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Food processing s.r.l.

*The passion
that drives to Excellence*



*Single head aseptic filler for small bags
without spout - Mod. AFFUS Calipso
Patented system*



*Double head aseptic filler for palletized bags in drums
220 lt and bag in bin 1000 - 1500 lt with integrated
automatic loading system for 220 - 20 - 10 - 5 lt web bags
Mod. WEBONE - Patent pending*

VISIT US HALL 4.2 AISLE D-030 E-039

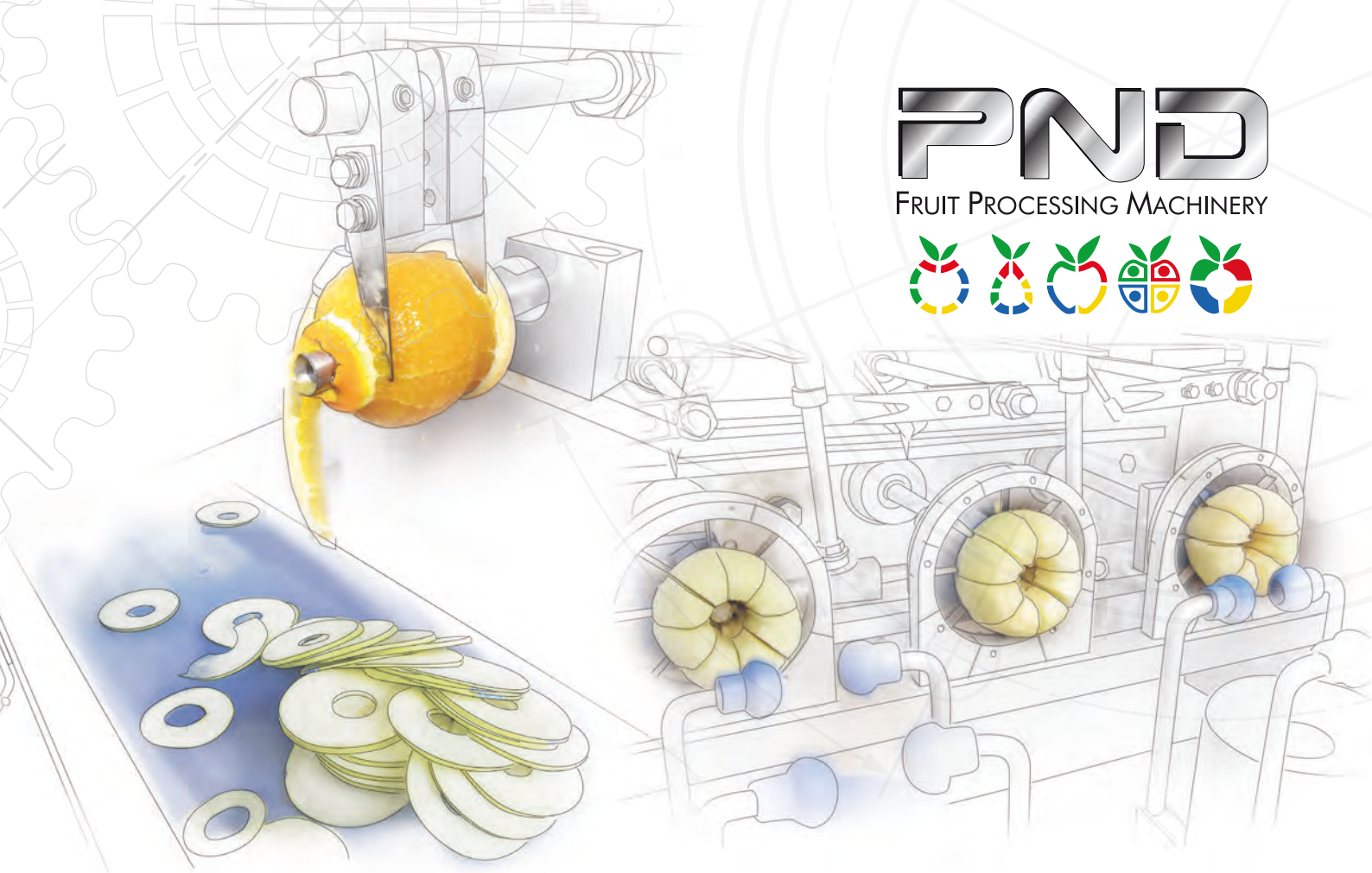
NAVATTA GROUP FOOD PROCESSING Srl

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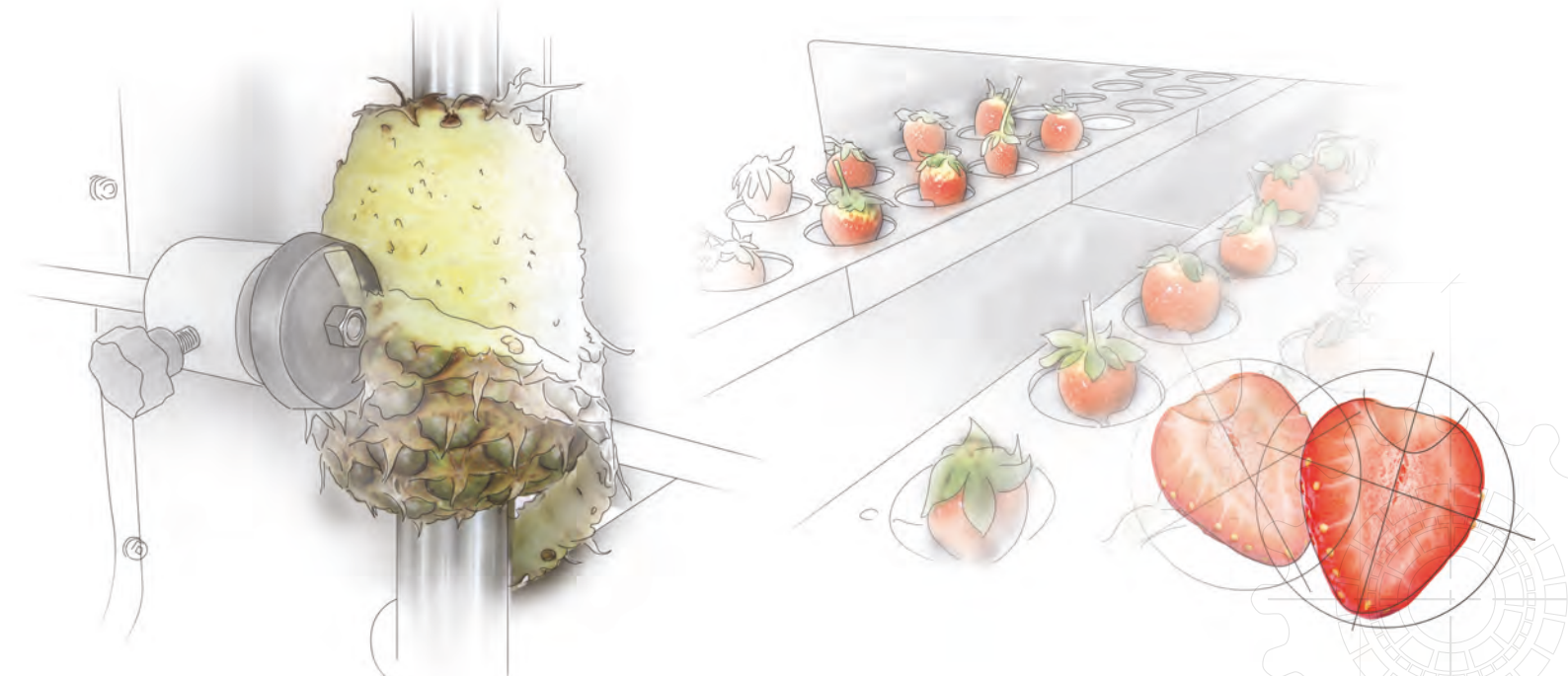


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G R O U P



OMIP, SINCE 1971, EXCELLENCE OF MADE IN ITALY

“Its passion at your service in fruit processing”

The O.M.I.P. SRL Company, established since 1971, is specialized in the manufacturing of machines for fruit processing. Relentless research, development and innovation have allowed OMIP to introduce, on the world market, the most modern technologies in the sector of fruit pitters and hence obtaining results that go beyond imagination.

OMIP machines boast of combined characteristics including strength, reliability, ease of use and low maintenance cost.

In fact, the name OMIP is synonymous with quality and the excellence of Made in Italy.

The **K8/16 Pitter** is a stable machine that is manufactured entirely using stainless steel.

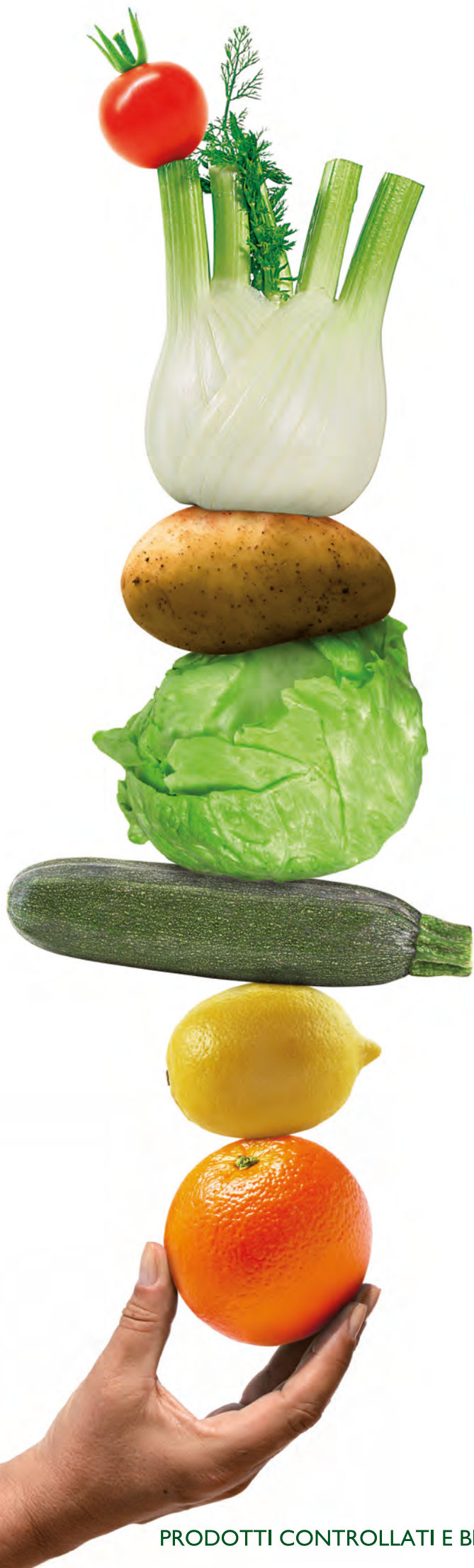
Its innovated and advanced electronic components (for operating and monitoring), make this machine simple and relatively economical in its sector in terms of maintenance.

Thanks to its new and more efficient cutting group, the machine pits

Continued on page 15



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EXCELLENT CONTRAST INK IS HIGHLY VERSATILE

Linx Printing Technologies is launching a new opaque yellow pigmented ink that delivers excellent contrast on both light and dark substrates to ensure effective code visibility across a wide range of food packaging applications. In addition, the new Linx Yellow pigmented ink 1079 provides a fast drying time of within two seconds, allowing it to be used on fast-moving production lines or where products are handled soon after printing. The ink can be used with Linx's Midi plus and Ultima plus printheads on the company's Linx 5900 and Linx 7900 series printers to code a wide variety of materials including plastics, in particular PVC, PP and OPP, dry glass, card, and steel.

For industrial environments, it provides broad chemical splash and rub resistance, as well as excellent resistance to alkali, acid, water, alcohol, petrol and cutting fluid.

Linx 1079 also offers superior lightfastness, making it particularly suitable for products and packs that are exposed to light for extended periods. The ink's nine month shelf life is longer than many competitor pigmented inks and enables companies to carry out effective stock management. Using the ink, printers can operate for up to 1400 hours between scheduled maintenance. 🏭

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2018

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COMPLETE RANGE FOR FRUIT FRESH-CUT PRODUCTION.

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MAKRO LABELLING SRL

MAKRO LABELLING'S STRATEGY FOR 2018

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DRINK TECHNOLOGY MAGAZINE

Digital magazine in English focusing on lines, plants and equipment for bottling and beverage industries. Four issues a year, delivered to more than 20.000 beverage industries and to more than 3.000 suppliers, worldwide. The magazine has an extra launch before all the main international exhibitions about beverage technology.

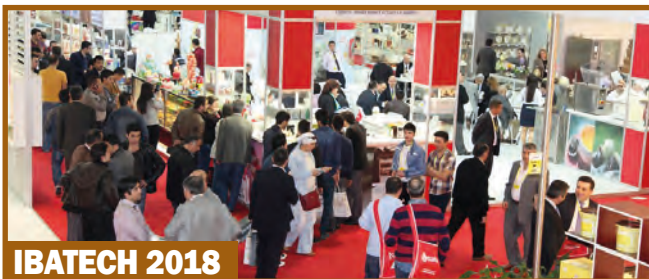


www.drinktechnologymag.com



SMI SPA - SMI GROUP

SMI GROUP MAI DUBAI LLC
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IBATECH ISTANBUL IS READY FOR 2018!
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for food and beverage industry**

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For over 40 years, passion, internationalism, research and reliability have been the pillars on which the company builds his success.

INDUSTRIE FRACCHIOLLA SPA is perfectly managed and can trust on a manpower consisting of 120 employees, 20,000 square meters of indu-



strial Facility, a fleet consisting in 40 vehicles and 4 Truck cranes and a comprehensive range of technologically advanced machines.

Today the company is run by the three Fracchiolla Bros and their sons, who are strongly motivated to develop their family business.

Very modern productions techniques, accuracy in details, reliability of his products, prices competitiveness, punctuality and a very skilled after sales service, are some of the factors that makes prestigious INDUSTRIE FRACCHIOLLA SPA supported by a constant growth of its exportation. 





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Seit über 40 Jahren steht das Familien geführte Unternehmen "Industrie Fracchiolla S.p.A." als eine der führenden Unternehmen auf den Internationalen Edelstahltank markt.

Der hohe Qualitätsstandard unserer Produkte ist das Ergebnis einer konsequent verfolgten Qualitätspolitik, in allen bereichen unseres Hauses.

Von der Anlieferung des Rohmaterials bis zur Auslieferung des fertigen Produktes sorgen neueste Technik und das spezifische Know-How unserer 120 qualifizierten Mitarbeiter auf insgesamt 20.000qm für beste Produktionsbedingungen und hervorragende Ergebnisse.


Mit der Projektierung und Bau bis zur Installation unserer Edelstahl-tanks für die Getränke-,Nahrungsmittel, Chemie-Pharma Industrie, die natürlich auch vor Ort gefertigt werden können, dank unserer 40 Fahrzeugen und 4 Autokräne.

Eine Industrie die auf der ganzen Welt tätig ist.



Die kundenspezifische Ausrichtung steht bei uns an erster Stelle. Das wollen wir mit unserem umfangreichen Service deutlich machen. Nicht allein die Qualität der Produkte macht einen Lieferanten und

Produzent zum geeigneten Partner sondern auch die Flexibilität, die Schnelligkeit und der Service.

Vom ersten Augenblick an begleiten wir mit hoher Fachkompetenz Ihren Auftrag. 





Continued from page 3

344 peaches/min of any level of ripeness irrespective of the variety (clingstone or freestone). Production capacity: over 3 tons/hour; Feeder yield: 100%; Automatic peach aligner yield: 90% depending on the fruit; Maintenance cost: very minimal.

KA3 and KA6 Apricots Pitting machines pit apricots in two halves along the suture line leaving the stone intact and loose to separate from the pulp.

All parts in contact with the fruit are for alimentary and hygiene purposes and the structure is completely made of stainless steel. Production capacity: from 550 up to 1.100 fruits/minute.

The **Brushing Machines Mod. SZ8 and SZ-10** complete the peeling process

by removing all residual peels. Their rows of cylindrical synthetic fiber brushes have a sense of rotation that allows a better distribution



OMIP, AUSHÄNGESCHILD DES MADE IN ITALY SEIT 1971

„Seine Leidenschaft zu Ihren Diensten im Bereich
Fruchtverarbeitung“

Das seit 1971 gegründete Unternehmen O.M.I.P. SRL ist spezialisiert auf die Herstellung von Maschinen für Fruchtverarbeitung. Dank unermüdlicher Forschung, Entwicklung und Innovation ist es OMIP gelungen, auf den Weltmarkt die modernsten

Technologien im Bereich Entkerner zu bringen und somit Ergebnisse zu erzielen, die über jede Vorstellungskraft hinausgehen. OMIP-Maschinen zeichnen sich durch kombinierte Eigenschaften aus, wie z.B. Festigkeit, Zuverlässigkeit, einfache Bedienung und niedrige Wartungskosten. Tat-

sächlich steht der Name OMIP für Qualität und Aushängeschild des Made in Italy.

Der **K8/16 Entkerner** ist eine stabile Maschine, die völlig aus Edelstahl gefertigt ist. Die innovativen und fortschrittlichen Elektronikkomponenten



of the fruits in the unit. They have water pipes to facilitate the wetting of the entire surface of the brushes. Both models are equipped with a tank for the collection of residues during processing.

The **KR8 Peach Repitter** is a machine that is used to reprocess the pitted fruits irrespective of their variety (clingstone, freestone and nectarine) and the degree of ripeness thus permitting to do without the labour for this operation.



The machine has been designed to make cleaning and maintenance operations easier and faster. Produc-

tion capacity: 320 peach halves/min.

OMIP Company manufactures: Stoning machines for: Peach, plum, apricot and avocado; peach and apricot Roller-Operated stone Remover; Apple and Peach Corer; Peeler; Dicer; Slicer; Brusher; Turn-Overs; Elevators and more...visit OMIP website:

www.omip.net 



(zur Bedienung und Überwachung) machen diese Maschine einfach und relativ sparsam in ihrem Bereich, im Hinblick auf der Wartung. Dank der neuen und leistungsfähigeren Schneidgruppe kann die Maschine 344 Pfirsiche/Min in allen Reifegraden, unabhängig von der Sorte (Clingstone oder Freestone), entkernen. Produktionskapazität: über 3 Tonnen/Stunde; Zufuhrertrag: 100%; Ertrag der automatischen Pfirsichausrichtung: 90% abhängig von der Frucht; Wartungskosten: sehr gering.


KA3 und KA6 Aprikosenentkerner entsteinen Aprikosen in zwei Hälften entlang der Nahtlinie, so dass der Stein intakt und locker bleibt, um sich vom Fruchtfleisch zu trennen. Alle Teile, die mit der Frucht in Berührung kommen, sind für Nahrungs-

mittel- und Hygienezwecke bestimmt und die Struktur ist völlig aus Edelstahl gefertigt. Produktionskapazität: von 550 bis 1.100 Früchte/Minute.

Die **Bürstenmaschinen Mod. SZ8 und SZ-10** schließen den Abschälvorgang ab, indem sie alle Restschalen entfernen. Ihre Reihen zylinderförmiger Kunstfaserbürsten haben eine Drehrichtung, die eine bessere Verteilung der Früchte im Gerät ermöglicht. Sie verfügen über Wasserleitungen, die die Benetzung der gesamten Bürstenoberfläche erleichtern. Beide Modelle sind mit einem Tank für die Sammlung von Rückständen während der Verarbeitung ausgestattet.

Der **KR8 Peach Repitter** ist eine

Maschine, mit der die entsteinen Früchte unabhängig von ihrer Sorte (Clingstone, Freestone und Nektarine) und dem Reifegrad weiterverarbeitet werden, so dass auf die Arbeit für diesen Vorgang dadurch verzichtet werden kann. Die Maschine wurde so konzipiert, dass Reinigungs- und Wartungsarbeiten einfacher und schneller durchgeführt werden können. Produktionskapazität: 320 Pfirsichhälften/Min.

Das Unternehmen OMIP produziert: Entkerner für: Pfirsich, Pflaume, Aprikose und Avocado; pfirsich- und aprikosenrollbetätigte Steinabscheider; Apfel-und Pfirsichausstecher; Schäler; Schneidemaschinen; Bürsten; Turn-Overs; Aufzüge und mehr... Besuchen Sie die OMIP-Webseite: www.omip.net 



SELF-ADJUSTABLE CONTINUOUS-CYCLE BIN TIPPER WITH PNEUMATIC SYSTEM

Mod. RMM300 PATENTED

Machine suitable for fruit and vegetable products, especially big delicate fruits, i.e. watermelons from 1 kg to 25 kg. Input module suitable for receiving columns formed by up to 4 bins having a height of 85 cm.

Destacker designed to disassemble columns formed by up to 4 bins having a height of 85 cm.

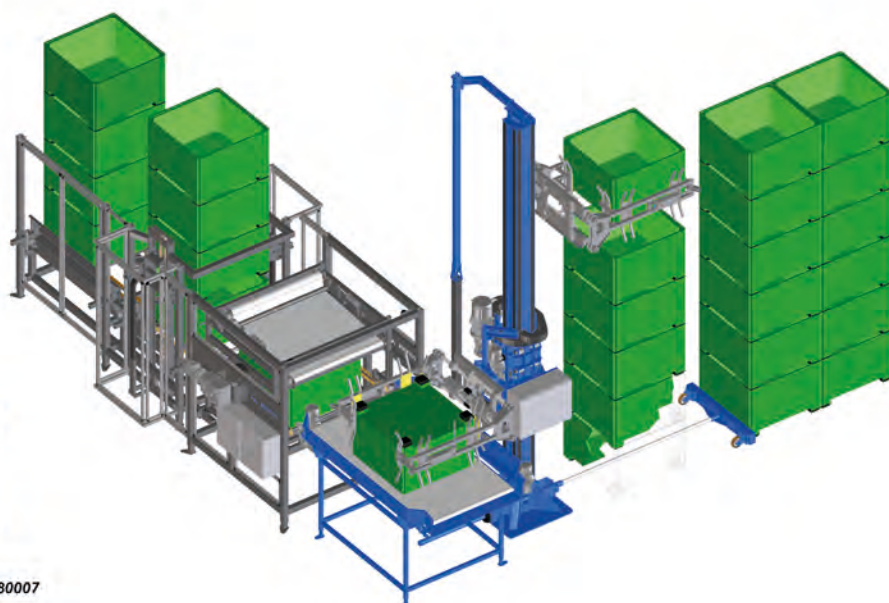
Self-adjustable tipper support, suitable for all types of plastic or wooden bins.

