costs. Suitable for both dry and wet environments, the system can blend a wide range of products, including baked and fried snacks, nuts and dried fruits, pet food, pasta, cereals and gummies, but is also suitable to mix fresh and frozen products like salads or frozen vegetables.

Incorporating the company's weighing technology with an integrated load cell, the product ensures that each ingredient is measured accurately, delivering system precision and control over both recipe and costs. Each integrated ingredient input module (IIM) features a compact design, comprising an infeed conveyor with hopper, control conveyor and weigh conveyor, offering some of the smallest factory footprints.

The system's hygienic, washdown design with stainless steel construction, no wearing parts and a mobile hopper facilitates cleaning, reduces maintenance and ensures equipment reliability. In addition, it operates on natural frequency, requiring a minimal amount of energy for a more sustainable production process.

The system is suitable for a variety of infeed methods, including manual or bulk or directly connected to the processing line. Output can be fed onto a variety of distribution systems, including the company's vibratory, horizontal or belt conveyors.

tna solutions Pty Ltd

www.tnasolutions.com



Insulated packaging for temperaturesensitive goods

Woolcool is an environmentally responsible insulated packaging product. Made of 100% sheep's wool, a renewable resource that is biodegradable, sustainable and compostable, it can be used for transporting temperature-sensitive goods such as food, beverages, veterinary and human pharmaceuticals.

It comes flat-packed and reduces damaged goods due to the cushioning effect during transport.

The product keeps chilled items at the critical 5°C or lower for more than 24 h. Fewer ice packs are necessary, according to the manufacturer, making smaller deliveries more feasible and reducing the weight of transport.

The wool and the food-grade film in the product reduce condensation and remove humidity, preventing spoilage and maintaining the integrity of cardboard cartons.

The company offers a bespoke, customised 'fit for purpose' solution. Users have the

flexibility to use smaller cartons for transport by packing more product into the boxes with less wasted air space. More cartons can thus be fitted on to trucks.

The company offers a customer recycling program.

WoolCool

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Permanent-magnet synchronous motors

NORD DRIVESYSTEMS' permanent-magnet synchronous motors without cooling fins achieve level IE4/super premium efficiency. This is suitable for the food, beverage and pharmaceutical industries, and other hygienically demanding applications. The efficient smooth-surface motors are suitable for use in dry areas as well as in applications requiring frequent



cleaning. As they generate very little excess heat, they need no fans and therefore do not contribute to the spreading of germs.

The synchronous motors operate more efficiently than induction motors, specifically in the partial load range. This results in lower cost for energy consumption and lower TCO. The motors feature a particularly high power density and a long product life. Frequency inverters can be mounted directly onto the motor or near the motor for flexibility.

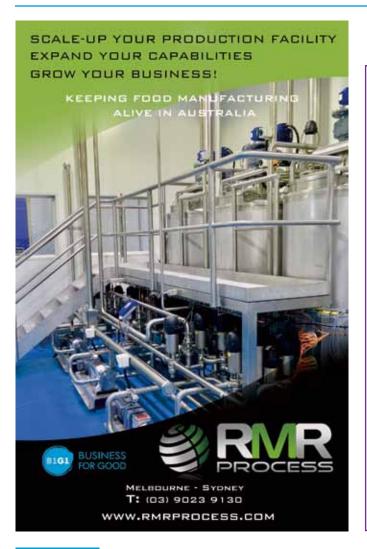
Three motor sizes (80, 90, 100) with power ratings from 0.75 to 2.2 kW are available. They complement the existing smooth-surface

induction motor range, which already covers outputs from 0.37 to 1.1 kW. The motors can be supplied with a brake.

For washdown-enabled inverter-controlled drive systems with an IP66/IP69K protection rating, the company can draw on four different suitable gearbox series. Washdown drive configurations all feature die-cast aluminium housings with smooth surfaces, designed so that cleaning fluids and foams easily run off. For extra corrosion protection, they can be fitted with the nsd tupH Sealed Surface Conversion System, which is approved for food and drink applications in accordance with FDA Title 21 CFR 175.300.

NORD DRIVESYSTEMS (Aust) Pty Ltd

www.nord.com





Digital packaging, printing and embellishment equipment

Konica Minolta has recently branched out into the manufacturing of short-run digital packaging, printing and embellishment equipment. Using a mix of toner, inkjet and foiling technologies, the company provides digital printing and embellishment equipment for roll-fed label and sheet-fed folding carton applications. Products include the Accuriojet KM-1 sheet-fed inkjet printing press and the MGI range of spot varnish and spot-foiling products.