The PATENTED tipper consists of a self-adjustable tipper support equipped with an inflatable mattress aimed to protect the fruits while the bin is emptied thus avoiding shock or damage.

The bin is inverted half way, then it moves forward on a shock-absorbing conveyor belt. A gripper slowly lifts the bin until all the fruits gently roll out and lean on the shock-absorbing foam-coated conveyor belt.

The gripper can stack a column of 3 to 6 bins having a height of 85 cm and then move it aside in order to immediately start a new one: such system allows a continuous operational cycle and avoids downtime.

Productivity: 60 to 110 bins/hour.



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OPTICAL SIZE LINE FOR WATERMELON AND PUMPKIN

The system is the result of a specific know how acquired throughout the years.

This is a very innovative sizing machine. It can calibrate every type of watermelon, from the smallest varieties (approx. 1,5kgs) up to the biggest ones (approx. 30Kgs), by making them proceed on a plain conveyor, without needing to place the fruits into a cup chain. Among the many advantages: no risk of shock or damage to the fruits, no need for maintenance to the chain, minimum acoustic impact during action.

Description: working bench 11 m long, seven discharge points plus one, shelves for empty crates, wide sizing management program, error tolerance below 3%, system capacity 20-22 Ton/hour.



PRICE WEIGHT LABELING MACHINE

Price-weight-labeling machine with weighing in motion for fruits from 0 to 20 kg. Conveyor belt a "V" adjustable from 0° to 120°.

Suitable for fruits, vegetables and package.

Productivity 50 pieces/minute. 🏠

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Juran
Technologies 



www.arilsystem.com

50 YEARS OF INNOVATION FOR THE FOOD INDUSTRY

Developing breakthrough technologies, from automated pomegranate handling, to sulfur-free lychee treatment, Juran continues to innovate and green the food industry

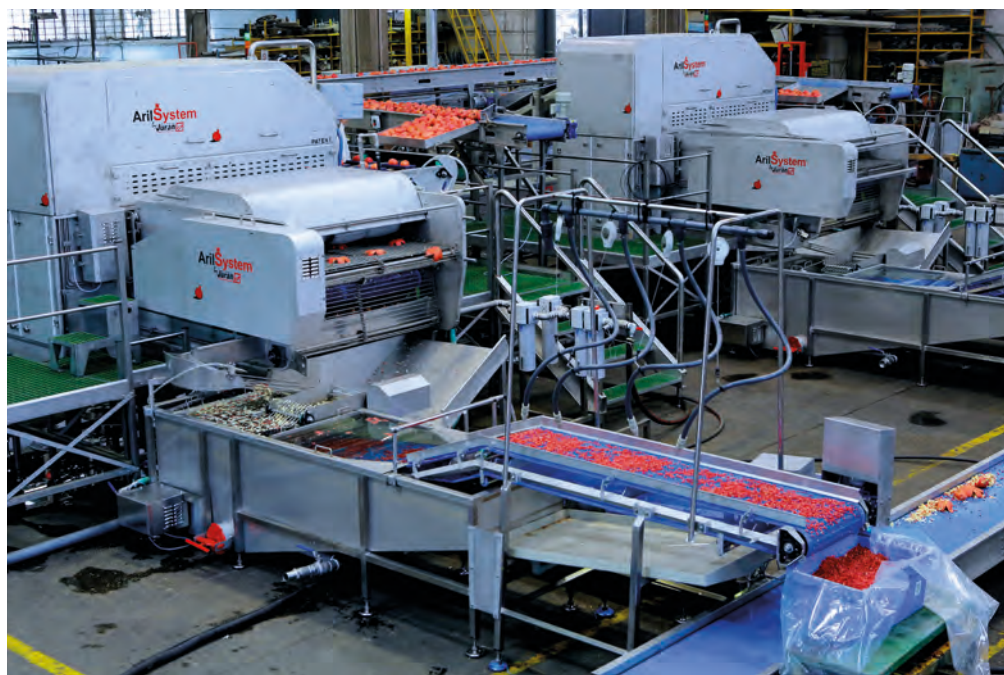
Significantly impacting agrotechnology and the food industry worldwide, Juran has been coming up with new ideas for streamlining traditional methods of farming, harvesting, and produce handling since its inception in 1966. From automated packing houses to unique technologies for greening food processing practices, Juran's R&D achievements caught the attention of the Agricultural Engineering Institute of the Israel Ministry of Agriculture, as well as of EU R&D institutes. In thriving partnerships over 40 years, their joint activities have yielded innovative R&D projects and many jointly registered patents.

The pomegranate handling breakthrough

A prime example, and a flagship Juran product, is the **ArilSystem™**, an automated system for extracting the juicy seeds from pomegranates. The pomegranate is one of nature's most remarkably health enhancing fruits. Higher in antioxidants than wine or cranberries, it promotes heart health, reduces blood pressure, enhances healing, and has even been shown to inhibit tumor growth.

Yet consumption of this healthful and tasty fruit has been far from commensurate with its value.

This is largely due to the messy and time consuming process of extracting the arils. Consumers find the fruit less than user-friendly.



Even when the juicy seeds are provided ready extracted, consumers do not rush to buy them due to their high cost, based on the labor-intensive extraction process. Hence the general public has failed to avail itself of the health benefits of this remarkable fruit. Juran set out to change all that.

Researching the problem, Juran developed the **ArilSystem™**.

It can process hundreds of pomegranates per hour, supervised by just one or two workers.

It boasts a 95% efficiency level, bringing aril damage down to 3%-5%, compared with previous industry standards of 20% wastage.

The extracted arils are gently washed, filtering out peels and fruit membranes. The end result is pure arils, cleaned and packaged, untouched by human hands.

ArilSystem™ The pomegranate breakthrough

- **Labor-Saving** - 1-2 workers replace 45!
- **Minimal waste** - 95% efficiency
- **Better Taste** - Tannin-free tastier juice
- **Higher Quality** - Hygienic Food Safety Standards
- **Industrial capacity** - Up to 56 fruits/minute

Aside from the obvious advantages of low labor costs and increased output, the **ArilSystem™** yields



a far more hygienic, higher quality product. This is reflected in its significantly increased shelf life. A further benefit is afforded the beverage industry.

Most pomegranate juices are obtained by squeezing the whole fruit, including peel and membrane, which gives the juice a bitter taste due to their high tannin and phenol content. The **AriSystem Juicer** obtains pure pomegranate juice from the arils alone, producing a far tastier beverage. And as an extra bonus, the seeds, efficiently extracted during the juicing process, are a sought-after byproduct utilized by the cosmetics and pharmaceuticals industries, yielding additional revenue.

Today's **AriSystem™** is available in 4 models handling 10, 20, 28, or up to 56 fruits per minute. A rate of 56 fruit/minute, or 1,680 kg fruit/hour, can yield over 550 kg/hour of superior quality arils, all from a single production line.

Since the first AriSystem was installed in Israel, there are currently AriSystems operational in the USA, Spain, Turkey, India, South Africa, Australia and others.

Now affordably available, the presence of this wonder fruit is growing in the Fresh-Cut market as well as the Food & Beverage Industries, Pharmaceuticals, and Cosmetics.

But the big winners are the consumers.

Juran's marketing director, Avner Galili says, "There is an increasing market demand for pomegranate products. We're pleased to enable our customers to offer a superior product to the growing number of pomegranate consumers worldwide."

Greener methods for redder lychees

Making food processing more natural and putting healthier products on the market is a main Juran objective. Today, fresh lychees are a tricky commodity.

Starting out an attractive red, they lose their vibrant color within 2 or 3 days, becoming an unappealing brown.

To overcome this marketing drawback, lychees are subjected to a sulfur treatment that helps them maintain their color for a longer marketing window. However it offers the consumer a product that is, literally, soaked in chemicals.

"There is an attitude of resignation among lychee growers," Avner Galili says, "that sulfur treatment is a necessary evil. Sulfur is a toxin, and it may penetrate the flesh of the fruit. Careful testing is then required to ensure compliance with allowable levels. The good news," Avner tells us, "is that lychees needn't be soaked in toxins to keep them market-red."



AriSystem™

www.arisystem.com



Juran has developed a **Sulfur-Free Lychee Treatment and Packing House**. In a unique process based on nothing more than a temperature regulated water and salt treatment, the beautiful rich red color of lychees is preserved for up to 4-5 weeks!

That represents a very significantly extended marketing window and shelf life.

This computerized, all natural process maintains the lychee's delicious flavor along with its vibrant lasting color. The unique natural treatment process is integrated with a sorting and packing system.

Moving along a state-of-the-art motorized conveyor, the lychees undergo a sorting & grading process including an automatic sizer with five size/grading groups compliant with EEC and USA market requirements. With a packing capacity limited only by customer demand, Juran Lychee Treatment Systems and Packing Houses have been installed in China, Thailand, Israel and Australia.

Today Avner Galili is pleased with Juran's steady growth.

"From marketing their equipment to the small local market, Juran has grown into a company with a worldwide presence, whose technologies and systems are opera-

tional on five continents. It keeps me busy," he concludes. 🏠

www.juran.co.il



Juran's Sulfur-Free Lychee Treatment & Packing House

- Maintains vibrant red color for 4-5 weeks
- Greatly increases marketing window
- All natural process
- Tested and field-proven

With the company for over 8 years, Avner Galili is Juran's Business Development and Marketing Director, and by now like one of the family of this family business.

Formerly on the Board of Directors of the Israel Export Institute and the National Agricultural Research Institute of the Volcani Center, he also served as advisor to the Israel Agricultural Ministry's Genetic Engineering Consortium.

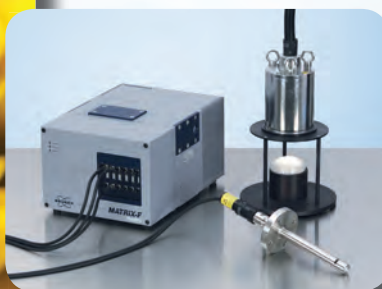
LITCHI TREATMENT SYSTEM

A Revolutionary System, that Prolongs the Shelf-Life of Litchi Fruits

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Keeps Litchis as Beautiful as they are Delicious

Process Analytical Technology



MATRIX-F FT-NIR Process Spectrometer

The online spectrometer MATRIX-F allows contact and non-contact measurements in reactors, blenders, pipes, bypasses and even over conveyor belts.



MPA FT-NIR Lab Spectrometer

Designed to provide maximum flexibility, the Multi Purpose Analyzer MPA is ideal for the at-line method development and routine QA/QC work in the laboratory.

Today, many companies are not only striving to manufacture high quality products, but also increase production efficiency by installing the analytical systems directly into their production plants. This improves process verifiability and process understanding and gives the company the opportunity to optimize material use, run-time of machines and quality of the products up to real-time-release.

Bruker's spectroscopical technology based on modern FT spectrometers can be used at a lot of different process steps and offer high amount information to gain better process knowledge. The robust design of all spectrometers enables usage in tough conditions in production plants with very low maintenance costs/times.

Contact us for more details: www.bruker.com/optics

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BRUKER OPTICS – FT-NIR SOLUTIONS FOR FOOD QUALITY AND SAFETY



The LSM adds the capability to the MPA for the analysis of raw milk samples. It is fully automated, including cleaning and can handle liquids from whey to ice cream pre-mix.

Quality control requirements for food production and food processing are constantly increasing. Modern FT-NIR spectroscopy presents the industry with many possibilities for fast and simple quality control in the laboratory and can also be used to monitor the production line directly. The new-generation analytical instruments are easy and intuitive to use and even enable shift workers to carry out analyses alongside production.

Fast analysis is beneficial at every stage in the production chain because errors made at one specific point often impact on the final pro-

duct. With FT-NIR, manufacturers can:

- analyse samples from tankers quickly, prior to unloading, and therefore reject any deliveries that do not meet specifications;
- identify raw materials before use and quantify and assess their properties;
- conduct on-line quality control at important production steps and prior to bottling;
- check food is fit for human consumption.

The following examples demonstrate some of the possible uses of FT-NIR spectroscopy technology in the food industry.

Analysis of milk and dairy products

On account of seasonal and regional variation in the composition of raw milk, it is essential for all subsequent processing steps that the milk will be standardised. FT-NIR spectroscopy analyses the key parameters, fat, protein, dry matter and lactose, with accuracy comparable to that of conventional mid-infrared systems (FT-IR). Using the LSM (liquid sampling module) – a sample feed with optional homogenisation and automatic cleaning routines – samples are simply pumped into a temperature-controlled transmission-flow cell, where they are measured.



Any kind of milk, e.g. raw milk, skimmed milk or UHT milk, can be analysed, as well as other liquid dairy products including cream, condensed milk, liquid ice cream, flavoured milk products and concentrates, i.e. even viscous products that conventional milk analysis instruments struggle to measure.

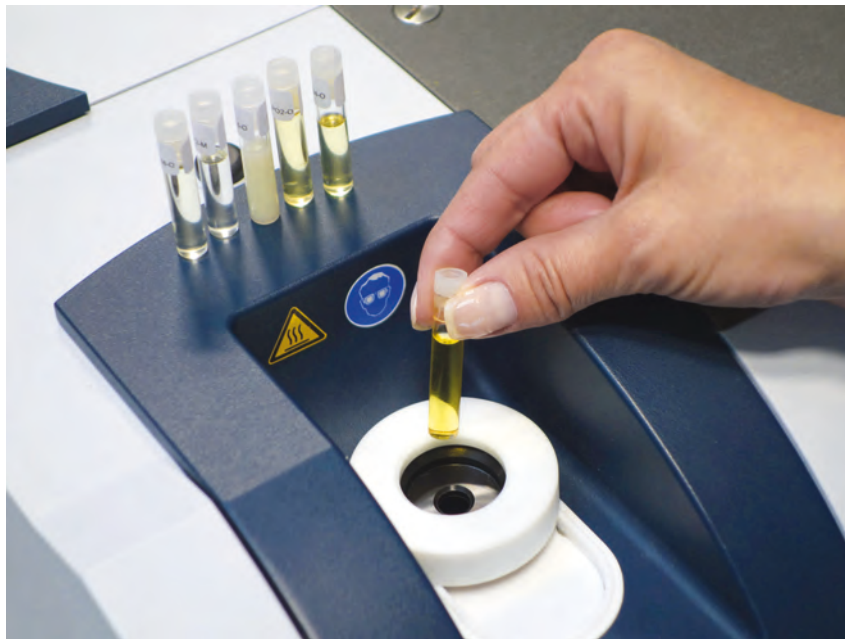
Another advantage of FT-NIR spectroscopy is that one single piece of equipment can be used to measure not only liquid samples but solid and paste-like products too, including cheese, powdered milk and yogurt.

This allows for the cost-effective analysis of different quality parameters in all relevant products, ensuring quick quality control at the individual stages of production.

Quality control of frying oils

Deep-fried foods, such as chips, fish products, doughnuts and crisps, have become a substantial part of our diets today. This calls for a quick and simple method for closely and continuously monitoring the degradation in quality of deep-frying oil and thereby detecting harmful by-products that develop from oxidation and polymerisation in particular.

Various criteria are applied to determine when the oils need to be changed. For instance, the total polar materials (TPM) and polymerised triacylglycerol (PTG) levels are defined using gel permeation chromatography (GPC). Regulations in many EU countries state that a deep-frying oil should contain below 24-27 % TPM, and 16 % PTG. However, no single parameter can be considered conclusive. A variety of tests should always be consulted to measure the by-products resulting from both oxidative and thermal processes in the oil before a valid conclusion can be drawn. Using FT-NIR spectroscopy, these parameters, as well as other important readings such as acid value and Anisidine value, can be established from one single measu-



Rapid quality control for edible oils and oilseeds can be achieved by Bruker's dedicated FT-NIR solutions. The analysis is quick, cost-effective and safe to use, even for untrained staff.

rement. FT-NIR was included in the DGF standard methods (DGF C-VI 21a) last year as a screening method for the analysis of deep-frying oils.

Many other important quality parameters for fresh, unused deep-frying oils and other cooking oils, such as olive oil, can be analysed using FT-NIR. Besides the iodine value, the

trans-fatty acid content and the acid value, the various fatty acids can be quickly identified too.

Solutions for the meat-processing industry

With global demand for meat and meat products continuing to grow, it can be a challenge to always de-



The major application areas for FT-NIR spectroscopy in the food industry include meat, dairy, beverages, edible oils, flour & bakery ingredients and condiments as well as grains and oilseeds.



liver the quality that customers expect. FT-NIR technology, which can produce analysis results in less than a minute, has the capability to complete, or even replace, a wide range of conventional quality assurance testing procedures for meat and meat products, both in the laboratory and on the production line.

For example, it is very important for sausage manufacturers to determine the often variable fat content in their meat supplies when planning subsequent production steps. Furthermore, the fat content is a common criterion for value-based payment to suppliers. In this respect, FT-NIR spectroscopy represents a valuable tool for assessing the raw materials going into the product. The parameters of fat, protein and water can be determined simultaneously using just one measurement. The results can be used as a basis for decisions about production procedures. In sausage production, there is a legal requirement to define the maximum water content, minimum pro-

tein content and total fat content. The salt level is also of particular interest to the manufacturer and consumers as well. FT-NIR has proven itself to be an efficient method of analysis for measuring levels of moisture, fat, protein and salt in the different sausage varieties. Additionally, water activity (a_w -value) can be analysed to optimise the product's shelf life.


Monitoring Food Processes Online

FT-NIR spectroscopy is however not restricted to the laboratory. There is a strong trend to take spectroscopy on the line rather than taking the sample to the lab. Not only quality and safety issues, but also economic considerations motivate the producers to develop methods for the real time process analysis. Online measurements are suitable for solid and liquid samples alike. There are different contact and non-contact sensors available which can be implemented into pipes, bypasses

and even over conveyor belts. Up to six sensors can be multiplexed by a single MATRIX-F FT-NIR spectrometer. One example is the monitoring of the milk powder process. The key points in the spray drying process can be monitored by installing sensors e.g. in the storage tanks, the inline feed of the spray dryer as well as at the powder outlet of the fluid bed dryer.

Why FT-NIR?

FT-NIR spectroscopy is a high-performance method of analysis that is increasingly being used in the food industry. With its simple operation, it has the potential to replace a wide range of conventional analysis methods and to serve as a rapid method that dramatically increases the number of samples that can be measured.

Consequently, the quality of the raw materials, production processes and end products can be controlled and monitored more closely. 



The award winning MATRIX-F FT-NIR spectrometer allows the direct measurement in pipes, bypasses and even over conveyor belts leading to a better understanding and control of the process.



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CREATIVE CUISINE WORKSHOP

New ideas to interpret customers' needs that fulfil the demands of a public that is increasingly attentive to quality and the flavours of the moment

The passion that has accompanied L'Insalata dell'Orto right since its foundation and the constant trend focusing on innovation has enabled us to go even further by making the most of consumers' creativity and culinary experience, by proposing modern, IV-range products that can be used as they are or revisited as required.

The new "Tisane dell'Orto", "Condimento al momento" and "Spaghetti di verdure" product lines rightfully enter through the main door of every kitchen, as a valid help and to inspire everyone's culinary flair.

Alongside the classic I and IV-product range that has, by now, become well-established and recognised by the primary players of the Large-scale retail sector both in Italy and abroad, L'Insalata dell'Orto is proud to present "THE CREATIVE CUISINE



WORKSHOP", a culinary idea incubator that has a positive impact on the creation of products that encourage the experimentation of tastes and needs.

OUR COMPANY

L'Insalata dell'Orto was founded based on the combination of passion with an idea.

The passion for the land, that for generations has driven our family to devote itself to the cultivation of vegetables.

The idea refers to the one we had in 1990 that has led us to extend our production to the cultivation of greenhouse crops and to devote ourselves to the production, processing and packaging of IV-range products.

After taking this first step, as a natural evolution of the business,

L'Insalata dell'Orto Srl was established in 2000.

A company that we immediately wanted to be absolutely impeccable in terms of compliance with regulations and legislation in general, with both a tasteful corporate image reflecting its strong bond with its territory of origin: from this latter, we have gradually broadened our customer portfolio, starting from the Veneto region, up to covering Italy as a whole then moving overseas, and orienting our products to fulfil the requirements of the large-scale retail, hypermarket and supermarket chains, collective and commercial catering sectors.

CERTIFICATIONS

L'Insalata dell'Orto boasts the achievement of significant qualitative targets: IFS and BRC certifications relating to the packaging of I and IV-range ORGANICALLY-GROWN PRODUCTS, the ISO 22005:2008 certification regarding traceability




in the feed and food chain as well as the VEGANOK ethical certification.

THE PRODUCTS

We propose adult and baby salad greens as well as vegetables, to be eaten raw or to be cooked, with weight options to suit the requirements of all family types,

from the single customer to large communities.

In addition to the wide variety of ingredients, we also provide a vast selection of packages: maxi or single-portion bags, film-sealed and

flow-pack trays, heat-sealed bowls, polypropylene or polystyrene boxes that ensure the most suitable method of preservation for each product assortment. 

www.linsalatadellorto.it



L'insalata dell'ORTO

POTS SHOWCASE DAIRY DELIGHTS

Regional French dairy producer Duo Lozère has selected RPC Bebo Bouxwiller to supply the packaging for the company's high quality organic yoghurts and fromage blanc.

The stylish 125cc thermoformed polypropylene pots are lightweight and easy to handle, combining consumer convenience and ease of use with effective product protection and presentation. Newly-designed graphics, offset printed in a variety of different colours, distinguish the different products in the range and create

maximum impact on-shelf. Established in 2008 and based near Mende en Lozère, Duo Lozère's products feature locally-sourced cow's and sheep's milk where the altitude of the pastures (around 1,000m above sea level) gives the milk a remarkable quality. They are available both in the local region and also nationally through selected distribution channels.





INGREDIENTS FOR MEAT & SAVOURY APPLICATIONS



A white paper by Lycored

Clearly natural solutions for perfect flavour and texture

Beyond clean label

Clean label has been a major trend in the food industry for the past decade, with food and beverage manufacturers keen to highlight that their products are free from synthetic ingredients and additives. But today's consumers are looking for more. They want to know what is in their food, not just what isn't. They want their food to be made of recognisable natural ingredients and they want to know where those ingredients came from. This desire for more transparency is leading to a massive upsurge in clearer labelling. So, while Innova Market Insights found in 2014 that a quarter of all food and beverage launches featured clean label claims, it also identified greater transparency – a shift from 'clean to clear' – as the top labelling trend for 2015. In tune with this trend, Lycored offers Real Food Ingredients made from 100% tomato, enabling formulators to label products with reassuringly simple food declarations that all consumers will recognise. What's more, its vertically-integrated business model guarantees farm-to-fork transparency and traceability. Lycored uses its own specially bred non-GMO tomatoes, carefully grown on farms in California and Israel. Once the tomatoes are harvested, a proprietary extraction process is used to remove the delicate pigments, fibres and serum from their pulp as efficiently as possible.

Honest goodness

The unique non-GMO tomatoes bred by Lycored are naturally four times higher in lycopene than standard tomatoes. They are also rich in naturally occur-



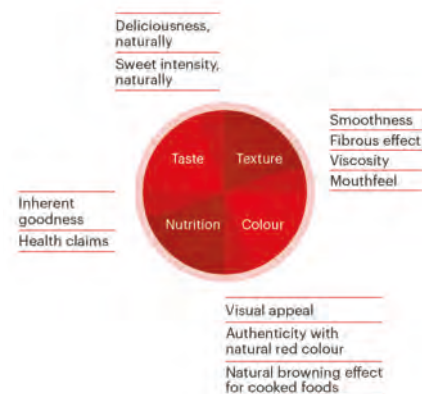
ring taste compounds, including glutamate, which is an amino acid. Lycored's Real Food Ingredients range builds on the goodness of these tomatoes to enhance the taste, colour and texture of food, while also providing an inherent nutritional advantage. There are four product types available from Lycored, as follows:

- **SANTE** - this taste enhancer provides a high concentration of the natural-compounds that produce umami (the fifth taste) and kokumi (the Japanese word for deliciousness). SANTE accentuates existing flavour characteristics while remaining taste neutral.
- **Clear Tomato Concentrate (CTC)** - a concentrated serum with a savoury character that offers balanced sweetness from 60 brix combined with higher acidity than SANTE, which creates a smooth balancing taste effect. In tomato-based products, it also increases tomato taste intensity.
- **Lyco-Fibers** - these modify the pulpiness, viscosity and mouthfeel of sauces, soups and meat products. The unique, authentic texture they provide cannot be achieved reliably using other texturisers. They lend products a

pleasant pulpy fibre mouthfeel, without the slimy consistency of formulations that rely on alternative stabilisers such as gums and starches.

- **Dry Tomato Pulp** - this combines a fresh, vibrant and consistent red colour with a stable texture for red sauces, ketchups and soups. Its fibre content can add to the health credentials of a naturally-positioned product. It also works well as a natural colourant and texture improver in meat-based products such as sausages, in which many food colourants or starches are not permitted.

4 dimensions of goodness, from our tomato





Lycored

Sharing nature's wonder from our garden to your kitchen.

We put our hearts into getting
the very best from Mother Nature's
wholesome treasure.

Real food ingredients, 100% tomato
for taste, texture and colour.

Natural food & beverage colours,
that look good and are good.



Interested in clean label, all-natural,
food ingredients for better colour,
flavour and texture?

Get in touch with us by emailing:
infos@lycored.com

www.lycored.com



SANTE - natural deliciousness

Available as a liquid or powder, SANTE provides naturally occurring umami and kokumi tastes with a low sodium content. Umami, meaning ‘delicious taste’, is also known as the fifth taste – after bitter, sweet, salty and sour – and its savoury, meaty character is detected via the taste receptors for glutamate. Kokumi, meaning ‘rich taste’, provides balance and a hearty mouthfeel. Kokumi is delivered by foods with the right combination of amino acids. Importantly, SANTE manages to combine both of these attributes with a clean and clear label. Manufacturers may declare SANTE as ‘tomato concentrate’ or ‘natural flavour’, according to local regulations. SANTE is taste-neutral, with no overt tomato taste, so it can be used to boost the flavour of both sweet and savoury products. It is ideal for use in soups, sauces and marinades and in its powdered form it can also be applied as part of a seasoning mix for products such as potato chips and extruded snacks, and in spice blends for meat products. Low dosages of between 0.15 and 0.7% are sufficient to deliver a highly accentuated taste experience, and SANTE is stable across a wide range of temperatures and pH. As well as providing all these positive attributes, SANTE enables formulators to reduce or eliminate a range of ingredients with negative labelling connotations, such as MSG, ribonucleotides, yeast extracts and hydrolysed vegetable proteins. In addition, thanks to its ability to enhance the salty flavour of products, SANTE allows a reduction in sodium from salt by 30 to 50% in some applications. The secret of SANTE lies in the high levels of naturally occurring glutamate in Lycored’s specially bred tomatoes. Glutamate occurs naturally at high levels in many delicious foods, such as ham and Emmental cheese, Nori

seaweed and scallops. Lycored’s special breed of tomato is also a rich source of natural glutamate. It has an amino acid concentration of almost 9%, of which 32% is natural glutamate.

Clear Tomato Concentrate - smooth flavour

CTC is a clear liquid that acts as a natural taste improver for food, bringing a smoother character to savoury products such as soups, condiments and sauces. It can also intensify the tomato character of tomato-based foods and act as an extender for tomato paste, which can be expensive. CTC can be declared as consumer-friendly ‘tomato concentrate’ and, like SANTE, it gives formulators a way to reduce or eliminate their use of less attractive ingredients. It is stable across a range of pH and temperatures. It is colour-neutral and besides delivering a better taste and cleaner label, it can also produce a browning effect for a more appetising appearance in foods such as pies and pastries.

Lycro-Fibers - authentic texture

Formulators can modify the pulpiness, viscosity and mouthfeel of sauces, soups and meat products naturally using Lycro-Fibers. Not only do they deliver a cleaner label, but they also carry the positive benefit of fibre content. Their high stability means that Lycro-Fibers do not undergo syneresis when used in sauces. In addition, while alternative stabilisers such as gums and starches can lead to a slimy consistency, Lycro-Fibers deliver an authentic vegetable fibre texture. Lycro-Fibers also improve the juiciness of meat products and prevent burning of the meat when barbecuing.

Dry Tomato Pulp - visual appeal with fibre

Lycored’s Dry Tomato Pulp is perfect for formulators looking to produce tomato-based sauces, soups and dips with a fresh and vibrant ‘made from scratch’ look, taste and texture that remains stable throughout a product’s shelf-life. It also suits meat products such as sausages. The pulp delivers a fresh, consistent, natural red colour thanks to its high lycopene content, combined with an authentic pulpy

texture. It also contains fibre and can carry a consumer-friendly ‘crushed tomatoes’ or ‘tomato concentrate’ label within the EU. Conventional tomato pastes can be inconsistent, which may lead to formulation challenges. In contrast, Lycored’s Dry Tomato Pulp provides reliable, consistent, repeatable results. It also permits the removal of starches from sauces, leading to a shorter ingredients list.

Benefits of Lycored’s Real Food Ingredients at a glance:

- Foodstuff label declaration
- Cleaner label and a shorter ingredient list in many applications
- Stable across a range of pH and temperatures
- Allergen-free
- Kosher and Halal
- Fibre content
- No added glutamates
- Non-GMO
- Vegan

Inherent goodness – naturally

Lycored is an international company committed to ‘Cultivating Wellness’ by harnessing the nutritional potential of nature using cutting edge science. The result is a growing portfolio of natural ingredients and products that formulators and – just as importantly – consumers can recognise and trust. Lycored’s first ‘hero ingredient’ was lycopene, which has been clinically proven to help support general health and, more specifically, heart, skin, prostate and female reproductive health, among others. As global leaders in natural carotenoids for food, beverage and dietary supplement products, Lycored’s experts are constantly developing new fortification blends using lycopene to support relevant health claims. Beyond this, simply including Lycored’s natural tomato ingredients allows customers to provide an ‘inherent goodness’ or better-for-you positioning for their products. Established in 1995, Lycored is based in Israel, with sales and production operations in the UK, Switzerland, the US, Ukraine and China. 🏢

www.lycored.com



food technologies

to **pit**



to **peel**



to **cut**



to **core**



to **slice**



to **dice**



and

to **cook**



to **dry**



to **freeze**



to **fill**



to **pasteurize**



for



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COMPLETE RANGE FOR FRUIT FRESH-CUT PRODUCTION

M.F.T. offers a complete range of equipment especially designed for the preparation of FRUIT FRESH-CUT products

The wide variety of equipment by MORRONE FOOD TECH (M.F.T. srl), a company specializing in the designing and manufacturing of fruit and vegetable processing equipment, includes also a complete range of special machines for the preparation of fresh-cut fruit.

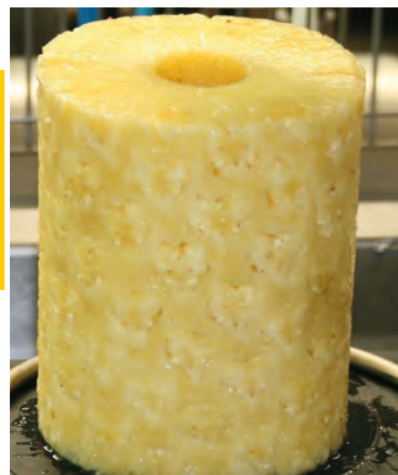
The machines in this range have been especially developed with the aim of meeting the versatility and scalability needs of this sector; they include in fact both high-capacity models and smaller or even table-top units, which are particularly suitable for start-up and catering businesses.

Equipment included in the fresh-cut range:

- WASHING AND SORTING LINES
- PEELERS - CORERS - TRIMMERS - SEGMENTING MACHINES: for kiwis, oranges, pineapples, peaches, nectarins, apples, pears, mangoes, persimmons, prickly pears, melons;
- SEGMENTING AND CHUNKING MACHINES for apples, pineapples, peaches;
- RING SLICERS for apples, pears, kiwis and various types of fruit
- DICERS for various types of fruit
- ANTI-OXIDANT TREATMENT TANKS

M.F.T. also specializes in engineering and manufacturing machines and





complete lines for:

- DEHYDRATED FRUIT
- JAMS AND MARMALADES
- FRUIT IN SYRUP AND FRUIT PRESERVES
- LIMONCELLO
- JUICES, FRUIT PULP AND PUREES
- "SOLID PACK"
- PREPARATION OF FRUIT FOR FREEZING
- TOMATO PROCESSING (peeled tomatoes, tomato passata, chopped/diced tomatoes, tomato juice, tomato paste, ketchup, ready-sauces)
- VEGETABLE PRESERVES, OIL AND VINEGAR PRESERVES
- BEAN PRESERVES
- PREPARATION OF VEGETABLES FOR FREEZING
- DEHYDRATED AND GRILLED VEGETABLES. 🏠

www.mftitalia.com



FBF ITALIA'S QUALITY IN THE WORLD

FBF Italia's machines are suitable to process a lot of products and can be inserted into complete process/production, both in sanitary and aseptic design

FBF Italia has designed and manufactured since 1987, high pressure homogenizers, positive displacement pumps, laboratory homogenizers and, thanks to the wide experience gained in this field, is now a key point-of-reference for plants manufacturers, suppliers of turn-key equipment and end-users in the food, chemical and pharmaceutical sectors.

On-going innovation, exacting experimentation of special materials, strict quality controls and endurance tests allow FBF Italia to guarantee maximum performance, durability, reliability and safety; its mission is to offer to all its customers not only excellent sales services but also continuous relationship with constant, direct post-sales technical assistance; the target is to keep friendly relationship built on mutual evolution and innovation.

FBF Italia's machines are suitable to process a lot of products and can be inserted into complete process/production, both in sanitary and aseptic design.

The main utilization fields of the company machineries are:

- dairy industries (milk, cream, cheese, yoghurt, caseinates, proteins, soya milk, etc.);
- ice-cream industries;
- food, processing, preserving and beverage industries (fruit juices, tomato sauces, oil, ketchup, eggs, vegetable greases, emulsions, concentrates, baby food, etc.);
- cosmetic, pharmaceutical, chemical and petrol-chemical industries (starch, cellulose, wax, colorants,



beauty creams, toothpaste, detergents, disinfectants, emulsions, inks, latex, lotions, emulsifiers oils, pigments, proteins, resins, vitamins, etc.).

But what about the homogenizing principle? In order to permanently mix one or more substances in a liquid, a homogenizer must be used in such a way as to make it possible to micronize and disperse the suspended particles in the fluid, rendering it highly stable even during successive treatments and storage.

The product reaches the homogenizing valve at a low speed and at high pressure. As it passes through the valve, it is subject to various forces that cause the micronization of the particles: violent acceleration followed by immediate deceleration causes cavitation with explosion of

the globules, intense turbulence together with high-frequency vibrations, impact deriving from the laminar passage between the homogenizing valve surfaces and consequent collision with impact ring.

Homogenization can occur with the use of a single stage homogenizing valve (suitable for dispersion treatment), or double stage homogenizing valve (recommended for use with emulsions and for viscosity control when requested).

FBF Italia's range of machines can be commonly classified as follows:

High pressure homogenizers
Positive displacement pumps
Laboratory homogenizers
Positive displacement pumps for product containing particles. 🏭

www.fbfitalia.it



WHAT WE DO BETTER IS HIGH PRESSURE HOMOGENISERS & PISTON PUMPS.

...and we'll always do it better and better.

A complete range to suit a wide variety of applications and products



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Phone: + 39 0521 548200 • Fax: +39 0521 835179
www.fbfitalia.it - info@fbfitalia.it



PLANTS FOR THE FOOD AND BEVERAGE INDUSTRY

FARCK Spa manufactures plants for the food and beverage industry with a particular attention to the storage, heating/cooling, pasteurizing and concentration of the fruit juice and milk/whey. FARCK concentration plants can be used with excellent results both for pure and rectified musts and for fruit juices and can be coupled with all desulphurization columns with a very high energy saving. FARCK uses the principle of the Vapour Thermal Recompression and manufactures plants with reduced consumptions (less than 1 Kg. of steam to evaporate 10 Kg. of water). The circulation of the product is "falling film", with vertical pipe bundle exchangers, condensate separation



with elimination of non-polluting liquids and cleaning of the plant by means of forced circulation in short time. The capacity of the evaporators varies from 1.000 or 2.000 lt. of evaporated water to 50.000 lt/h of evaporated water (big plants with 3-6 effects). An important characteristic of FARCK evaporators is the centralization of all controls into a control synoptic board that allows the driving of the plant by one operator alone. All FARCK evaporation plants are realised in monobloc in order to be transported and installed in short time. Thanks to many years of experience in this sector FARCK Spa can design and manufacture plants with very low consumptions thus respecting the environment. FARCK Spa manufactures also plate exchangers, heaters coolers and pasteurizers for food liquids. Our technical office is able to calculate the exact number of plates and sections necessary to guarantee the best energy saving by respecting the product to treat; the plate exchangers are completely manufactured with AISI 304 and 316 stainless steel and have a capacity from 500 to 40.000 lt/hour, with one or

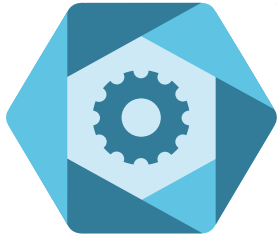


more cooling or heating or pasteurisation sections, with or without holding tubular sections, provided with temperature control board and positioned on bedplates in order to reduce space and time assembly.

FARCK Spa is also specialised in the manufacturing of S/steel tanks with capacity up to 200.000 lt. for the storage, cooling or mixing in general. It is possible to add special stirrers for the movement of high density and viscosity products, manholes with micro-switch, breathers, rotating cleaning balls, manifolds, gangways, railings; everything realised following all accident prevention regulations. Thanks to the high level of its technicians. FARCK Spa manufactures also Spray-drying plants for the pulverisation of the concentrated liquids coming



from evaporators and their transformation into powders with a long-life conservation. Compared to traditional dryers, the product coming from a FARCK plants has better qualitative characteristics: lower density, no hygroscopicity, better solubility, no hardening in packaging and so a better use in the industry. Thanks to the high level experience of its technicians, FARCK Spa is able to manufacture and supply complete « turn-key » plants in Italy and all over the world. The transport, positioning and assembly also of voluminous and complex plant's components are always made directly by its own skilled staff and its means of transport, offering also a good after-sale service. 🏠



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TECNOLOGIA

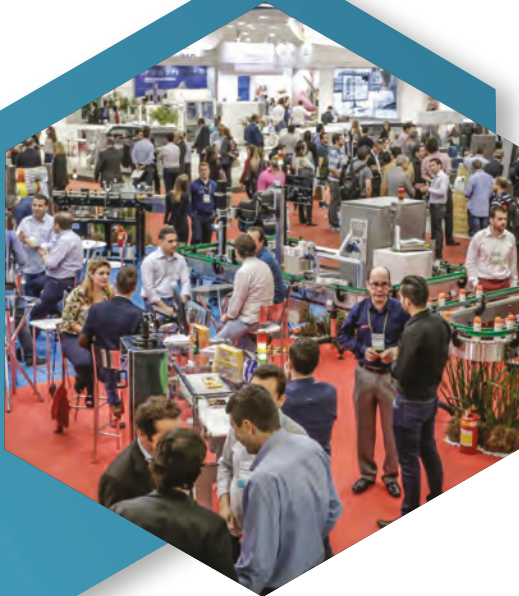
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are purchase
influencers or
decision-makers

85%

consider
Fispal Tecnologia
important for
their business

87%

consider the trade
show with the best
opportunities for
business in the sector

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PRODUCTION, THE SELECTION, THE PACKING AND THE INTERNATIONAL COMMERCIALIZATION OF FRESH FRUITS

Gullino Import Export S.r.l. is a company specialized in the production, the selection, the packing and the international commercialization of fresh fruits: in particular kiwis, apples, peaches, nectarines and plums.

All products sold by Gullino Import Export S.r.l. have Italian origin and more than the 50% of the volume is own grown in the farms of the group.

In August Gullino started his Apples business improving the hectares of Apples plantation and turning on a new facility with a brand new sizing machine with optical internal and external selection and full new packing lines are starting operating with the beginning of the season.

Main varieties grown and exported are Galas, Red Delicious, Granny and diseases resistant varieties both conventional and organic.

Gullino exports almost the 95% of its volume mainly to Spain, UK, Germany, USA, Canada and UAE.

Arab markets became even more important this season because they are one of the main markets for Apples and the penetration of Gullino's product has been improved in the area



thanks to an important commercial action.

All products sold by Gullino have origin Italy and the 60% of the volume is grown in own Gullino's farms. This big own production is very important to help us to maintain a very high and homogeneity quality standards.

The season we are facing in a particular season because of the very small availability of fruits (in particular kiwis but Apples too) due mainly to the frost that affected almost whole Europe and Italy last spring.

Because of this small availability prices are pretty high and the targets for the season will be to increase Gullino's apples customers portfolio and to get satisfying returns for our grower that are facing a difficult season due to the small volumes produced.

As already expressed Arab markets like UAE, Saudi Arabia and Egypt has

been developed in particular for the Apples' export.

In around three years apples will become the most important item for Gullino. Varieties offered on the market will be mainly Galas, Red Delicious, Granny and diseases resistant varieties. A brand new Apples' sizing machine with optical internal and external selection and new packing lines have been inaugurated this season. We are constantly improving our quality and we're very proud to say that 100% of Gullino's kiwis are FREE OF post-harvest treatments.

This has been possible thanks to the know how acquired by studies made to improve our Organic Processes. Our main Apples orchards are in conversion from conventional to organic, so in two years Organic Apples will be an important item in Gullino's offer. 🏡

www.gullino.it





A NATURAL EXPERIENCE

Fra.Va. Srl was born from the expertise of Mr Valenzano and has been proudly carried out by his children. The company is located in Rutigliano (Ba), in the heart of the main production area of table grapes and cherries.

Puglia, in fact, is known in the world as a leading region for the production of these products, which are qualitatively superior to national and international standards.

For more than 50 years, the Valenzano family has been working in the fruit and vegetable sector in Puglia, dealing with the selection, packaging, refrigeration and distribution of fruit and vegetables, with the aim of supplying a first quality product to the most demanding markets.

The factory covers an area of 26,000 square meters, 11,000 of which are indoor and fully air-conditioned, where there is room for advanced machinery for processing and preserving the product, which allows the fruit to reach its destination as fresh and genuine as just harvested.

CERTIFICATIONS

The company is equipped with an Internal Quality Control System developed according to UNI EN ISO 9001/2008, based on the following standards:

- **IFS (INTERNATIONAL FOOD STANDARD)**

Fra.Va. Srl production organization has developed an integrated quality management system based on the Standard IFS Food that is applied to all phases of production: from the supplier qualification to the production and processing cycle of the entire supply chain up to the customer deliveries, with special attention to a thorough quality control.



- **GLOBAL GAP**

The protocol identifies and defines the good agricultural practices to be applied in the primary production process. The company, also responding to the demands of European distribution, has always recognized the Global Gap requirements as a standard to be applied in its business processes and it transmits the culture of GAP (Good Agricultural Practices) to the supplying companies, especially to the family farms.

- **SA 8000**

Another important goal achieved by the company was getting the certification for the Social Responsibility Management System, which demonstrates the commitment of Fra.Va. Srl for ethically correct behaviour towards workers, and a responsible production. Working in accordance with this certification standards helps to: reduce risks, meet the customer's needs, improve relationships with the suppliers, create better working conditions and a safer working environment, provide clear and reliable guarantees in making responsible purchasing decisions.

DISTRIBUTION

The efficient organization of the com-

pany guarantees the distribution of its products in very short time to the main national and international markets (Austria, Belgium, Canada, France, Germany, Holland, Poland, Portugal, United Kingdom, Spain, Sweden, Switzerland,) and to the most important Italian and foreign retail stores.

INNOVATION

Thanks to the use of advanced machinery, Fra.Va. Srl is able to preserve the freshness and authenticity of the fruit, offering a competitive, high-quality product.

The factory is equipped with the latest generation refrigeration systems, a Hydrocooler for rapid temperature cooling and an optical calibrator for processing cherries, a microwave that, together with an innovative packaging, lengthens the shelf life of the grapes, without altering the physical and organoleptic characteristics of the fruit.