The latest development is the AccurioLabel 190 digital label press, which was launched in late 2017.





Overprinting system

AstroNova Company TrojanLabel has released the Trojan T3-OP overprinting system. The system enables high-quality, 4-colour printing directly onto materials which have an absorbent surface or an ink-receptive surface such as cardboard, postcards, boxes, paper bags, wooden planks or thicker objects like blister envelopes or folded boxes ready for shipment.

With a print width of up to 223 mm and length from 15 to 1500 mm, the system provides print resolution of up to 1600 dpi.

It runs at a print speed of up to 300 mm/s and automatically adjusts for variances in timing and spacing when fed manually. With the T3-OP, it is easy to switch between substrates without making equipment adjustments. Designed for high production, it allows users to generate large runs in a short period of time.

The TrojanControl touch screen is complete with a job library and has a cost calculator making it easy to review operating costs.

The system is suitable for print shops, manufacturers, contract packaging solutions and secondary packaging.

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Inspection reporting

The AutoCoding Inspection Reporting product, available from Inspection Systems, is designed to monitor the performance of multiple checkweighers, metal detectors and X-ray equipment, irrespective of brand.



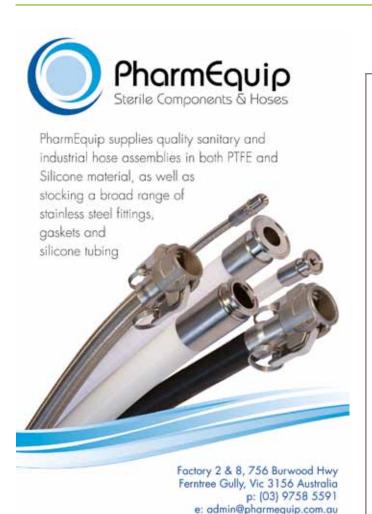
It supports all brands of inspection equipment, including the full range of Loma units. It provides access to real-time statistics allowing efficiencies to be identified and addressed proactively rather than waiting for historical data. Information relating to contaminant detection rates, weight and overfill can be collated quickly and corrective action taken, as required. Factory managers have instant access to machine status, with the ability to drill down to specific devices to obtain a real-time snapshot of rejects, weight and giveaway. Production processes can be adjusted throughout the production run to ensure product giveaway is kept to a minimum and weight targets are consistently achieved.

Data is provided in a user-friendly graphical format for quick and easy trend analysis. The modern, easy-to-navigate user interface gives access to straightforward menus enabling users to switch easily between devices, products and batches gaining an instant overview on rejects, metal count, mean weight, giveaway and pack rate. The reports can be configured according to specific user preferences and can be accessed via any network-connected device.

The flexibility of the reporting module means it can be used on its own or added to an existing AutoCoding installation.

AutoCoding Systems Pty Ltd

www.autocodingsystems.com





Bioplastics coffee packaging

Jet Technologies has launched high-volume bioplastics coffee packaging that is fully biodegradable.

It has the ability to maintain packaging strength and the integrity and freshness of the coffee product it contains. It has a strong laminate lining to withstand the packing production process, as well as the logistics of handling and travel.

It comes with a biodegradable barrier that is fully recyclable and breaks down over time naturally. This laminate is only compatible with certain form fill seal packing machinery.

Jet Technologies

www.jet-technologies.com.au



www.sterileprocesscomponents.com



Machine automation controller

Omron's NX1P machine automation controller is equipped with technology to meet the demand for efficient production of high-quality products in small to midsize production machines.

Based on Omron's Sysmac (System for Machine Automation Control) platform, the NX1P machine controller features advanced motion control, with built-in EtherNet/IP and EtherCAT ports. With an EtherCat real-time field network, users can connect up to eight servos, I/O devices, vision systems and other devices using a single cable, thus reducing wiring work, while the EtherNet/IP port is utilised to share data with a host PC, other controllers or the internet. The IO-Link master unit also makes monitoring machine information possible.

NX1P increases machine speed and precision by controlling up to four synchronised axes, giving functionality like electronic gear/cam and linear/circular interpolation. It is battery-free to reduce machine maintenance and features an SD memory card slot to restore, back up and verify data in the

controller. Now with one or two built-in option boards, there is no need to increase the size of the control panel for adding serial and analog communication.