ADVANCED TECHNOLOGY FOR A SUSTAINABLE PRODUCTION

All investments in innovation are directed towards a policy of sustainable production, which allows to produce in the most environmentally friendly way and to reduce resource consumption as much as possible.



An advanced 100 kWh photovoltaic plant produces clean and renewable energy; the machinery for the treatment of water used to process and sanitize fruit allows to better manage water resources, preserving a precious resource such as water.

AN INNOVATIVE TECHNOLOGY: THE OPTICAL CALIBRATOR

Fra.Va. Srl has decided to further improve its production through the installation of a new plant for processing and packaging cherries, which improves the already efficient organization of the company.

The plant, realized by ICOEL of Fondi (LT), in collaboration with the New Zealand company Compac Sorting Equipment, allows working in a highly automated way about 6 tons of cherries per hour.

The most innovative part of the machinery is certainly Compac's InVision system, which creates a real identity for each individual cherry tree: while rotating inside a transport cart, each fruit is subjected to about 60 photographs, 30 in colour and 30 in infrared, which analyse each berry in every single aspect.

The InVision software, through algorithms, determines the softness of each cherry, which is useful to have a skimming of the product from the first category to mature, and its bright-

ness, which is useful to have a skimming based on colour.

At the end of this phase, each cherry is divided according to its size, softness and colour. Finally, each type of imperfection is identified and the specific berry can then be addressed to an output for non-commercialisation. Thanks to this system, Fra.Va. Srl is able to deliver a uniform product of excellent quality, tailored to the needs of customers.

MICROWAVE TECHNOLOGY

Packaging using FIT's microwave technology (Food&Innovative Technologies) preserves grapes and cherries for much longer in a natural way, without the use of sulphites, leaving unchanged the physical and organoleptic characteristics of the fruit and, above all, their taste.

The use of microwaves is very functional to the management of the product during transport and exposure at the point of sale, breaking down pathogenic microorganisms and preserving the antagonist ones, which are useful in controlling and defending the product.

This system, in fact, guarantees the shelf life of the product for the entire supply chain, even after long interruptions in the cold chain (over 24 hours), thus contributing to drastically reducing waste both in the warehouse and at the point of sale as well as in the consumers' house.

THE NEW WATER PLANT

Another innovative process is the treatment of fruit processing water: a system that produces dematerialised water and sanitizes the product through the dosage of an appropriate sanitizer, allowing you to have a product with zero bacterial values and very low values of yeasts and moulds.

This process allows extending the shelf life of the product, preserving its organoleptic characteristics and giving a cleaner and brighter image of the fruit.

RESEARCH

FARMING TECHNOLOGIES

For several years, Fra.Va. Srl has been working on a process of continuous evolution that has led it to become a reference point for fruit and vegetable companies in the south-east of Bari. The use of integrated production techniques associated with GAP (Good Agricultural Practices) is the starting point for guaranteeing high standards of food safety and environmental protection.

The company, to fight Lobesia, uses the technique of mating disruption, a technique that allows reducing the number of phytosanitary treatments for insect control, one of the most dangerous pathogens for table grapes.

Micro-dose fertilisers are used to optimise the absorption by the plants, reduce leaks and groundwater pollution. The fertigation system optimizes fertilizer administration, without leaks of nutrients and water, thanks to their better distribution to the soil and their precise location near the root system of the crops;

Fra.Va. Srl works with the University of Bari in the study of new methods of land management, through the use of spontaneous or controlled grassland with annual or perennial meadows.

Through this system, soil management has been optimised, almost eliminating the soil treatment, obtaining a better response from the plant in terms of stress and reducing diesel consumption, with important repercussions on carbon dioxide production.

LUISA, FIAMMETTA AND APULIA – THE NEW VARIETIES MADE IN PUGLIA

Fra.Va. Srl, together with some important companies in the grape sector, has joined two "business networks" called Grape&Grape Group Srl and Italian Club Variety, companies that are active in research and varietal innovations.

On the one hand, the collaboration with the Italian Club Variety started in





2015 will lead to the introduction in 2018 of new varieties of seed grapes with medium/late ripening thanks to a genetic improvement project that involves some of the scientific and entrepreneurial excellence of the whole southern Italy; on the other hand, the partnership with Grape&Grape Group Srl has allowed Fra.Va. to create, patent and register 3 varieties from an all-Italian chain:

- Luisa is a seedless variety of table grapes (with herbaceous seed, soft and not sensitive to chewing), characterized by an intense yellow colour, bright and uniform, with an excellent preservability before and after harvesting, and a unique taste. In addition to the charm of the yellow colour, this variety has a very particular, tasty and pleasant flavour. The presence of a small herbaceous seed also guarantees all the benefits and beneficial properties of the seeds while leaving the

consumer the perception of eating a seedless grape.

- Fiammetta Seedless is a seedless variety of table grapes, obtained in Puglia using the natural technique of controlled pollination and thanks to the collaboration with Dr Stefano Somma, breeder of Grape&Grape Group Srl.

Fiammetta is a grape that ripens between the last decade of August and the first of September, characterized by berries of a bright red and uniform colour, thin and resistant skin, firm pulp, with a sweet and pleasant taste.

- Apulia Seedless is the third seedless variety of table grapes made in Puglia using natural crossbreeding methods.

The name "Apulia" evokes the history of Puglia, a region that has always been dedicated to the cultivation of grapes and that, thanks to the pas-

sion of farmers, excels in the production of table grapes.

The Apulia variety is a late ripening grape with harvesting period between the 1st and the 2nd decade of October.

It is characterized by grapes of a uniform violet red colour, thin and resistant skin, firm and crunchy pulp, with a sweet taste. The berries are rounded and uniform in shape and have shown high development potential in response to appropriate cultivation techniques.

The continuous commitment to varietal innovation and the search for increasingly advanced agronomic techniques, without neglecting the attention paid to the environment and company welfare, make Fra. Va. Srl a well-established reality of the Italian fruit and vegetable industry. 🏡

www.fravafruit.it



WE PRESENT YOU OUR PRODUCTS

Fra.Va Srl cherries and grapes from the Apulian land to worldwide tables.

Our land has to offer excellent quality produce.

We grow fruits trees and keep them healthy and productive to guarantee freshness and genuineness of the product.

- EXCELLENT QUALITY
- TRACEABILITY
- FOOD SAFETY

We remain at your disposal for further informations.

E-mail : info@fravasrl.it, tel.: +39 080 476 19 95

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A STORY, A FAMILY, A CHALLENGE

THE COMPANY OPAC-CAMPISI BETWEEN DREAM AND REALITY



The heart of the agricultural activity is the company. As Adam Smith wrote in 1776, “agriculture by its very nature does not allow a separation of the work, such as factories, nor allow a separation of one activity from another”.

A farm, even more if it's family-run, cannot be relocated because it is intrinsically embedded in a social and environmental context, in a specific territory and is permeated by a distinct local culture. The earth's products are made from intangible ingredients of a particular place, which cannot be reproduced elsewhere in the same way. For these reasons, the company is the family's number one priority, the centre of gravity of social micro-regulations. The family work is a unique alchemy made of “gifts” and “exchanges”.

This opening serves as an introduction to the story of the Sicilian family farm OPAC-Campisi. A company that was born and developed in Syracuse, led by the brothers Campisi, Giuseppe (production manager) and Dario (business manager) together with their sons and daughters: Nino, Roberto, Ludovica and Barbara.

It is a leading company in the fruit and vegetable sector with a particular focus on the production of citrus fruits. Their pride and joy is certainly the Lemon of Syracuse, the European capital of high-quality lemons. When entering their factory, the smell of this fragrance is very vivid, thanks to the pleasant fragrance of lemon essential oil that pervades the environment and welcomes at the entrance.



The centrality of the workforce and the importance of human resources are the pillars of the company philosophy: “without our employees, we would not exist!”, points out Dario Campisi.

“Our history starts immediately after the war”, explains Dario, “with four brothers who suffered, believed and fought in the agricultural sector, when the landowners were facing a deep crisis. My father, Antonino Campisi, was the smallest landowner of the area. The four brothers were great pioneers who, courageously and with a bit of luck, began to set rules and trends that then the introduction of protected crops improved, strengthened by their position on the market thanks to the first fruits that filled both the Italian and the foreign

markets. This strong and united collaboration between the brothers lasted about forty years. Then, as history teaches, that hidden desire that makes a man a creator of lineage, led both my father and his brothers to take different professional paths”. In the mid-1970s Antonino Campisi started his activity in full autonomy. Giuseppe and Dario, then, followed their father's footsteps and decided to take over the reins of the company, which they immediately evolved to very high-quality standards. Unlike other companies, which have weakened over the years, OPAC-Campisi has always tried to look ahead and follow the “trends” of the fruit and vegetable sector, also looking at the national “giants” like “a good writer would take inspiration from the great novelists”. Continues Dario, “from the very



beginning with my father and his brothers up to now, our strength has always been the "Family". Our company has grown gradually and now counts three thousand employees". "At some point, in the early 80's, my brother and I realised how to enter the market in a correct way thanks to a diversified distribution strategy. On the one hand, we tried to get a contract with the large-scale distribution (GDO), at the beginning of its history in Italy; on the other hand, since we saw how everyone wanted to enter the national market, we did not neglect the network of the small "provincial" distributors, and this rewarded us and made us stronger to enter into the large-scale distribution. This is a subtle mechanism, but it gives you the sense of frustration that the market often imposes on unexperienced entrepreneurs".

Today the OPAC company works exclusively with the Italian and foreign GDO and in the peak times of work it has about 300 employees.

The name "OPAC-Campisi" arrives later - in fact, the farm was initially called "Antonino Campisi di Giuseppe e Dario". Over the years, since they had to keep abreast of the times and the European orientation was to give more and more preference to the Organisations of Producers, they managed to create a family OP, that is an Organisation of Family Producers.

"The large-scale distribution rewards the Organizations of Producers that have parental relationships because they believe more in a family structure where they see strong ties and a more certain future, rather than phantom OPs that perhaps collect two thousand producers but becomes difficult to manage. Obviously, we really care about the company's health, we can see clearly when we face complicated issues and we do everything we can to overcome obstacles. The name OPAC derives from the acronym Organization of Producers Antonino Campisi in the name of

our father who was its founder and leader".

OPAC is a company that continues to grow in numbers, customers and image. It is diversifying its investments both in the agricultural and in the food sector. In 2012, in fact, it introduced a new commercial initiative, the "Gusto Gourmet Store", which, five years after its opening, offers the retail sale of excellent food, wine and agri-food products, with a particular care for healthy, organic, dietetic and gluten-free products to which the "Health Line" is dedicated.

Attention to detail, careful research of high-quality product and craftsmanship are the features that characterize this "store".

"In the wake of the enthusiasm for the creation of Gusto Gourmet Store and thanks to the help of our children, we are planning to complete the production chain of lemon with the transformation of the product to be used in cosmetics, essences, fragrances and pharmaceutical products. Our lemon, - both Giuseppe and Dario explain - the "Femminello Siracusano", as it is commonly known, has exceptional and valuable characteristics for its content in citric acid juices and for the fragrance of essential oils".

Regarding the lemon, it is important to highlight the close collaboration with the Consorzio di Tutela del Limone di Siracusa IGP, a reality that is proving to be of exceptional value. Therefore, with the arrival of the new generation, the OPAC company is trying to close the supply chain and enter a new market.

The arrival of young people in the company always brings a breath of news. Everyone with their own talent and role: Roberto and his father Giuseppe deal with the plant nursery and production in the fields; Nino and Ludovica are responsible for the commercial side as well as for the development of innovative projects. Finally, Barbara, the youngest, is cur-

rently finishing her academic studies. "In a citrus fruit processing company", says Nino, Giuseppe's eldest son," the management of the by-product has always been a problem. But if you shift the focus from the production to the 'transformation' this problem becomes a valuable resource. For example, let's take an 'imperfect' lemon: instead of positioning it in the retail chain, I will transform it into an essence or a fragrance, achieving two goals: the respect of the large-scale distribution quality standards and the development of a new market sector. The processing industry is a very important innovation. For fifty years we have been selling a perishable product with a limited shelf-life, being able to enter only the European market, maximum the Russian market. Instead, now we shift from a product that has 20 days of shelf-life to a product that has 3 years of life or, in the case of essential oil, more than 5 years of shelf-life. All this allows us to change the commercial vision but also the actors with whom we relate". Ludovica, Dario's eldest daughter, represents the female soul of the group: "About what my cousin Nino was saying, I would like to create a natural cosmetic line for women including our essential oils - body cream and other products based on lemon essential oil. This is a golden moment for the lemon and we, who know it from a long time, we must and want to look at this new scenario, transforming and diversifying the fruit: health, wellness, healthy diet and beauty. In my opinion, a winning sodality. In order to do this we would need a cosmetic company, but if the fruit is produced directly by us then transformed by us into a cream, this surely gives us a unique and incomparable additional value. An eco-sustainable project, with products of natural origin and high quality: this is our philosophy and our credibility".

And the challenge continues... 

www.opacampisi.biz



THE BEST OF ITALY IN ONE COLOR – RED

OUR VISION, OUR MISSION AND PHILOSOPHY OF EXCELLENCE

In a country with food manufacturing potentials, food manufacturing has to be set as one of the pillars of technological and economical progress.

PIGO set a goal to become an initiating force in technological and consequently economical progress in food processing industry, a leader in country and in the world in manufacturing of food processing machines from its program.

Today, PIGO has established itself as a world-class leader in the design and manufacture of high technology freezing, freeze drying and drying equipment, as well as fruit and vegetable processing equipment, with an extensive experience in both freezing and fruit and vegetables processing.

PIGO can proudly say that its machines achieve excellent operating characteristics and energy efficiency, while being user friendly, thus guaranteeing many advantages and privileges to the company's buyers.

Main products

PIGO has specialized in building fluidised bed freezers, EASY Freeze, the most suitable for IQF freezing all variety of fruits, vegetables and numerous sea, meat and cheese products, redefining IQF Technology With Adaptable Air Flow.

EASY Freeze technology is providing perfect shape of IQF product and no clumps - Full controlled fluidisation method keeps the product constantly suspended above the belt in a cushion of air. The result is the immediate crust freezing and efficient core freezing of individual pieces, regardless of type, variety or condition of product.



Maximized freezing efficiency for each unique product, whether the product is heavy, light, soft, sticky or fragile, thanks to Variable speed control of all fans and belts, allowing on-the-fly optimization of air flow conditions.

Interior video monitoring allows for real-time supervising of operating conditions, allowing the complete control and adjustments of the entire process from outside, without necessity to entering into the freezer.

EASY Freeze is considered as the freezer with the most superior sanitation, giving the possibility to user to freeze different products one after the other without risk of cross - contamination.

EASY Freeze is ENERGY SAVING and TROUBLE FREE solution for all your freezing needs.

Within the freezing equipment product line, PIGO also manufactures the innovative EASY Freeze SPYRO, the

latest generation of spiral freezers giving utmost advantages to the users in terms of energy efficiency, hygienic conditions and advanced technological characteristics, such as:

- Belts gear motors are positioned outside the insulated cabin (no lubrication inside the freezer) avoiding any risks of contaminations due to some oil leakages;
- The unit doesn't have any mezzanine floor and or intermediary platform, to avoid any dirtiness accumulation (presence of any mezzanine floor or intermediary platform are making more difficult the cleaning operations) - the absolutely highest hygienic standards;
- Freezer design is made according to max. thermal load and max. surface occupied on the belt by the different products foreseen;
- Low maintenance cost and low spare parts cost due to utilisation of high quality commercial components;
- Low pressure fans to higher air speed. In order to obtain a quick freezing process EASY Freeze SPYRO is designed for high speed circulation (4 -10 m/sec) of cold air

“Our philosophy is very simple: Give our best for people who expect the best” (D.Z.)



- in contact with the product, on the whole length of the spiral conveyor;
- Very low weight loss, which is two times less than with vertical air flow
- Hitting the incoming product with the coldest air; the product is therefore immediately “crusted” and snow formation diminished;

PIGO freezers are built in modular sizes and all components are made entirely of stainless steel, capable to provide perfectly frozen product even for delicate products like cooked rice, raspberries, etc.




PIGO also designs, fabricates and assembles sophisticated freeze dryers, **EASY Freeze DRYER - LYOPHILIZER**, product line which includes a broad range of standard and custom units, applying low temperature work and shorter cycle time. The freeze drying - dehydration technology allows to save delicate aromas while drying the frozen product under vacuum, producing premium quality product. Premium sensorial properties for finished product, absolutely superimposable to those of the fresh product. Machine execution is entirely in stainless steel (Chamber, doors, hinges, shelf modules, etc). In the EASY Freeze Drying concept Shelf modules and vapour condenser are contained inside chamber, giving as final result much shorter freeze dry-

ing time than any other freeze drying technology. Viewing ports are provided in the doors, allowing observation of both the vapour condenser and product trays during the drying cycle. Each unit is equipped with complete refrigeration plant of corresponding size, including also refrigeration condensing unit is purpose-built with capacity control to allow economical use of refrigerant. Includes condenser unit. Besides EASY Freeze, EASY Freeze SPYRO, and EASY Freeze DRYER - LYOPHILIZER, one of the company's main machines is automatic Pitting machine PG103 having up to five times higher capacity than other pitting machines on the market. Experience of all PIGO's clients confirms work with 0,00% of remained stones when adequate quality and

preparation of the fruit (clean, calibrated product with adequate ripeness) is provided. EASY DRY PG 135 multistage belt adiabatic dryer, with separate zones temperature and humidity control is sophisticated solution for air drying, even for delicate products. For extraordinary blanching results and efficiency is recommended SUPER STEAM Flow blancher-cooker.

PIGO systems are conceived to create a “High Added Value Fruit” production plant, which contains dozens of small innovations and a few large improvements for a more reliable system, all together also improving natural fruit characteristics. In the field of different drying technologies, PIGO is also providing CONTINUOUS INFUSION TECHNOLOGY and KNOW-HOW to its clients, giving possibility to improve also natural fruit properties, as well as extended shelf life.

To get a better idea of what PIGO does, please visit the website www.pigo.it or just send an e-mail to info@pigo.it, they will be very glad to send their detailed offer, and also a presentation with plenty of videos with its machines in the work. Short video clips of PIGO machines in operation are available on www.youtube.com, look for PIGOsrl. 

www.pigo.it





A GROUP OF GREAT SUCCESS IN THE WORLD OF PACKAGING



Tecno Pack

PACKAGING MACHINES

The three companies from the Schio area exhibited at the 2017 edition of Interpack in a unique exposition area, where the public could experience first-hand examples of technological integration, applied to automation needs in packaging of user companies.

The new products and innovations were numerous.

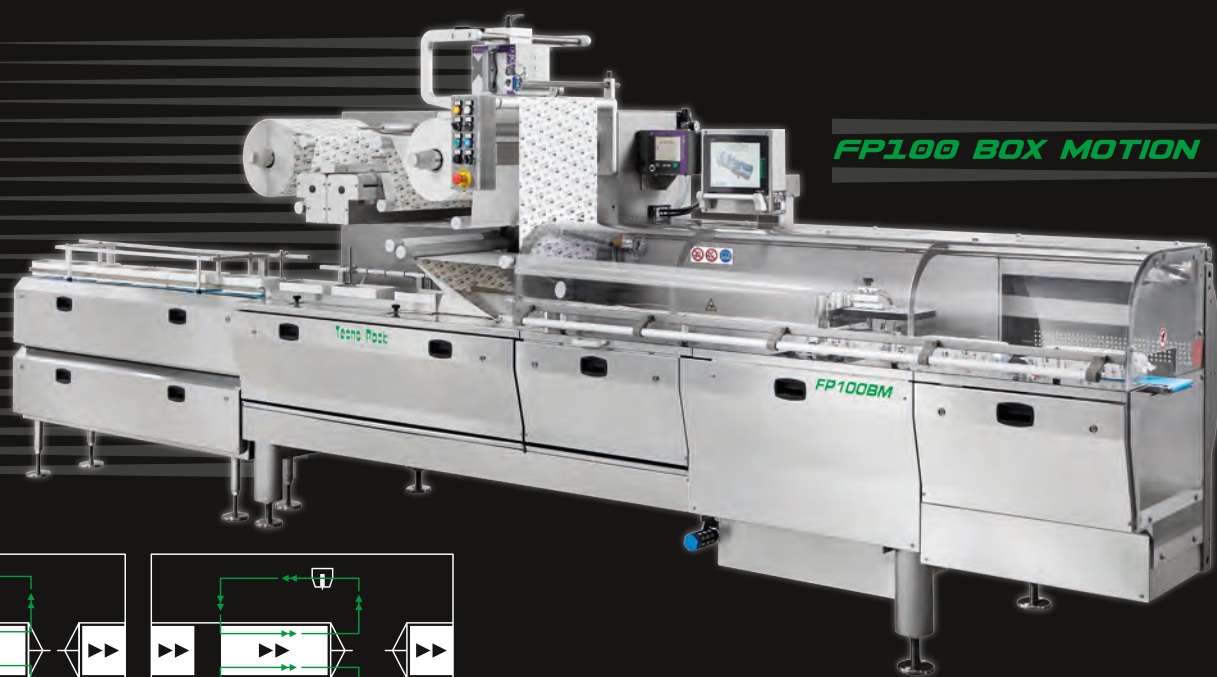
Tecno Pack presented a fully automated line able to pack with primary flow



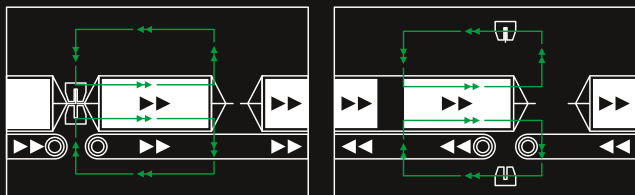
READY TO FLY?



**UP TO 230 PACKS PER MINUTE:
THE FASTEST BOX MOTION SYSTEM IN THE WORLD**



FP100 BOX MOTION



Tecno Pack is proud to introduce you the new electronic Flow-Pack packaging machine FP100 BOX MOTION.

Its equipment includes the BOX MOTION transversal sealing unit, which is known to be the fastest available on the market. This machine is the result of a demanding research in order to guarantee great versatility and high working speeds, up to 230 packs per minute.

Airtight sealing, gas flushing in a modified atmosphere and the aesthetic perfection, even with lateral gusseting, are always ensured. Tecno Pack box motion sealing unit guarantees great performances and versatility that cannot be compared to other long time sealing systems provided. We are at your disposal to accompany you in the new world of high speed and modified atmosphere Flow-Pack packaging.

ARE YOU READY FOR TAKEOFF?

Tecno Pack

PACKAGING MACHINES

Via Lago di Albano, 76 · 36015 · Schio (Vicenza) Italy · +39 0445 575 661 · www.tecnopackspa.it · comm@tecnopackspa.it



pack and secondary robotised pack machines up to 72000 biscuits/hour.

Companies visiting the stand were able to appreciate an application at the top of the current state-of-the-art, applied to industrial packaging.

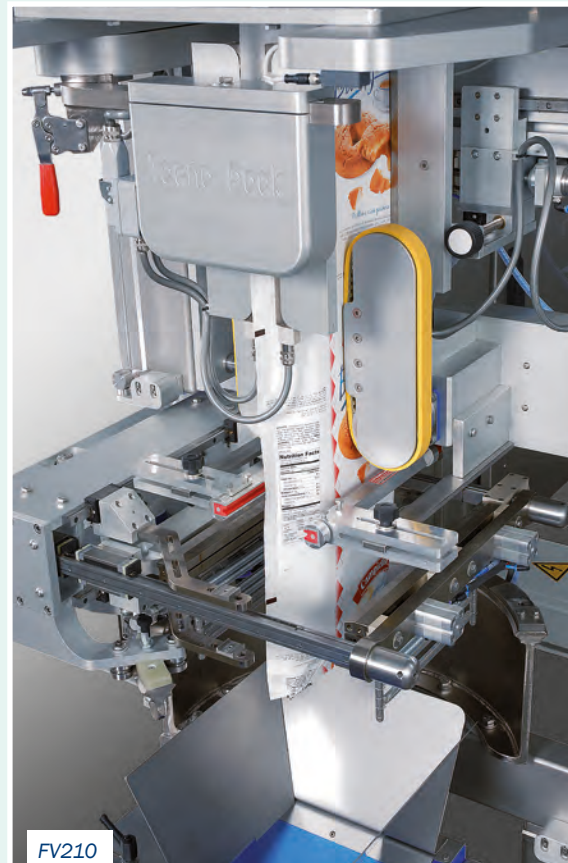


FV210

In this plant, we integrated the new FP 100 E horizontal flow pack machine, the result of dozens of years of technological evolution, used day after day by Tecno Pack S.p.A. The experience gained by serving the major players in the global market has enabled the Vicenza company to propose the most demanding users an even more advanced variation of horizontal flow pack machines.

This combination provides markets with a fully electronic packaging machine with highly-sanitised cantilever frame, motorised film unwinding calender, side-sealing unit with two separate motors, transversal sealing units, both long dwell (with the innovative, fast changeover system) and high-speed box motion.

The box motion version is currently the fastest prolonged sealing system with square motion of this type in the



FV210

EINE IN DER WELT DER VERPACKUNG SEHR ERFOLGREICHE GRUPPE

Unternehmen aus Schio werden auf der Interpack 2017 auf einer Ausstellungsfläche vertreten sein, auf welcher der Öffentlichkeit Beispiele für moderne technologische Integration präsentiert werden, die auf die Bedürfnisse der Automatisierung von Verpackungsunternehmen abgestimmt sind und die hier bestaunt und auch angefasst werden können. Zu sehen gibt es viele Innovationen und Neuheiten.

Techno Pack stellt eine vollautomatische Linie vor, die bis zu 72.000 Kekse/Stunde bei der primären Verpackung in Schlaubeutel abpackt und anschließend robotergesteuert umverpackt.



Diamond Tunnel

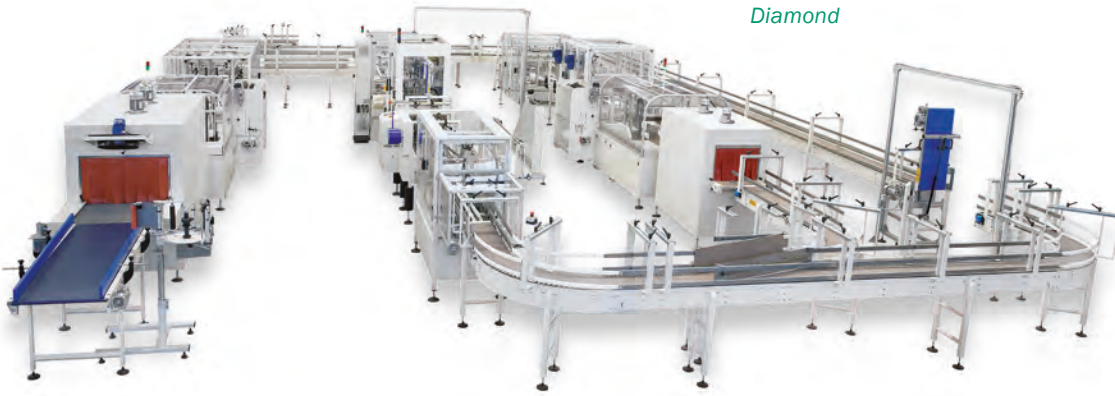


Unternehmen, die den Stand besuchen, werden sicherlich von einer Anwendung begeistert sein, die auf dem aktuellen Stand der Technik der Industrieverpa-

ckung ist. Denn in diese Anlage haben wir eine neue horizontale Schlaubeutelverpackungsmaschine FP 100 E integriert,



Diamond



Visitors were also able to see a vertical pillow pack machine based on the FV 210 model, a packaging machine completely made in stainless steel, equipped with an innovative cantilever

world; it combines the typical operating velocity of traditional D-like motion cut-seal machines, also known as long dwell, with the versatility of translating cut-seal machines, aptly known as box motion.

Ultimate operational precision, design and solutions studied for high sanitization, ergonomics, mechanic and electronic stability, high-speed for prolonged sealing, controlled atmosphere (MAP), manometric dosing

of liquids (alcohol and anti-mould), integration into advanced print systems, upstream and downstream interaction with any integrated system, easy and user-friendly touch screen, reliability and long service, make the new FP 100 packaging machine, designed to be integrated into automatic lines, the best top-of-the-range alternative for food companies that require the highest quality and performance standards.

frame, completely driven by brushless motors and able to produce 4-sided sealing bags with double gusset.

IFP Packaging revealed the TWIN T 75 N 90 automatic shrink-wrapping machine, which was integrated into the FV 210 vertical system with the task of automatically grouping the vertical bags and wrap them with shrink film, thus obtaining the so-called "secondary" packaging.

das Ergebnis von Jahrzehnten des technologischen Fortschritts, der Tag für Tag bei Tecno Pack S.p.A. gelebt wird.

Die Erfahrungen, die den wichtigsten Akteuren des Weltmarktes zugutekommen, erlauben dem Unternehmen aus Vicenza seinen anspruchsvollen Kunden noch fortschrittlichere horizontale Schlauchbeutelverpackungsmaschinen anzubieten.

Diese liefern den Märkten vollelektronische Verpackungsmaschinen mit freitragenden Konstruktionen für zuverlässige Hygienisierung, motorisierter Folienszuführung, Längssiegelungseinheit mit zwei unabhängigen Motorisierungen, Quersiegelungseinheiten sowohl Long Dwell (mit innovativem Schnellwechselsystem) als auch mit Box Motion mit hoher Geschwindigkeit.

Die Box Motion-Version ist derzeit das schnellste Versiegelungssystem dieser Art, mit quadratischer Bewegung; es kombiniert die typische operative Geschwindigkeit der Schneide- und Versiegelungsmaschinen mit „D“ Bewegung,

der sogenannten Long Dwell, mit der Vielseitigkeit der Schneide- und Versiegelungsmaschinen mit Translation, auch bekannt als Box Motion.

Absolute Genauigkeit während des Betriebszyklus, Design und Lösungen

für hohe Hygienisierung, Ergonomie, mechanische und elektronische Stabilität, High-Speed für längere Versiegelungszeiten, kontrollierte Schutzgasatmosphäre (MAP), manometrische Dosierung von Flüssigkeiten (Alkohol



general system pack

GSP55EVO





A line for the automatic packaging of AFH industrial paper rolls in high-speed shrink film, based on the electronic continuous horizontal packaging machine – DIAMOND BOX – has made the visitor appreciate high technical profile solutions for the tissue industry.

General System Pack offered the public three electronic horizontal flow pack

machines, including the GSP55EVO INOX L.D., specifically designed for packaging small and medium pieces of cheese in a modified atmosphere and ready to be positioned and to work in hostile environments.

The GSP65EVO for packaging food products in trays in a controlled atmosphere, followed by heat shrinking

and the achievement of an excellent aesthetic and shelf life result.

The presentation finished with the versatile and quick GSP50EVO, an electronic horizontal flow pack machine with great potential and excellent cost-quality- performance ratio; the excellent solution for worldwide medium-sized and artisan businesses – baking, for example.



GSP55EVO

INTERPACK 2017 visitors have received targeted responses, dedicated studies and extremely top-level solutions from the team of the three companies, to solve all issues with packaging in the most varied application fields. The group of companies headed by Tecno Pack S.p.A. is confirmed as worldwide leader in the industry of machine manufacturers and packaging plants dedicated as “tailor-made clothing” to companies that entrust their success in this excellent Italian business. 🏢

und gegen Schimmelbildung), Integration von fortgeschrittenen Drucksystemen, vor- und nachgeschaltete Interaktion mit jedem integrierten System, einfacher und benutzerfreundlicher Touchscreen, Zuverlässigkeit und Langlebigkeit machen diese neue Verpackungsmaschine FP 100, die entwickelt wurde, um in automatische Linien integriert zu werden, zur besten hochwertigen Alternative für Lebensmittelunternehmen, die Spitzenqualität und -leistungen verlangen. Die Besucher können auch ein vertikales Schlauchbeutelverpackungssystem auf der Basis des Modells FV 210 kennenlernen. Eine Verpackungsmaschine komplett aus Edelstahl mit innovativer Schwingarmstruktur, die vollständig von borstenlosen Motoren gesteuert wird und in der Lage ist Faltenbeutel mit quadratischer Form herzustellen.

IFP Packaging präsentiert eine automatische Bündelmaschine TWIN T 75 N 90, die in das vertikale System FV 210

integriert wird und die Aufgabe hat, die Beutel automatisch vertikal zu bündeln und mit einer Schrumpffolie, für die „sekundäre“ Verpackung, zu umwickeln. Eine auf der elektronischen horizontalen Verpackungsmaschine Modell DIAMOND BOX aufgebrachten Linie für die automatische Verpackung von Industriepapierrollen AFH mit Schrumpffolie für höhere Verarbeitungsgeschwindigkeiten wird das Interesse der Besucher wecken, die hohe technische Lösungen im Tissue-Bereich schätzen.

General System Pack bietet dem Publikum hingegen drei elektronische horizontale Schlauchbeutelmaschinen, darunter die GS P55 EVO INOX L.D., die speziell für die Verpackung von mittelgroßem und kleinem Käse unter Schutzatmosphäre entwickelt wurde und auch in aggressiven Umgebungen betrieben werden kann.

Die GS P65 EVO dient dem Verpacken von Lebensmitteln unter Schutzatmosphäre in Schalen mit anschließender Schrumpfung, dadurch erhält man ä-

ßerst ästhetische Ergebnisse von hervorragender Haltbarkeit.

Die vielseitige und schnelle GS P50 EVO schließt die Präsentation ab. Eine elektronische horizontale Schlauchbeutelverpackungsmaschine mit großen Potenzial und einem hervorragenden Verhältnis von Preis, Qualität und Leistung; die optimale Lösung für den Mittelstand und das Handwerk, wie zum Beispiel für Bäckereien.

Die Besucher der INTERPACK 2017 erhalten von den Teams der drei Unternehmen gezielte Angebote, spezielle Studien und hochwertige Vorschläge für die Lösung aller Probleme bei der Verpackung in den verschiedenen Industriebereichen.

Die Gruppe von Unternehmen, unter der Führung von Tecno Pack S.p.A., bestätigt sich international als Marktführer unter den Maschinen- und Verpackungsanlagenherstellern, mit Angeboten, die speziell auf die Unternehmen abgestimmt sind, die sich an diese erfolgreichen italienischen Firmen wenden. 🏢

The Evolution never stops...



general system pack



SCRIANI WINERY IS A SMALL JEWEL IN THE HEART OF THE VALPOLICELLA CLASSICA AREA

The Scriani winery in Fumane is a small jewel in the heart of the Valpolicella Classica area, a fertile land of tastes and traditions, designed by the rows of its famous vineyards and anchored to the undulating backdrop of sweet hills.

A corner of generous nature which sows and harvests fruit of extraordinary quality, from terrace to terrace, from vine to vine with the care and passion that has always distinguished these people.

The Cottini family has a long agricultural history and has founded the values of their work on the farming culture passed on by generations.

A passion for the land and a deep awareness of our roots have given the most authentic meaning to our lives for years.

Cultivating grapes with love according to traditions, in full respect of nature, means giving a continuity and authenticity to our projects and ensures an outcome which always lives up to our ambitions.

Stefano Cottini, owner of the winery SCRIANI, young winemaker in love with his vineyard, watching the big producers, attending and documenting and catching up on technology innovations, it takes wisdom from the old values and experiences of the past, succeeding with simplicity and a dash of unconsciousness to impose its authenticity investing everything with passion, in the hope



that the enterprise value, follows the success.

In our vineyards we do the pruning and harvesting exclusively by hand,



refines for eighteen months in barriques, followed by eight months in oak barrels and a further six months in the bottle.

The wine cellar is cared for in the greatest detail in order to ensure the greatest precision during each winemaking stage.

A prestigious selection combining body, perfumes and tastes, from delicate to intense, with unique nuances produced by the grape varieties: Corvina, Rondinella, Molinara and others.

Prizes and awards obtained at prestigious events are the most tangible evidence that the Scriani represents one of the most respected names in the panorama of Italian winemaking. 🏛️

www.scriani.it

SCRIANI

a carefully selected picking of the grapes in order to preserve the spirit of the precious grapes, caressing their sweetness and character.

A yearly ritual which reveals the wonder of an effort which transforms and brings joy and energy even to the air.

“Mandolari”, “Bosco”, “Carpanè”, “Tondin”, “La Costa” are pieces of land which host vines aged between nine and fifty two years, raised by the pergola system, in single and double rows, for a density of three

thousand three hundred plants per hectare.

The vineyards are positioned according to a logic that takes into account not only the terrain characteristics, but also the pattern of the surrounding woods.

A research for balance and respect in order to infuse quality and health, producing purity and transparency, all of these values are transmitted to our wines.

The most noble wine produced by Scriani is the Amarone, which





CFT GROUP COMPLETE LINES FOR THE TROPICAL FRUIT INDUSTRY

A 360° PARTNERSHIP WITH FRUTCO DE LAS AMERICAS

This month CFT Group has delivered its first turnkey line in Nicaragua, for FRUTCO DE LAS AMERICAS. This famous company is born from the merger between the Swiss based banana puree broker FRUTCO, and fresh banana producer COEN GROUP, based in Nicaragua but with Italian roots, employing over 7.000 persons worldwide.

The CFT Group/ FRUTCO project

CFT Group and FRUTCO companies first encounter took place during Juice Summit 2015, a well-known meeting point for the professionals of the Juice community, organized by the I.F.U (International Fruit & Vegetable Association.)

Let's discover the highlights of CFT first complete banana line, designed and manufactured especially for FRUTCO to answer specific needs (passion fruit juice and banana puree for multiple purposes such as baby food production for instance):

- CFT aseptic filler Macropak was offered with a special OXONIA KIT, used to fill low-acid products, such as banana puree. The company is actually about to obtain the FDA (Food & Drug Administration) validation, necessary for the customer to be authorized to sell its puree in the USA and reach the highest product quality on the market.
- FRUTCO also had a special request to handle its passion fruit puree with extreme care: thanks to CFT dedicated extractor GIUBILEO, FRUTCO is able to reach an extraction return of up to 30%, combined with a peel depulper which is going to recover up to 5% of juice. The second step is the product flowing into our GIUBILEO extractor which task is to carefully eliminate any possible seed, to finally arrive into our decanter where black specks are removed. The juice obtained in the end can be sterilized and aseptically filled, or alternatively, it can be cooled down to be finally frozen.
- CFT Group has designed and engineered a special series of resized scraped surface heat exchangers, our OLIMPIC range, and, in the same time, has drastically improved its maintenance system.



LEADERS
INNOVATE.



- The star rotating valve is usually mounted on the Cold Extractor GI-UBILEO, to avoid the entry of air in the machine. In this specific case it has been decided to locate it on a hopper which works as a buffer, where the banana (peeled and still unbroken) remains for some minutes before being inactivated.

CFT Group complete lines for the Tropical fruit Industry: a 360° partnership

This new project highlights the strong presence of CFT Group in the Tropical fruit Industry, with highly innovative solutions able to handle even specific Fruits needing a suitable equipment, such as the banana and the passion fruit. CFT Group highly precise equipment allows to reach very high quality standards in terms of product preservation, whilst answering all hygiene standards.

Beyond the design and installation of the machine, the collaboration between CFT Group and FRUTCO/COEN GROUP has been a real partnership. CFT Group provided a complete 360° consulting support, allowing to launch this activity in the best possible way, always with the aim to maximize the machines performance.

CFT is also present locally, thanks to a partnership with FISA group to provide premium and prompt technical support throughout the whole installation and in the after-sales phase as well.

AWARDS: Talking about I.F.U

For the record, CFT had already won the I.F.U Innovation Award in 2016 for our ZENITH technology: we have been rewarded for “our innovation and our outstanding contribution towards the fruit and vegetable juice industry”. The IFU is the larg-



est fruit juice manufacturers organisation in the world, which has been in existence for 50 years and now represents 32 Countries.

Designed specifically for fruit (and tomatoes) the «technology was patented in 2006 – states Mario Gozzi, sales area manager of CFT – in order to extract the fruit puree in an anaerobic (oxygen-free) atmosphere, and then proceed immediately with the heat treatment, thereby avoiding product oxidation, which is normally a very rapid process that turns fruit and vegetables

brown. The result is a brighter, more natural product, which fully maintains its nutritional and organoleptic properties without the need for antioxidant additives».

The Zenith Chrono lines has already encountered a very quick prompt success, handling peaches, apricots and ultimately to tropical fruit – explains Gozzi – and that’s not all. In addition to puree, we have also started to apply this technology to cloudy juices». 🏠

www.cft-group.com



FRUIT AND VEGETABLE PROCESSING LINES

The company Navatta, founded by Mr. Giuseppe Navatta in 1983, produces and installs fruit and vegetable processing lines and boasts references across the globe.

Navatta Group is also centre of excellence for the production and installation of processing machines and plants for peeled tomato and tomato by-products; it counts many references all over the world, with capacity ranging from 20 to 120 t/h of incoming fresh product. Navatta Group is today a well-established and technologically efficient reality, also thanks to the numerous companies' acquisitions over the years, such as Dall'Argine e Ghiretti in 2001, a 40-year-old company world famous for rotary can pasteurizers and tomato pulping lines.; Mova, in 2010, with extensive experience in bins handling, bins and drums emptying, palletizers and de-palletizers, washing systems; Metro International, in 2012, leader in fruit and vegetables processing, boasting international patents for juice and

puree extraction, concentration plants and thermal treatment; Ghizzoni Etore, in 2012, specialized in special batch plants for ketchup, sauces and jams.

MANUFACTURING RANGE

NAVATTA GROUP manufactures and commissions Processing Lines, Systems, Equipment for Fruit, Tomato, Vegetables for:

- peeled / diced / crushed tomatoes, tomato sauces and purees, tomato paste, all filled into any kind of package or in aseptic.
- diced, puree, juices (single strength or concentrated) from Mediterra-

nean / tropical fruit, all filled into any kind of package or in aseptic.

- Fruit crushing lines from IQF, frozen blocks and frozen drums.
- high yield PATENTED fruit puree cold extraction, fruit purees / juices equalized in aseptic.
- Wide range of evaporators to produce tomato paste Mediterranean and tropical fruit concentrate.
- Evaporators for coffee and milk: evaporation before spray atomizers, freeze dryers or other dryers.
- Evaporators for cogeneration industry (waste treatment).
- Aseptic sterilizers.
- Aseptic fillers for spout bags/ spoutless Bag-in-Box 3 - 20 liters, Bag-in-Drum 220 liters, Bin-in-Box / IBCs 1.000 - 1.500 liters.
- Spiral-cooler.
- Formulated products productions (jam, ketchup, sauces, drinks) starting from components unloading to dosing, mixing, mechanical / thermal stabilizing, to filling into any kind of package or into aseptic mini-tanks.
- Processing pilot plants.
- Vegetable processing as receiving, rehydration, cooking, grilling and freezing. 🏡



Single head aseptic filler for small bags without spout - mod. AF1WS Calipso patented system



Web-drum automatic filler & case packer - Web: 3-20 lt/drum: 220 lt

www.navattagroup.com





NEW VERSIONS OF WELL-KNOWN MIXPROOF VALVE DESIGNED TO MEET YOUR INDUSTRY CHALLENGES

Cover your industry specific needs with the new Alfa Laval Unique Mixproof High Alloy and UltraPure versions

A reliable process with flexibility and sustainable advantages ensures high product quality and strengthens your competitiveness in hygienic manufacturing of food, dairy, beverage, pharmaceutical and home & personal care products.

Food / Dairy / Beverage industries: Manufacturers of products containing high chloride concentration or low pH-levels often face corrosion challenges in their hygienic processes. A few examples:

- Food: Soy sauce, ketchup or citrus acid extraction
- Dairy: Lactic acid, whey and brine from cheese manufacturing
- Beverage: Isotonic drinks, minerals dosing and hot water systems

Meeting the demand for higher corrosion resistance, Alfa Laval's newly launched high alloy versions of its well-known Unique Mixproof valve secure superior product safety and longer equipment lifetime. The new Alfa Laval Unique Mixproof High Alloy version comes in two optional materials: Hastelloy C22 and AL6XN.