These features, together with a fast execution time of 3.3 ns, make the NX1P an easy-to-use, high-performance compact controller.

Omron Electronics Pty Ltd

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TrojanLabe

Ideal for manufacturers, contract & secondary packaging

Visit here for more info: https://www.youtube.com/watch?v=3cMGUa7NIi4









Compact labeller

The KHS Group's Innoket Roland 40 is a compact labeller with a capacity of 2500 to 25,000 containers/h. It can be fitted with various labelling stations and is easy to use.

The machine is specially geared towards lines with a low output. During development particular attention was paid to simple operation and a high degree of economy. The table machine is for craft breweries and companies in the food sector, such as manufacturers of canned food, sauces or dressings.

In its standard version, the labeller comes with two cold glue stations. This allows shoulder and neck labels to be applied at two levels by the first station, for instance, with the second station affixing back labels to the bottles. Alternatively, self-adhesive stations, a combination of cold glue and self-adhesive technology and hot melt labelling processes can be used.

Inside are countless components taken from the Innoket Neo labelling machine, including the carousel, infeed and discharge stars, folding doors, installation and format parts and guides and, on the cold glue station, the gripper cylinder and label magazine. The Innoket Neo servo feed screw has also been applied and integrated, permitting gentle bottle stops.

The company also provides opportunities for extension to cater for individual labelling tasks.

KHS Pacific Pty Ltd

www.khs.com



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A solution for all budgets



Linear weighers

ERC Packaging has introduced a line of M2WLP series linear weighers, available in single-head to four-head configurations.

The units can be used as desktop weighers or supplied with an optional, mobile, free-standing support frame. All stainless steel construction ensures food grade requirements are met.

For ease of cleaning and product change they have a quick disassembly of the storage hopper, vibratory tray, weigh hopper and discharge chute. These four items are all the points of contact for the product and can be removed for cleaning in less than 2 min without the use of any tools.

The weighers offer easy-to-use colour HMI with weights shown in grams to 1 decimal place. Up to 10 product parameter presets can be stored. The screen can be mounted on the front or the side of the machines.

The weighers operate from a standard 10 A power outlet and require no air.

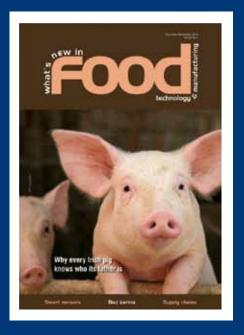
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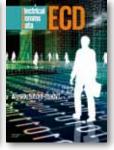






















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Flow switch

The FLT93 Flow Switch from Fluid Components International (FCI) provides an early warning alert to the potential of dry running conditions, cavitation and other pump issues that can lead to emergency shutdowns, service interruptions and unplanned maintenance.

The flow switch monitors the flow and temperature of liquids, gases, slurries and more. It is suitable for pump wet/dry detection where sudden, unexpected reductions in media flow rates can leave pumps vulnerable to overheating conditions that shut down process lines



and require troubleshooting, fixes and more.

With its no-moving-parts design and dual-alarm capability, the flow switch offers robust pump protection. With Alarm 1, the switch will detect a low flow situation anywhere between 0.003 to 0.9 MPS. This low flow alarm can be regarded as a pre-warning signal for the control system or operator who can then decide to keep the pump running or to shut it down.

If an Alarm 2 occurs because the feed line to the pump is running dry, this condition would be an emergency signal to shut down the pump immediately because the bearings now see gas instead of a liquid as a heat transfer media. In such situations, the temperature of the bearings may rise very fast. Using a flow switch prevents permanent damage to the pump's bearings that will require an overhaul of the pump before more damage occurs.

The dual-function instrument indicates both flow and temperature and/or level sensing in a single device. Dual 6 A relay outputs are assignable to flow, level or temperature. The switch can be specified in either insertion or inline styles for pipe or tube installation.

The rugged switch is hydrostatically proof pressure tested to 240 bar (g) at 21°C. Derated with temperature, the maximum operation service recommended is 162 bar (g) at 260°C. Higher ratings are available with special construction and test certification. Agency approvals include FM, ATEX, CSA, CRN and CE.

The flow switches are suitable for many demanding and hazardous process industries. They are used extensively with or without SIL2 certification in applications including food/beverage, mining/milling, pulp/paper, pharmaceutical, water/wastewater treatment and more.

AMS Instrumentation & Calibration Pty Ltd

www.ams-ic.com.au



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