Home & Personal Care industries: When producing anti-perspirant deodorants, fabric softeners and bleach type products there may be a need for equipment with high corrosion resistance in certain parts of your process. Products containing quats with high chloride content and aluminium chlorohydrate tend to increase pitting or crevice corrosion leading to pos-

sible equipment failure and systems leakages. The new Alfa Laval Unique Mixproof High Alloy, manufactured in either Hastelloy C22 or AL6XN, gives you two solutions for higher corrosion resistance, longer equipment life and reduced production downtime.

Biotech & Pharmaceutical industries: To meet the high standards needed in the growing pharmaceutical industry, Alfa Laval has launched its well-known Unique Mixproof valve in an UltraPure version. Like all of our UltraPure equipment, the new Alfa Laval Unique Mixproof UltraPure comes with the Alfa Laval Q-doc package ensuring full traceability (3.1 certification) and seals with FDA, USP class VI and TSE/ADI certificates. Furthermore, the new Unique Mixproof UltraPure version will be available in high alloy materials: Hastelloy C22 and AL6XN. These alloys meet the demands for higher corrosion resistance from aggressive applications including, buffer solutions, cleaning liquids, high salt solution etc.

About Alfa Laval

Alfa Laval is a leading global provider of specialized products and engineering solutions based on its key technologies of heat transfer, separation and fluid handling. The company's equipment, systems and services are dedicated to assisting customers in optimizing the performance of their processes. The solutions help them to heat, cool, separate and transport products in industries that produce food and beverages, chemicals and petrochemicals, pharmaceuticals, starch, sugar and ethanol. Alfa Laval's products are also used in power plants, aboard ships, oil and gas exploration, in the mechanical engineer-



ing industry, in the mining industry and for wastewater treatment, as well as for comfort climate and refrigeration applications.

Alfa Laval's worldwide organization works closely with customers in nearly 100 countries to help them stay ahead in the global arena.

Alfa Laval is listed on Nasdaq OMX, and, in 2016, posted annual sales of about SEK 35.6 billion approx. 3.72 billion Euros. The company has about 17 300 employees. 🏢

www.alfalaval.com

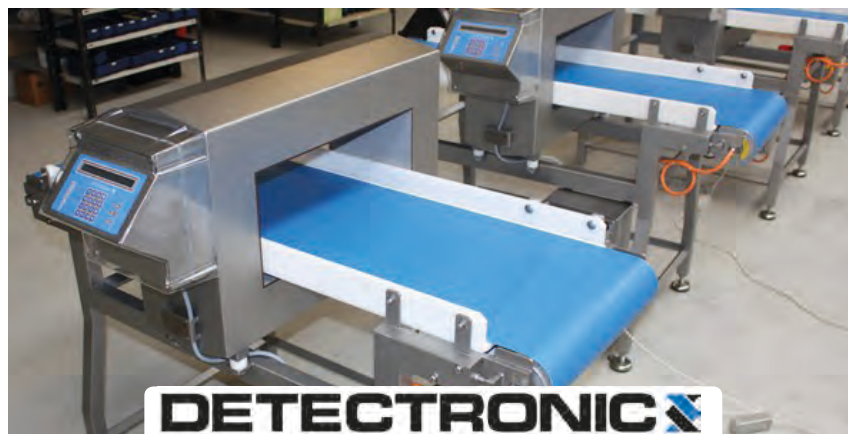


DETECTRONIC, MANUFACTURER OF FOOD INSPECTION SYSTEMS

DETECTRONIC is a privately owned company with production facilities based in Denmark. We develop, manufacture and market industrial food inspection systems - including metal detectors, checkweighing systems, multi check systems, X-Ray systems as well as grading and sorting solutions. We have experienced rapid growth and expansion over the last decade. Today, we are present on all continents in the World, which enables us to provide prompt and effective services to meet the requirements of our customers globally.

High Quality Solutions

DETECTRONIC has been producing metal detectors since the mid 80's and a vast majority of the first produced machines are still fully operating almost 30 years later. This underlines our high quality and the great craftsmanship which DETECTRONIC delivers year after year. DETECTRONIC metal detectors are supplied in glass blown stainless steel. The machines are easy to clean and fulfil all the demands set by today's food industry. The modern micro process controlling system and the newly developed Super Sensitive detecting system makes the DETECTRONIC metal detectors among the most sensitive and effective machines on the market. Also precision and speed is a benchmark for Detectronic check weighers, with speeds up to 260



pcs/min and a precision of 0,2 gram they are among the fastest and most effective on the market. Due to its rational and cost effective construction, the machine has also proven ultra competitive with a very high performance/cost ratio.

Providing Higher Standards for Food Safety

Working with the food processing industry means having to deal with foreign objects such as bones and metal that can be introduced into the product during processing; such foreign materials can act as choking hazards that can endanger the consumers. Cutting tools used during processing, such as knives, can also find their way into the final product, and are some of the most dangerous contaminants for the products. We aim to help our customers provide higher standards for food safety.

Strong partnership

We care about our customers' food responsibility - and therefore we are very passionate about providing our customers with the best quality solutions within industrial food inspection systems. We believe that strong innovation starts by forming strong partnerships with our customers. Our history proves, and we will continue to keep an eye on the future and provide innovative solutions for our customers that reach into the next decade.

Contact

We have many years of industrial knowledge, we focus on our customers needs and we can provide you with flexible solutions that will save you time and money. 🏠

Learn more on www.detectronic.dk



Metal detector systems



Xray systems



Weighing systems



HIGH-TECH SOLUTIONS FOR THE OLIVE OIL EXTRACTION

The passion for innovation has always been the driving force behind the Pieralisi Group. This is just as true today as at the outset when Adeodato Pieralisi set up his first workshop in the small town of Monsano in **1888**, the start of this family-run manufacturing business. From the **post-war period** onwards, the Group's main plant in Jesi has specialized in **olive oil machinery** and what was once a family-run manufacturing business became an industrial enterprise with a solid organization.

In the **1960's**, Pieralisi revolutionized traditional olive oil extraction systems, conquering domestic and international markets with the first decanter for olive-oil continuous processing. Starting in the **1970's**, Pieralisi moved into new sectors of the market. The Group's large experience and know-how in the olive oil sector led Pieralisi to offer centrifugal force as a rational solution to production processes in a wide range of food-processing and industrial sectors. The Group's success was so rapid that, in just a few years, it established itself as the **world's leader company in centrifugation**.



The key to Pieralisi's success in the olive oil sector is the continual testing of innovative high-tech solutions aimed at increasing customers' olive oil yield and quality. This commitment dates back to Pieralisi's introduction of the first continuous-processing decanter that revolutionized the olive oil extraction process. Still today the Group provides the olive oil extraction industry with modern plants that are automatically able to handle all processing stages and to keep track of all data for complete traceability of the product.

In 2012 Pieralisi revolutions once again olive oil sector by introducing **LEOPARD**, the only centrifugal extractor with **DMF technology** (Multiphase Decanter) which represents the solution of the third era for olive oil extraction, turning a by-product to be disposed of into added value for the miller. The last innovation created by the Pieralisi Group is the **Protoreactor®**, a unique system for the worldwide olive oil market that revolutionizes the traditional kneading process granting important advantages in the batch and industrial processing. It increases the quantity and the quality of the product with an energy saving due to the reduction of kneading time and heat loss.

The result is a significant increase in polyphenol and better organoleptic properties of the produced oil. 🏡

www.pieralisi.com



GRUPPO
PIERALISI
INNOVATORI PER PASSIONE



PND SRL, THE GLOBAL MARKET REWARDS HIGH-QUALITY SPECIALISATION



Specialisation, customer care, continuous innovation, custom technology and extensive knowledge of international markets are just some of the features that have enabled PND srl to be among the leading companies in the world in the construction and sale of machinery for the processing of fruit.

Alongside this quality is the conviction of having to insist on ever-increasing knowledge of the industry where we have gained such experience that we can be clearly distinguished from our competitors throughout the world.

This awareness means that PND is not forced to yield to the urging of some customers who would also like us to provide machinery for processing other products, such as vegetables.

PND is proud of its strong identity, which allows it to avoid having to pursue success through contests or by undergoing frenetic diversification. The only recognition to which PND aspires is the satisfaction of its customers, who choose PND machines without focusing on appearances or rumours but rather on the substance of the proposed solutions.

This success can be easily seen in the figures racked up by the strawberry de-calyx machine (Mod. DF12 - DF24). This machine, only 24 months after its launch, is already present with more than 40 units in four continents.

Companies based in the United



States, Mexico, Spain, South Korea, Poland and Egypt have chosen the features of the PND strawberry de-calyx machine.

Indeed, this machine makes it able to work with considerable volumes of fruit with great quality, reducing waste to a minimum.

Normal de-calyxing machines usually create product waste of about 30%. With the PND de-calyx machine, however, this waste is reduced to only 10%.

This means a large amount of product is recovered, especially if we take into account the fact that the models built and marketed by PND can

respectively process 300 fruits per minute (Mod. DF12) and 600 fruits per minute (Mod. DF24).

Another feature that makes the PND strawberry de-calyx machine a winner is its ability to work with all the various sizes of strawberry without needing to be pre-calibrated, as well as its ability to remove any type of calyx. These features make it particularly popular in Mexico or wherever it is necessary to switch quickly from the field to production.

Without the need to intervene in the settings, the PND strawberry de-calyx machine is able to process a wide range of product with a diameter ranging between 18 and 55 millimetres, a range that, in practice, includes all types of strawberries.

It is a truly global machine, as PND srl is also truly global, being based in Italy, but with representative offices located in several different countries.

A team consisting of 30 people, including administrative and sales



staff, technicians and engineers, based at its headquarters in Scafati, in the province of Salerno, in the south of Italy, works alongside agents and technical offices all around the world. Indeed, the human element is one of the main resources of a company with these kinds of mechanical and technical strengths.

Despite the widespread presence of PND representatives on the various continents, when it comes to installing a new machine, there is always an expert who travels from the parent company and follows the process through to completion.

This assumption of responsibility is a guarantee for the customer, which knows from the very first moment that it is going to be accompanied constantly from the design phase to the commissioning of the system.

This constant attention to the needs of its customers is a winning strategy that allows continuous updating in the field and a swift response to customer needs means that customised production lines can be offered to them.

The ability to deal constantly with customers all around the world offers

the technicians from PND the opportunity to tackle new challenges and properly understand the needs of their customers.

This situation has given rise to the NEW coring - slicing machine mod. DRR, which is able to chop and slice apples and peaches with low energy consumption.

The loading plate rotates at regular intervals, so that when the plate stops the three work operations are carried out at the same time: the operator loads the fruit and the two mechanisms perform the coring and slicing operations. The machine has a stainless steel structure and is placed on wheels (with brake) for easy movement. If so desired, adjustable feet can be requested in place of the wheels. The coring tubes are available in different diameters as required. All modifications can be made thanks to the competence and availability of PND technicians, making it possible to carry out mechanical adaptations to the machinery, tailoring the type of processing to your needs. Another example of the versatility of the machinery manufactured by PND is highlighted by the changes that have allowed us to adapt our apple peeling machine to the needs of South Korean companies engaged in the processing of nashi apple pears. This fruit has the consistency of a pear, the smooth shape of an apple and the diameter of a baby melon. This challenge was brilliantly resolved by PND.

Relying on PND means having personalised assistance anywhere with skilled technicians able to speak different languages and enjoying the on-site support of offices in Europe, USA, Canada, Brazil, Chile, Argentina, Peru, South Korea, Egypt, Tanzania, Australia, China, Turkey, United Arab Emirates and Qatar.

Pears, apples, kiwi fruit, oranges, grapefruits, lemons, pineapple, lem-

ons, mangoes, strawberries and peaches are the varieties of fruit handled, with all their possible variants, in order to meet the needs of companies engaged in the production of 4th Range fresh products, the canning industry (jam and canned peaches), and the dried and frozen sectors. The food industry has always had a need for innovation and has different requirements and peculiarities depending on the different target markets. For example, in the United States and Europe, the Fruit Fresh Cut is one of the main production sectors, unlike in Turkey, where the main operations are focused on dehydrated or dried products.

PND's main ability is always to provide successful solutions to make processing easy and economically advantageous, complementing the lines, for example, with a freezing tunnel or drying ovens.

Those wishing to learn more about the wide range of solutions offered by PND srl can do so easily on the website at www.pndsrl.it where, besides being able to view the catalogue of machines and lines on offer, you can also see the full calendar of international trade events in which PND takes part with its own stand and make an appointment with the staff of the company, thus offering you the opportunity to receive the most suitable solution for your business. 🏠

www.pndsrl.it





SANITIZING AND PRESERVING WITH OZONE



De Nora, with its series of De Nora Next ozonizers, offers effective solutions for meat, cold cuts, cheese, fresh pasta, bread and pastries

A full range of well-tested ozone-based application solutions, that De Nora, a company that has been operating in the electrochemical field for over 90 years, can offer, due to its cooperation with important partners and its commitment in research projects.

“Ozone has numerous applications due to its oxidizing and anti-microbial properties”, explains Cristian Carboni, Ozone Application Specialist at De Nora, “it oxidizes not only bacteria, yeasts and moulds but also other organic and residual compounds that may be present in water or on surfaces, without leaving any traces! Ozone is also effective against biofilm, a problem that many food companies have only discovered over the past few years. In fact, the bacteria present in biofilm may be viable but non-culturable, which makes them difficult to detect using traditional methods of analysis such as cultivation on Petri dishes”. “Companies often ask me if the use of ozone affects the quality of the product.

Chemical and sensory analysis have shown that, when used correctly, ozone does not affect the taste even of delicate products such as culatello, stracchino, taleggio, gorgonzola, salami, speck, raw ham and ricotta and does not produce peroxides or oxidation by-products”.

The Dairy Industry

Many studies have shown that ozone is effective in the treatment of water for cooling mozzarella cheese, which may contain bacteria such as *Pseudomonas aeruginosa* or *Pseudomonas*



Taleggio ripened in air and rooms sanitized with ozone;

fluorescens (cause of the blue streaks in mozzarella and other products); in the treatment of rinsing water used, for example, in CIP (Cleaning In Place) cycles to avoid transferring any contaminants that have survived the sanitization process from one tank to another; and process water that may be contaminated by the biofilm present in pipes and brine regeneration. Ozone improves the quality and safety of the products with no risks for staff.

The research conducted by the University of Udine, Department of Food Science and CNR ISPA, Institute of sciences of food production, entitled ‘Use of ozone in the production chain of high moisture mozzarella cheese’, published in 2013, shows how ozone is effective in reducing the contamination caused by the use of water, in the production processes of the Dairy industry.

It has also been demonstrated by many studies that gaseous ozone is also effective in sanitizing the rooms used for cheese maturation and ripening in that it prevents the development of undesired moulds (image 1) and mites, during the ripening stage,

and the presence of insects such as *Piophilina casei*. In addition ozone has proven efficacy against *Listeria Monocytogenes* on savoury ricotta, P.D.O. gorgonzola, P.D.O. taleggio and other kinds of cheeses.

Meat and cold cut industry

In the meat and cold cut industry, the use of ozone has been widely studied in ripening rooms for its effects against mites and to prevent the development of unwanted mould, in all production, cutting and packaging environments to reduce the risk of contamination by microorganisms, in particular *Listeria*. Gaseous ozone enables to sanitize both air and surfaces (particularly points that are difficult to reach such as cooling systems and the inside of machines and conveyor belts).

Sanitizing production environments and cleanrooms, especially those in which the products are cut and packaged, ensures a significant increase in the safety and shelf life of products.

Also in the meat industry ozone can be used to treat process water that may be contaminated by the biofilm present in pipes.



Taleggio ripened in air and rooms not sanitized with ozone.

De Nora Next ozone systems

With its De Nora Next series, De Nora provides a wide range of ozone systems capable of functioning at different concentrations and generating ozone gas or ozone water according to the specific application. The technologically advanced NEXT ozone series are equipped with ozone sensors to guarantee the safety of the workers and the right dosage of the correct volume of gas. The PLC enables the system to be managed simply through its user-friendly interface. De Nora is a multinational company, leader in the design of products and technologies for sustainable growth: energy saving and water treatment. It is the largest group in the world that supplies electrodes for electrochemical process and is one of the recognized protagonists in the technology and processes for the treatment and disinfection of water.

The De Nora products represent key elements with a high added value in transformation processes for a large number of industrial applications: chemistry, water treatment, electronics, energy storage and the protection of infrastructure from corrosion.

De Nora operates in 11 different countries with 23 sites, 13 production plants, serving customers in 119 countries. Its research and development centres are in Italy, USA and Japan. At present, the company holds 344 families of patents with over 2000 regional extensions. www.denora.com 

Fish industry

The use of ozone in the treatment of process and washing water and the sanitization of production environments ensures control against cross contamination and the increase in bacterial load that normally takes place during the working day. It also prevents the formation of biofilm in pipes and helps to oxidize it if it is already present.

Ozone water is widely used in mollusc farming and the preservation of crustaceans, in fattening or prefattening tanks, in recirculating water on fry farms and process water in general, with considerable advantages in terms of the size and growth of the fish. Other uses are the production of ozone ice and use of the gaseous phase for treating air in the production environments.

Fresh pasta industry

In the pasta, sweet and savoury pastry industry, following their removal from

the ovens or pasteurizers, products are exposed to a high risk of contamination from the air, conveyor belts or other machinery; the cooling tunnels and packaging rooms in particular may become critical points of the process with a negative effect on the product's shelf life and process water contributing to an increase in the microbial load of the products of up to 4 logarithms (1000 times) in a few metres.

Ozone is effective in clearing these environments from bacteria, viruses, fungi and moulds without raising the humidity level and thus the water present on surfaces and in the air.

Water purifiers and wastewater

The ozone systems in the NEXT technologies series can also be used in the treatment of wastewater to reduce the COD and BOD levels, remove a wide range of microorganisms and reduce the quantity of sludge produced, thus cutting disposal costs.

Example of an application



Product not treated with ozone

Product treated with ozone

An example of the use of gaseous ozone, effective in the sanitization of cold cut maturation and ripening rooms: two salami sausages from the same production batch, one ripened in a room sanitized with ozone and the other preserved in a room not sanitized with ozone.



FOOD REFRIGERATION SYSTEMS: SAFE, EFFICIENT AND ENVIRONMENTALLY FRIENDLY

Zanotti Spa, an Italian company, has been a point of reference for the design and implementation of cooling systems since 1962. In the cold chain since more than 50 years, its name echoes above all, in every field of application. Zanotti, as we were saying, has developed each component of the cold chain. From the storage of raw materials (such as cereals in silos), all the way up to supermarket, stores and restaurant distribution, including the processing of foods, transport with special units to handle and store food safely, Zanotti is always present, accurately and expertly responding to every need with a wide range of products, which actually is the most complete on the market.

Zanotti is now an international group with production sites in Spain and England and with a capillary distribution network to ensure reliability and assistance anywhere. Furthermore, its name is recognized at international level. In the Middle East area and Far East, Zanotti has been chosen by top class catering companies, Emirates Flight Catering and Oman Air, to realize the largest refrigeration systems for important airports. The total value of these projects rises approximately to 30 million euros and the plants are designed to comply with the highest hygienic and




reliability standards. Talking of 'turn-key plants' in the Republic of Kabardino-Balkaria (Russian Federation), Zanotti has been awarded a contract for the supply of a complete storage system for apples and fruits, beating the most important European competitors. The state-of-the-art technologies designed by Zanotti, allow to store apples at controlled temperature and atmosphere for long periods of time, up to 7 months, using nontoxic food grade secondary coolants.

Zanotti realizes big plants also in other sectors and countries like, for instance, cooling systems for meat in Russia, cooling and freezing systems for chickens in Lebanon and Ethiopia, refrigeration units for yogurt and ice cream production in Greece, logistic refrigerated warehouses in Middle East and Italy.



Zanotti is also active in the design and implementation of refrigeration systems for the ice rinks and the names included in its portfolio don't leave any doubt. It has designed and supplied the Olympic rinks of Turin, the World Championship Arena of Minsk (the biggest one in Europe), the Barys National Ice Rink in Astana and the new Dynamo Arena in Moscow. **The key of its success?** The absolute research of the solutions able to respect the organoleptic qualities of foods, the care for the environment and, for its customers, the best energetic efficiency with the lowest running costs. Zanotti's cooling units do indeed make use of technologies that are in line with its customers' expectations and, able to reduce the environmental impact: new natural gases and Ecodesign protocols for the total recycling of the equipment at the end of its life. Energy efficiency offers advantages for the environment, customers and foods.

Zanotti is innovation, green conscience, quality and expertise: these great premises for the future are based on its past experience. 

www.zanotti.com





ABOUT IG INTERNATIONAL PVT LTD. (IGIPL)

IG is one of the leading fresh produce importer/exporter company dedicated to provide high quality produce to consumers. With over 50 years of experience grown into a group of 14 companies committed towards supplying the demand of high quality fresh produce. Imports of fresh produce is the core activity. Promoter and Chairman Mr. Gian Chand Arora first imported fruits in containers from Australia in 2000. Since then, IGIPL has started investing in infrastructure and has become a leader in the Imported Fresh Fruit Industry and are now handling volumes to the tune of 2000 - 40 feet refrigerated containers from over 22 countries across the globe.

IGIPL also manages the distribution of the goods through its 28 wholesale outlets across India.

With over 5 decades of experience in the industry, IGIPL has become a leading marketer and distributor of nutritious, high-quality fresh fruits across India and brand IG is trusted symbol of product quality, freshness and reliability. Turnover for FY 2016 stood at Rs. 400 crores.

Along with imports, IGIPL has interests in exports as well as third party logistics and temperature controlled warehousing. We are primarily exporting Potatoes and Grapes to Russia, Europe and South East Asia and have invested in developing packing lines and warehousing facility to cater to the expanding business.

IGIPL, is also in the business of Third party Logistics and temperature controlled warehousing. With present capacity of 40000 MT and facilities in Mumbai, Chennai, Bangalore, Jaipur, Chandigarh. Theog and Amravati. We presently have a fleet of 50 refrigerated trucks and 20 refrigerated trailers equipped with 40' reefer Containers.



Promoter Profile

Mr. Gian Chand Arora – Chairman and Managing Director

- 5 decades of experience in the Industry
- Pioneered the imports of fresh Fruits in India
- Invested in temperature controlled warehouse in 1999

Mr. Sanjay Arora – Director – Marketing and Sales

- Visionary behind expanding IG network on Pan India Basis
- IG has expanded its clientele and customer base because of his People Skills and Relationship Management
- Responsible for sales and marketing across 28 wholesale outlets across India

Mr. Tarun Arora – Director – Finance and Operations

- The younger scion of the Arora family leads the young corporate team with his innovative and modern outlook
- He manages the Financials of the group with his superior Analytical skills

- Completed MBA from MIT & also attended Private Equity & venture Capital from Harvard Business School

Trade Experience

Our heaviest asset is our wide experience which gives us edge over others in the industry. 50 Years of experience in fresh produce industry. Importing & Exporting fresh produce from over 30 countries and handling 32 varieties of fruits.

Way Ahead

With the ever rising purchasing power of Indian middle class segment, the demand of good quality and hygienic fruits is increasing and IG, with its long history and vast experience has positioned itself to serve to the burgeoning demand. IG, in association with many global suppliers, is able to source high quality and consistent fresh fruits from all over the world and make it available to the Indian consumer. We also look forward to expand our temperature controlled warehousing business to 50000 Pallets and fleet of refrigerated trucks/trailers from 70 to 120. 🏠

iginternational.net

COMEXI, ENHANCING FLEXIBLE PACKAGING ADDED VALUE

The new flexible packaging market demands innovative packaging with short delivery times, efficiency, and at the same time, sustainable and unique. Comexi is known for its commitment to environmental management and for its leading technologies. As a global supplier with a wide experience in manufacturing equipment for the flexible packaging conversion industry, Comexi offers different product lines specialized in different conversion processes such as flexo printing, offset printing and gravure printing, as well as, laminating, slitting, rewinding and logistic complements. As a leading supplier, Comexi knows exactly which are the flexible packaging industry demands: flexibility, faster delivery times and personalized packaging. Also, Comexi is fully aware of brand owners' needs to differentiate in such a competitive environment and how they are constantly looking for something that makes them stand out. Comexi's printing and converting technologies are capable of bringing more added value to their products. The laminating and coating market is becoming extremely complex involving a wide range of different solutions. Comexi lamination answers these demands and fulfills the highest expectations thanks to the new machine portfolio and the very close relationship with its customers. Comexi's laminating line has been exponentially growing since its foundation, thanks to the excellence of its laminating solutions and, of course, based on the trust the customers have put in the group.

Versatile laminating solutions


Today's market demands a wide range of processes: solvent, water and solvent less applications, cold and heat-seal, a vast number of varnishes for multiple applications, and more yet to come. Comexi answers all these needs thanks to the Comexi ML1 and Comexi ML2. With the unbeatable Comexi Futura, the most amazing and astonishing holographic effects are now available for the flexible packaging market with great cost effectiveness. A part from that, the solvent less lamination growing ratio is exponential. For this reason, Comexi offers the top of the range laminating features to the solvent less sector with the renewed series Comexi SL3 and Comexi SL2.

Slitting facilitates differentiation

Taking into account slitting technologies, Comexi provides the most sophisticated systems for slitting and rewinding like Comexi S1 and Comexi S2 lines which offer the possibility to work with a double turret or a double shaft. Double turret machines assure higher performance and minimize downtime. Also, Comexi's slitting machines like Comexi S1 DT and Comexi S2 DT, are designed to meet the most stringent requirements of clients and final consumers. Actually, nowadays there is the need to carry out different applications more easily without increasing the number of processes. With this in mind, Comexi's slitting solutions can bring significant value for several reasons. First reason is to help in differentiation. A clear example of that is Comexi Cingular Laser, an innovative solution that fits with current market needs. This integrated equipment will increase the usability, shelf life or it will boost the products appearance by a wide range of its



laser processes: micro perforation, macro perforation, scoring, easy opens, windows or resalable labels. Another focus is increasing productivity by automation. Inside the machine different operations can be automated, such as positioning the knives or the cores. Regarding reels exit, Comexi can automate the whole process until the final pallet. It includes a very wide range of possibilities that embraces the automation of unloading, transporting, labeling, weighting or wrapping. At the same time, it will reduce downtimes, human errors and injuries. Additional achievement is to improve the quality and traceability of the delivered jobs. Slitting is frequently the last process and that is the reason why it makes it strategic. So, it makes sense to inspect every single meter slit with video systems and to manage all the data obtained from all the modules connected in the slitting automated net.

Also, all that taking into account that factories need to control better and faster their production process, the group has developed Comexi Cloud, the next step in industry 4.0. An innovative software, which provides real data to optimize resources and helps to analyse trends in production and reduce downtimes. 

www.comexi.com

 **COMEXI**



CODING ENSURES SAFE FOOD PRODUCE

Making products traceable is a reliable means of increasing the transparency of the supply chain while protecting consumers. In the pharmaceuticals industry, the coding of medicinal products is governed by directives in many countries. However, Track & Trace is also gaining ground in the food industry. Indeed, products are labeled in such a way that they can be traced on their way through the entire supply chain. This makes product recalls much more straightforward while also making it increasingly difficult for the product to be tampered with. The necessary coding solutions form part of the packaging process and therefore need to be integrated into existing packaging guidelines. In order to make this process as smooth as possible, precise knowledge of processes and expertise in the sector are advantageous.

The complexity of implementing such projects is not to be underestimated! The challenge here lies, on the one hand, with the company implementing the process. This entails analyzing processes and potentially standardizing them, providing sufficient financial resources and personnel as well as finding a suitable provider. For the provider of serialization systems and software, the task involves knowing the production and packaging processes of their customer and their product and production-specific testing requirements inside out. Only then the provider is able to use the perfect solution in the right place and depict the corresponding data flows. Providers not only need to demonstrate extensive software knowledge, but also detailed expertise where sensors and actuators are concerned. Only those who also accurately understand the product flow of the packager and boast plenty of experience in the



The food industry can benefit of pharmaceutical industry expertise.

mechanical integration of machines and modules into the packaging line, will ultimately be able to successfully implement complex serialization projects.

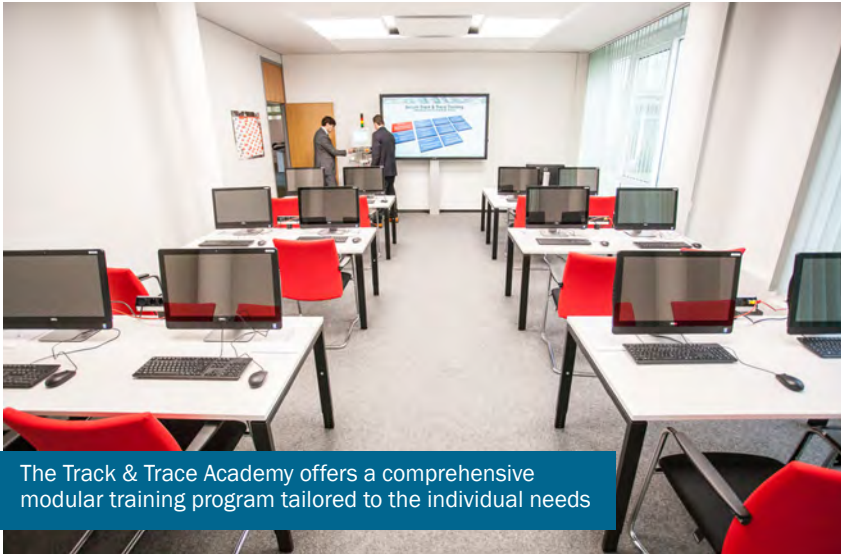
Benefits of pharmaceutical industry expertise

In the meantime, a large number of projects from the pharmaceutical industry have been successfully implemented. In doing so, the spectrum ranges from the manageable serialization requirements of small to medium-sized companies to the cross-site, multi-stage aggregation of global pharmaceutical companies. With this in mind, it makes sense to benefit from such experience and refer to tried-and-tested concepts. An example here is the German provider Laetus. The company with headquarters based in the Engineering Region of Darmstadt Rhein Main Neckar, near Frankfurt, offers end-to-end solutions for the pharmaceutical, medical technology, cosmetics and food industry and is armed with more than 40 years of experience in Inline quality control. Laetus has been part of the Danaher Group since 2015 and operates with more than 250

employees and branches in the USA, Mexico, Brazil, China, UK, Italy, Spain, Poland and France as an independent company within the product identification platform PID. Furthermore, around 50 agents and distributors represent the company across the globe. As such, the provider is perfectly positioned to offer visual inspection solutions as well as Track & Trace in order to even be able to successfully implement complex, global projects.

Flexible architecture for needs-oriented development

The core is a GAMP-compliant software architecture with a modular structure, which covers all levels of the ISA 95 standard in its multi-level design. Depending on needs, this covers all requirements placed on reliable traceability from simple serialization, to multi-stage aggregation, through to commissioning steps in the warehouse and along the supply chain. Of advantage here is the scalability of software, whose range of functions can be adjusted in line with equipment requirements without a great deal of expenditure. In addition, the company offers an extensive range of machines and



The Track & Trace Academy offers a comprehensive modular training program tailored to the individual needs

modules, which can be used to cover the various requirements placed on coding and verification on various materials directly on the packaging line or offline.

Quality assured with vision inspection

Laetus has established itself over the decades with its systems for vision inspection in the packaging process. Cod-

ing tasks can be extended in the packaging process with vision inspections in order to assure the quality of products in the packaging process. Here the inspection tasks range from code reading and pressure monitoring of additional information in plain text and images, to filling inspection, through to the inspection of a large number of features and properties of the product packaging.

Service and support are the key to success

Alongside the much needed experience, the service and support performances and capacities are ranked as the key criteria behind the success of such a project.

Laetus detected this need at an early stage and has developed an extensive global network for individually tailored services.

This includes reliable project management. If needed, as prime contractor Laetus assumes responsibility for the entire process from the planning phase through to commissioning. Service Level Agreements tailored to requirements, reliable repair and spare parts service, around the clock support via the hotline, online meeting or remote and the extensive training offer from the Track & Trace Academy round off the offer and not only secure your investment, but also the safety of food produce. 🏢

www.laetus.com

NEWS IN SHORT

IN SHORT

NO MESSING WITH SPILL-FREE SOLUTION

RPC Sæplast has introduced a spill-resistant version of its top-selling 660L PE container, ideal for the handling of products suspended in liquid or semi-fluid matter. The new model features a raised edge and a silicone gasket in the lid, which ensures a mess-free fit. The smart joint design reduces the risk of cross contamination and the tailor-made lid delivers a tighter seal that keeps liquid contents intact for cleaner and safer handling during processing, transfer and storage. In addition, the gasket can be easily removed, cleaned and replaced, and an optional drain plate is available that facilitates easy drain-

age of fluids and prevent formation of clogs and blockages. Like all variants in the range, the 660L is manufactured in durable, hard-wearing polyethylene with a triple-wall construction that is strong enough to withstand the harsh environments, changes in temperature and frequent washdowns that characterise food processing plants and warehouses. The ergonomic design combines optimum hygiene, including smooth surfaces for easy cleaning, with ease of handling. As well as being reusable, all containers in the RPC Sæplast PE range are fully recyclable. Containers can be branded with company log-



os. A standard imprinted serial number provides ready product identification and traceability, which can be further enhanced by various additional tracking options such as a barcode, QR code or RFID tag. 🏢

www.rpc-promens.com

ADD SECURITY TO YOUR PACKAGING WITH 3D AG

Counterfeiting became an unethical yet massive “global industry” affecting the profits of manufacturers and brand owners. It is developing to the most serious plague and challenge for the future of trade. Counterfeits are flooding the market, the internet and our homes, whilst consumers are left with questions of whom and what to trust.

The packaging of a product can be seen as its stage. It is the first impression at point of sale. A product should be safely embedded in the package to keep it from harm, as well as it should read all relevant information.

A package can be loud or functional and can be made from countless different materials. Most of all, the design and realization of the package will send a message to interested looks.

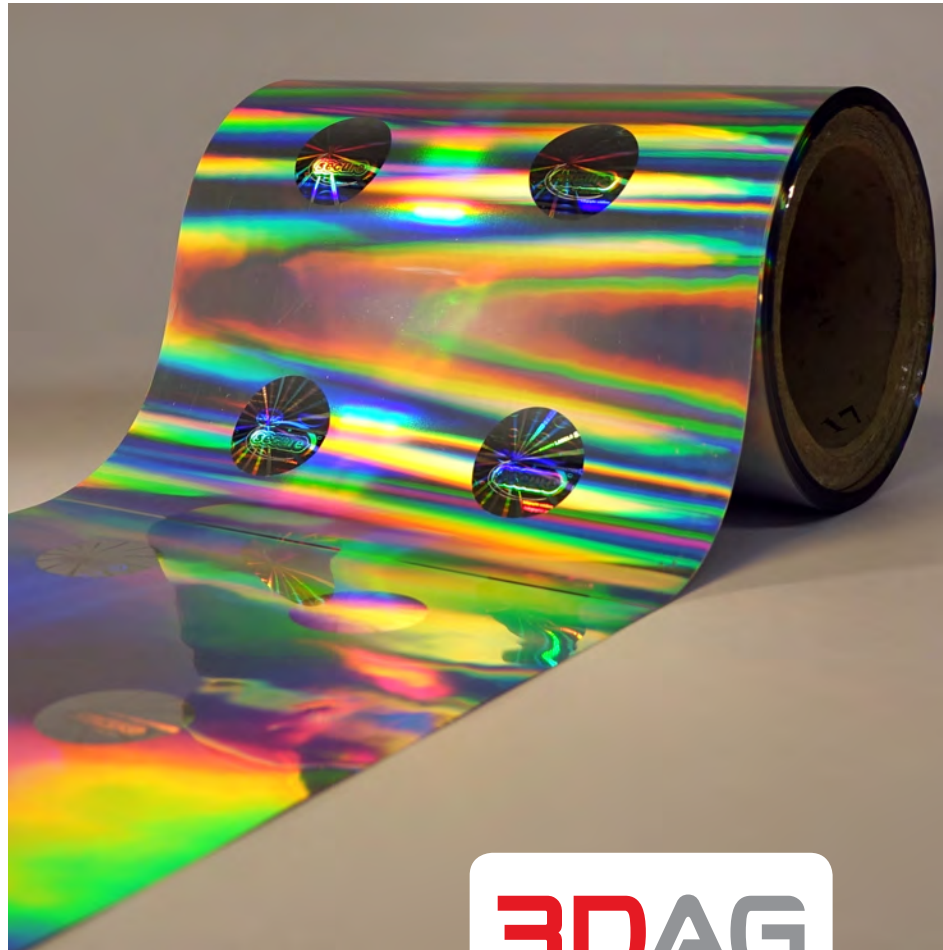
The jackpot is reached if the packaging allows authentication. ISO 12931 specifies performance criteria and evaluation methodology for authentication solutions.

Such authentication elements can be part of the material good itself and/or its packaging. It shows the importance of this topic and the risks carried in today's world.

With 3D AG's solution the package can keep the product and the consumer safe, which is a core brand responsibility.

Why 3D AG's Solutions?

- Handcrafted originations
- Swiss made high quality
- Leaders in banknote holography
- Experience with security since 1989
- Independent and family owned



3DAG

HOLOGRAPHIC SOLUTIONS

The Smart Solutions

Foil with Scattered Micro Elements

Holographic effects in packaging are mostly used for shelf attention or as a design feature for package enhancement. We see the advantage in the combination of design and security. Scattered micro text or graphics can be hidden in holographic patterns - authentication and design in one.

Rainbow with Security Elements

Our different bright rainbows are used worldwide in packaging. We also offer rainbows with dropped-in micro elements. As the security elements are scattered over the whole area, the later registration is not relevant. One doesn't have

to change or redesign packaging to add security. We have easy but solid solutions to protect products and their package.

Holographic Security Labels

We see the real value in the various possibilities one can implement in a hologram. With our personalized holographic security labels you can decide exactly what you want combined. From micro texts and graphics to hidden features, security may be disguised in between flashing optical effects. Holography offers the perfect mix between overt and covert features. The brands logo



can shine in rainbow colors, bearing hidden elements at specific locations.

The Secret is in the Mix

In addition, we suggest the combination of holograms with other printable elements. Serialization, QR or data matrix codes, barcodes, UV inks. Why should one only use one technology? The secret is in the mix.

The current hype is the collection of data to influence marketing and customer services. A hologram will catch the attention of the customer and welcome authentication, which can be used to collect data at the same time.

Fresnel and Embossable Lenses

3D AG has expertise for the design and tooling of decorative Fresnel lenses, which can be used for packaging applications. We produce customized sizes with special optical effects and hidden security elements.

We also offer embossable holographic lenses. We have existing patterns from our library of designs, or we can also provide new, tailored and customized lens designs.

Where We Act

Our holographic elements are active not only in product & brand

protection and decorative packaging, we are especially active in high security. We have originated holographic elements for over 70 banknotes.

Mastering classical holography, all our holograms are created in our laser laboratories by hand and are not digitally processed. Therefore, our holograms have extreme depth, movement and very bright colors. This is also of value for shelf attention, as they have a grand eye catching effect. The need for the application of holographic effects expands over various applications, in any market.

Security for the Brand and their Customers

Holography can be used to communicate authenticity to the end customer, as well as it can be a helpful tool to protect the trade. This is of great importance for a brand and its logistics of distribution. One has to distinguish the real from a fake at customs and

a secretly hidden security feature is the only way. The brand can decide who knows of which security feature and the counterfeiter can be misled.

Standard Application

Holographic patterns can embellish packaging by a hot stamping process, lamination, transfer foil or can be applied by many other production processes. Holographic labels are either on the product or package itself, as well as they can be used as tamper evident protection.

Who We Are

3D AG is an independent, Swiss, family owned corporation based in Baar, Switzerland. Founded in 1989 by a physicist and scientist as a technology center for holography, 3D AG engaged into the fundamental research of holographic structures and procedures.



3D AG played a leading role in the development of the mass production of the optical phenomenon holography.

As a forerunner in the field, 3D AG dominated the holographic origination creating hundreds of endless holographic patterns, many which are still used all over the world today.

3D AG has become an expert in the creation of high end security labels. Constant research has bred a whole palette of products and new optical security features to satisfy different needs.

3D AG delivers semi-finished products to supply and work with each step of the value chain. Over the year's 3D AG has broadened its view and engaged into the perfection of electroforming.

We have built various galvanic baths and master unique techniques of replication.

3D AG's experts have explored and acquired knowledge of various functional surfaces, diving into the vast world of micro- and nanotechnology. Researching these different structures and the exposure to many new base materials and components has allowed 3D AG to consult their customers better. We aim to constantly improve our science; to become the best partner we can be.

It is our goal to combat counterfeiting and to protect intellectual property. We want to create trust between the customer, retailer, supplier and governments.

Together we want to work against smuggling and illicit trade, which is harming our health and destroying

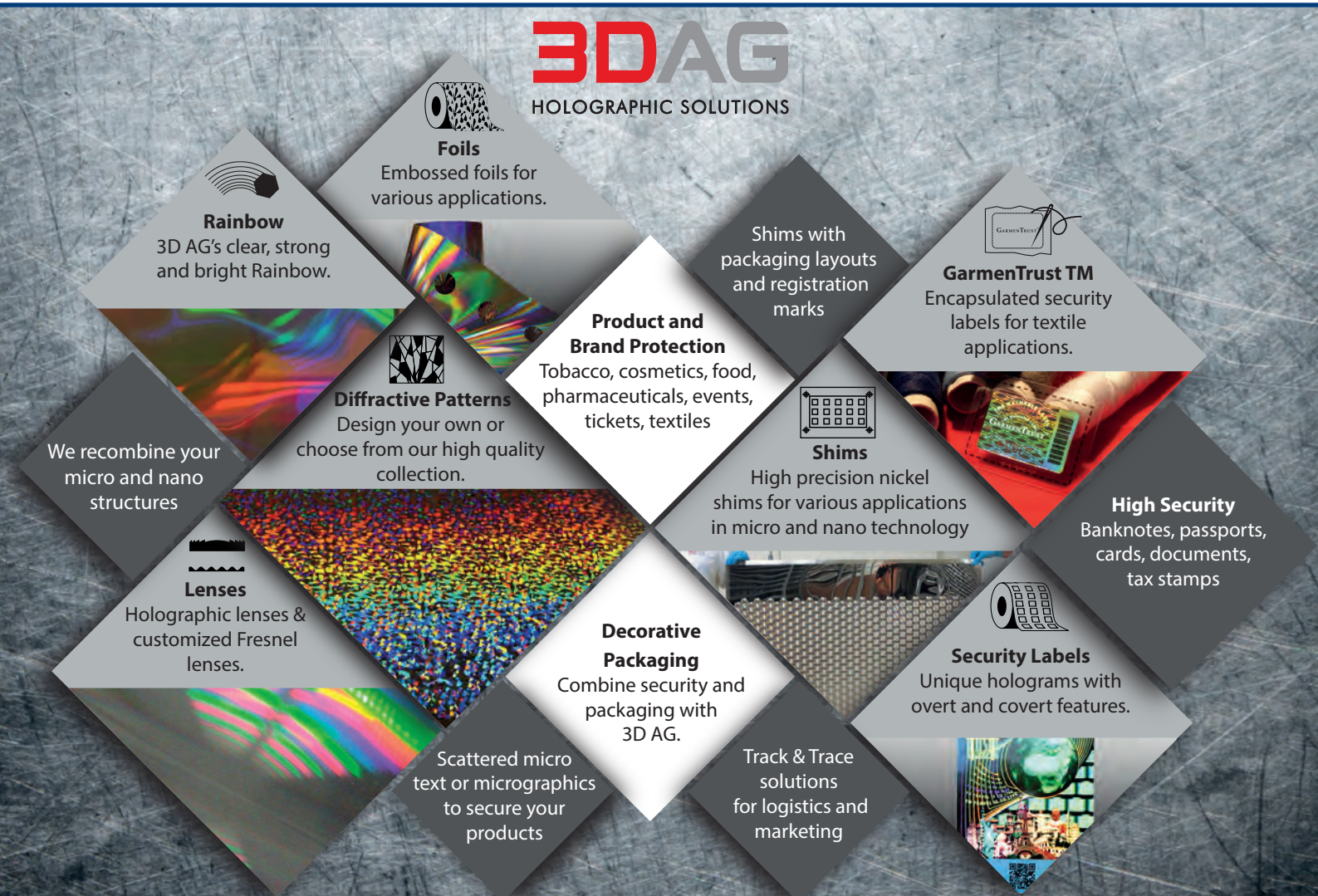
innovations. Our services reach various markets as our products and solutions are customized according to each client's needs.

The need to protect products, documents and packaging will continue to increase. Our dynamic and inspiring team is committed to research, hence realizing projects for a safer future of commerce.

We strive to always deliver the highest standard while conveying a sense of integrity, treating our business partners, colleagues and community with respect and trust.

Raise ethical awareness and combat counterfeiting with 3D AG. 

Visit:
www.3dag.ch



3DAG
HOLOGRAPHIC SOLUTIONS

- Rainbow**
3D AG's clear, strong and bright Rainbow.
- Foils**
Embossed foils for various applications.
- Product and Brand Protection**
Tobacco, cosmetics, food, pharmaceuticals, events, tickets, textiles
- Shims with packaging layouts and registration marks**
- GarmenTrust TM**
Encapsulated security labels for textile applications.
- Shims**
High precision nickel shims for various applications in micro and nano technology
- High Security**
Banknotes, passports, cards, documents, tax stamps
- Diffraction Patterns**
Design your own or choose from our high quality collection.
- Decorative Packaging**
Combine security and packaging with 3D AG.
- Security Labels**
Unique holograms with overt and covert features.
- Lenses**
Holographic lenses & customized Fresnel lenses.
- Track & Trace solutions for logistics and marketing**
- We recombine your micro and nano structures**
- Scattered micro text or micrographics to secure your products**

LINPAC INVESTS IN THE FUTURE OF NEXT GENERATION

TOP LIDDING FILMS FOR FRESH FOOD PACKAGING

According to Erwan Cadoret, business manager barrier films at fresh food packaging manufacturer LINPAC, the next generation of top lidding films for modified atmosphere and vacuum skin packaging should be sustainable and highly functional, as well as innovative.

LINPAC is accelerating its global sustainability strategy with a multi-million-pound investment in cutting-edge technology at its site in Pontivy, France. The facility will manufacture a range of multi-layer, top lidding films.

The investment in a new production line at the site will allow the business to drive the growth of its lightweight lidding film offer, in line with its Lightweighting for Excellence (LIFE) programme.

The move enables LINPAC to continue the active engineering of its ultra-light, resistant barrier flexibles for modified atmosphere packaging (MAP), in what has traditionally been a category of heavy gauge film usage. When combined with rPET trays, to create a complete pack solution, the resulting resource efficient, lightweight MAP solution offers a range



of benefits to the supply chain. From ease of handling to enhanced on-shelf presentation, the films offer a high level of functionality to protect and preserve fresh products.

Mr Cadoret commented: "The new LINPAC production technology allows us to produce a broad range of high barrier films with enhanced transparency, anti-fog and print properties for our customers. In addition, tailor-made shrink performance enables



tight, wrinkle-free packs with outstanding clarity and consumer appeal. Ultimately helping to drive sales of case-ready products at the retailer. "Essentially, we are able to deliver enhanced performance, whilst retaining excellent functionality."

A notable new formulation, which is created using the new multi-layer extrusion process, is a 25 µm shrink-barrier, anti-fog, PE film for retail-ready MAP formats. For use on manual and automatic lidding machines, and qualified form, fill and seal machines, the thin film boasts outstanding optical quality and excellent seal strength. In addition, the film is avail-





able in longer than standard rolls to reduce downtime for the packer. Further to its investment in cutting edge technology for MAP formats, the Pontivy site has also continued to innovate its film offer to enhance existing vacuum skin packs. The company has recently launched the high-

barrier LINtop® PE HB SKIN vacuum skin top film range to enhance the performance and shelf-appeal of its Rfresh® Evolve rPET trays for brands and retailers.

In addition, LINPAC has teamed up with specialist films manufacturer,

Klößner Pentaplast, to further improve a resource efficient modified atmosphere pack for fresh perishable foods and liquids. The novel design combines an APET++ rigid base web from Klößner Pentaplast with a LINtop® PET HB barrier lidding film, to create an appealing, secure pack that enables a reduced time to market for packers and retailers.

Mr Cadoret continued: “Our investment and continual improvement programme allows us to deliver a comprehensive range of stretch and high barrier PE and PET films for use with LINPAC EPS, PP and rPET trays. The resulting complete pack solutions meet the needs of our customers today and have the ability to evolve to the meet the challenges of tomorrow.

For more information, please visit linpac.com

Next Generation Barrier Films



Barrier Properties



Optics



Anti-fog



Shape Management



Sealing Performance



Puncture Resistance



LINPAC Packaging Pontivy
 Parc d'Activités de Kerguilloten
 56920 Noyal-Pontivy
 France
 tel: +33 (0) 297 28 70 70



For further information on the LINtop® range of films or any other LINPAC solutions, please email: info@linpac.com or visit www.linpac.com



YOUR GLOBAL FILM AND ALU FOIL SOURCE "WE MAKE IMPORT EASY"

Our virtual factory model which is thriving in Europe, is addictive and increases your business' liquidity and value

During the last Interpack, we spoke to you about our virtual factory supply model and why it should work for you. Now three years later we can say unequivocally that it not only works, but those who use it properly are addicted to it. Why? It's simple. It enhances your business both operationally and from a liquidity standpoint. And more importantly, it enhances how the outside world views your company – whether it is a bank, a new supplier, or a potential new investor, new partner or someone looking to buy your business outright.

Lets talk about it a little bit more.

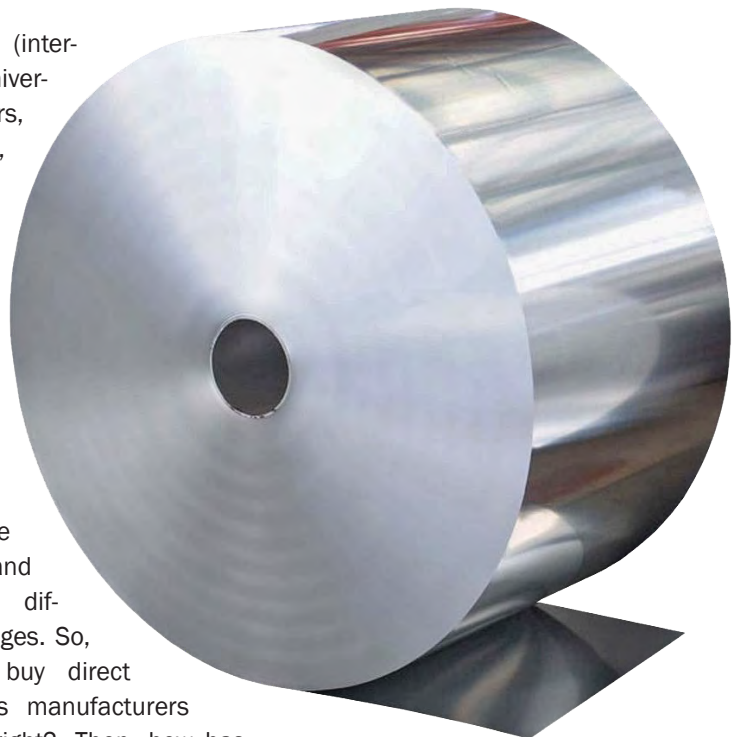
VALUE AND OUR MISSION DEFINED:

Value can come in many forms, not just a lower price. A price is just a starting point of reference. Does the product process well? Is scrap and downtime minimized? Are claims handled well? Do you have product available for unexpected needs? Does the final food processor run at maximum efficiency? Is your financial position and cash flow considered? Do your people have the time to focus on running the business, rather than worrying when product will show up at the door? How do you find out about new products in the market? These are some of the key questions to ask.

The packaging industry and the world have gotten a lot smaller. Today's

technologies (internet, email, universal translators, smartphones, etc) make it possible to have email discussions between two people who live on opposite ends of the world, are many time zones apart, and speak totally different languages. So, anyone can buy direct from overseas manufacturers all day long, right?. Then, how has NOW Plastics business model, as a global importer/ distributor/ supplier and "virtual factory" of various types of plastic films and aluminium foil not only survived, but has been thriving, in today's global environment???? The secret is that our business model is designed to take away the uncertainty associated with global importation while opening up the entire global supply landscape to our converter customers, and at the same time providing a huge positive cash flow benefit though just-in-time supply chain options.

This greatly enhances our customer's balance sheet and reduces bank debt, thereby increasing the value of your company.



Experienced buyers knows very well that buying films is not just about procuring some sheet of plastic that looks nice, has good clarity and a great price. You cannot just throw it on a machine and all is perfect. All films are not alike – plain and simple. They may appear alike and sound alike, but do they process on converting equipment alike? Almost never.

Our mission is to bring value to you - high quality products with a diversification of supply options, competitively priced and delivered in a manner that minimizes your risks of supply and maximizes your working capital, plant space and ultimately the value of your company.

NOW

PLASTICS EUROPE

Your Global Film Source

We make import easy!

www.nowplastics.com

OUR PRODUCTS

PET

Aluminum Foil

BOPA

BOPP

CPP

Multi-Layer

Specialty PE

PET/OPS Shrink

OUR PROGRAMS

DIRECT SHIPMENTS

CALL-OFF PROGRAMS

CONSIGNMENT STOCKS

WAREHOUSE STOCKS

WHAT'S NEW

RECENTLY COMMERCIALIZED FILMS

- Reclosable PE lidding and base films
- Heatsealable PET with antifog
- Low gloss matte PET- replaces BOPP for better packaging performance
- High COF PET (for big bags)
- Barrier Films

BARRIER FILMS

	BARRIER LEVEL	(g/100sq.in.) MVTR
ALOX PET clear film, top coated	Ultra	0.034
MET PET high bond up to 1000g	Very High	0.02
MET PET potential alum foil replacement	Ultra	0.01
MET BOPP high seal strength w/EVOH	Very High	0.032
MET BOPP w/EVOH layer	Ultra	0.013



THE VIRTUAL FACTORY MODEL

We have a seemingly unlimited capacity of supply for our core products – plastic films and aluminium foil – which are produced around the world. (see our advertisement on another page for our basket of products) We are not focused on maximizing the output of extrusion equipment. Harnessing all of this production allows us to act as a virtual factory so to speak.

Our focus is you, the customer, and what you need to succeed. Acting as an extension of your procurement and sourcing group, allows us to become your eyes and ears. Suppliers are well vetted, and product performance is guaranteed by us. The strengths and product varieties of our global suppliers are combined to offer you a one-stop shop. That is our advantage. You get the benefit of our 40 years of experience supplying products from around the world, without having to deal with any of the hassles. As our slogan says “We make import easy”.

OUR SUPPLY CHAIN PROGRAMS

Our business model is very simple.

The virtual factory means we are not invested in equipment. We are invested in you by extending our vast experiences and technical know-how. Our credit and financial strength allows us to keep stocks in sufficient quantities to support your business, and providing highly competitive payment terms as well. This can be close to a 9-12 month pipeline of supply for some companies. Some people call it a supply chain program, others call it “just in time” supply. We call it our business.

Overseas producers generally think their job is done once they have shipped the goods.

For us, the job starts before you even place an order and ends long after you use the goods.

Open orders are proactively managed far better than factories do themselves. We see changes happening in the market dynamics and do our best to alert our customers to be prepared.

Transparency is a critical component of our success, never hiding the identity of our supply sources and we transfer our knowledge and our level of confidence to you.

The other key is to act as your local support system.

Today we are able to supply anywhere in continental Europe and the UK (amongst other places). Our sales teams are close to you and able to react to your needs whether that is technical support, order tracking, supply coordination, new product sourcing or whatever is needed.

Quality can only be delivered by associating with world class producers. Our films and foil suppliers are required to have all of the critical ISO and EU food contact approvals, a serious and committed management, technical sophistication, a focus toward sustaining export business on a long term basis, an expansion strategy, financial stability, western thinking, product warranties and honoring claims, commercial flexibility, and the ability to maintain consistent relationships and mutual support through soft and tight markets. The last item is high on the importance list. The true test is how a factory behaves when we need them, not when they need us.

Our supply options comprise either establishing consignment programs or using third-party warehouses near to our customer’s plants, allowing for next day or in times of emergency even same day service.

Deliveries can be daily if necessary, again customizing the program to your needs. Even in markets experiencing strong demand and tight supply, we are able to anticipate and work with you to create higher levels of safety stocks to avoid any crisis and keep things running smoothly and continuously.

Invoicing is always in Euros (or GBP for UK customers), and can be done by EDI or other methods as necessary. 🏢

**Visit: www.nowplastics.com
www.nowplasticseurope.com
www.nowplasticsuk.com**

MAKRO LABELLING'S STRATEGY FOR 2018

Consolidation, international vision, brand capitalisation, maximum attention to R&D and guaranteed efficiency in after sales and spare parts: the five Makro Labelling focuses to innovate and compete.

For Makro Labelling, one of the leading manufacturers of industrial labellers for the **beverages, food and detergents** sector, 2017 ends with the supply of labellers to important industrial groups, turnover up to about € 20 million, 115 machines delivered and installed during the year and a close-knit work team with 90 permanent employees. Growth and development objectives achieved, confirmation of a shrewd targeted business strategy setting further ambitious goals of positioning, consolidation and new developments for 2018, as **Massimo Manzotti, President and Sales Director of**

Makro Labelling explains: “The transition from a “young” company to a standard setter in the world of industrial labeller manufacturers has been, and still is, the fruit of collaboration between all company departments. We watch the market closely to understand its demands and anticipate them with new technological developments able to offer efficiency, speed and a concrete response to specific labelling needs. This is the context of the new **C Leap**, presented as a prototype at

Drinktec and scheduled for definitive development in 2018, but also consolidation and development of our optical guides and work on the **M.A.I.A.** (Makro Advanced In-line Analysis) and **A.L.I.C.E.** (Advanced Label Inspection and Control Environment) systems.

For Makro Labelling, intensive R&D work, but also an international vision and the ever more structured acquisition of **new markets**. On one hand, the company is continuing its collaboration with consolidated partners (such as **TEP France**, distributor of mainly wine and champagne, together with beer, food oils and milk for



the French market, and its President Xavier Istasse), responsible for considerably boosting Makro Labelling's growth in 2017, while on the other, it is working in synergy with, for example, partners on the North American wine and spirits market.


Over the next few years, Makro Labelling will be focussing on brand capitalisation by opening new offices, such as the one set up recently by Makro Labelling North America in Saint-Philippe near Montreal. With the aim of strengthening Makro Labelling's presence in the North American food, beverages, soft drinks and home care sectors, the new company was opened in collaboration with Robert and Michael Kucey, already partners of Makro Labelling.

"In 2018, we will also be looking ever more closely at the Central and South American market where we want a direct presence. We are particularly interested in strengthening our presence in the Caribbean area where we are already present with a number of installations in the Dominican Republic: two labellers already operational for Beica Barcelo, one of the world's

leading rum and spirits producers, and a very important machine due to start production at the beginning of 2018 in the Brugal factory at Puerto Plata, another world leader for the production of rum."

As well as maintaining the presence on the European market alive and strong, Makro Labelling will be concentrating on reaching the Middle Eastern and Chinese markets, consolidating its presence in Australia and New Zealand and continuing with its penetration of the Indonesian market where it recently sold a machine for one of the production units of Heinz, the well-known ketchup producer.

Consolidation on the markets and ever greater efficiency in after sales and spare parts, the other leitmotif for 2018. Because "while it is true that the market frequently demands ever more efficient new services and machines, we believe offering a fast, clear and concrete response in after sales and spare parts is fundamental for our growth. Being able to guarantee assistance is the real secret to standing out on the market" concludes Massimo Manzotti.

Makro Labelling - Modularity, flexibility, practicality: these are the three concepts that have defined the company's style and philosophy and driven the technical innovation that has become its key strength. Today, Makro Labelling, www.makrolabelling.it, is a leading international player in the field of industrial labelling machines for the beverages, food, home and personal care and pharmaceutical industries. The company produces a range of machines capable of labelling between 1500 and 50,000 bottles per hour, applying up to five label parts per bottle. Its founders' thirty years of experience, an extensive international sales network, a rapid pre-sales and after-sales assistance service, operational flexibility and an ability to anticipate the needs of a constantly changing market enable Makro Labelling to satisfy all possible labelling needs. Makro Labelling: evolving technology for great numbers. 

www.makrolabelling.it



NO MINERAL OIL IN FOOD

Efficient, sustainable protective barrier for packaging



No more mineral oil mixtures transferred into food from packaging: Sappi's new papers with integrated mineral oil barrier bring new safety and capability to recycled packaging solutions for the food industry in a sustainable and efficient way. The two key benefits: Minimum 15-month mineral oil barrier protection and very good heat sealing capabilities so that food packaging does not require any additional coating seal.

A contribution by René Köhler, Group Manager for Flexible Packaging at Sappi Fine Paper Europe



Packaging protects the product it contains from dirt, contamination and destruction. However, there can be significant consequences when the packaging itself becomes a concern: The existence of poisonous mineral oil mixtures has been detected in various foods since the 1990s. Recycled packaging carton board was identified as the source of these mineral oil mixtures in food. Printing inks from recycled newspapers that contain solvents are the primary culprits due to the fact that poisonous hydrocarbons cannot be fully removed in the re-

cycling process. A residual amount, normally around ten percent, remains in the recycled material after processing.

The ink on the printed packaging can also contain mineral oil mixtures and can migrate into the food as well. Dry foods and foods containing fat are affected: Rice, noodles, chocolate products, muesli, potato dumplings and baby food. The mineral oils predominantly migrate into food – even at room temperature – as volatile gases. Most inner pouches currently used fail to offer adequate migration

protection. Safe solutions, such as those using complex laminates with aluminium and PET, are both expensive and not environmentally friendly.

The transfer of mineral oil into food is the result of two key properties of the food itself: First, the particular surface of the food onto which the mineral oil is absorbed; and secondly, the percentage of fat in the food into which mineral oils can easily be dissolved and absorbed. These residues consist of a complex mixture of saturated (MOSH) and unsaturated hydrocarbons



(MOAH) suspected of being carcinogenic. Humans ingest the poisonous substances by consuming the food with high-risk consequences: In 2009 the Bundesinstitut für Risikobewertung (BfR; Federal Institute for Risk Assessment) determined that mineral oils can become concentrated in the human body with ingestion over time. Animal testing has shown that they are highly poisonous and can cause liver inflammation, heart damage and other diseases, including cancer. The conclusion of the BfR was that it is urgent that the transfer of mineral oils into food should be minimised.

Solutions expensive and a long way off

Industry and researchers have long been looking for solutions to eliminate these unwanted risks. The entire printing sector is discussing how

THREE QUESTIONS TO KERSTIN DIETZE, MARKETING MANAGER FOR SAPPI SPECIALITY PAPERS, SAPPI FINE PAPER EUROPE

What has the market's response been to the idea of packaging papers with an integrated mineral oil barrier?

The interest in an efficient and sustainable mineral oil barrier solution is very high and is growing. The increasing interest is certainly also driven by the imminent introduction of legal requirements. Many product manufacturers are now focused on this issue and are looking for rapid solutions. For this reason, the response to our official product launch during Interpack 2014 was extremely positive. There were many enquiries from product manufacturers and processors about our innovative and recyclable barrier papers, with our efficient and easy-to-implement solution enjoying a great deal of interest.

Are there any specific projects yet, and how is the ongoing development of the mineral oil barrier papers progressing?

Currently there are multiple customer tests running on different packaging types for tea, cereals, chocolate and various dry foods. We are very optimistic that we will be able to present the first successfully implemented projects very soon. The development work will not come to an end following the successful market launch of the mineral oil barrier papers, however. The next stage is to expand the number of weights on offer for these barrier papers.

What further developments is Sappi currently working on?

Sappi is increasingly investing in the development of special papers. Thanks to expansion of the specialist centre for special papers in Alfeld, we will be able to present many additional innovations in the future. The Algo Nature and Leine Nature papers that can be composted at home, as well as the mineral oil barrier papers Algo Guard M and Leine Guard M are the first innovative results of these investments. In addition to this, our company is also running various development projects in the area of sustainable packaging solutions. A key focus is the integration of different functionalities into our papers. We will be announcing additional products and solutions very soon.

to migrate to inks free of mineral oil for the long term. Carton manufacturers are working on improved cleaning processes for recycled papers; and paper processors are voluntarily avoiding the use of inks containing mineral oil for packaging printing. However, none of these solutions can have the desired impact in the short term however, and even when they are achieved, the associated costs are very high. Functional barriers, either in the form of coated, painted or laminated folding cartons or impermeable inner pouches, is a potential solution that is currently available. The use and benefit of packaging materials with mineral oil barriers (abbreviated as MOB (Mineral Oil Barrier)) are currently an important topic of discussion in the packaging sector. Although some of these measures are currently being implemented by product manufacturers, there is a need to do more, and soon: Legal requirements for this are anticipated in Germany, in particular, where a legal bill is still being discussed. However, a recommendation for the use of barriers for inner pouches in food packaging has existed in Austria since 2012.

Sappi presents its solution

To enable the continued use of recycled paper in packaging materi-

als, Sappi has developed a solution in partnership with BASF and Eurofins that brings innovative MOB papers into the market. The Sappi paper has a barrier coating which is applied during the production process in the form of a special dispersion agent. These new paper types for flexible packaging prevent the penetration of potentially harmful substances into food while allowing the ongoing, sustainable use of recycled cellulose in packaging materials, including outer packaging and transport packaging, ensuring improved food safety.

Sappi introduced MOB papers as a technology demonstration at Fachpack last year. Shortly afterwards, these papers were awarded the "PPI Award 2013 for Advances and Innovation." At this year's Interpack, MOB papers were introduced onto the market under the brand names Algro Guard M for outer packaging that require high print quality, and Leine Guard M for inner pouches and bags. These save, sustainable and cost-effective solutions have been generally available since Spring 2014.

Homogeneous, sealed surface

One of the technical challenges in developing the MOB papers lay in achieving a homogeneous coating

to fully cover the pre-coated paper substrate. Even small defects in the coating can have a direct effect on the quality of the barrier function. This means it is important to have an exceptionally smooth, non-porous raw paper with a full-coverage primer offering. Another challenge was finding a production window on the coater to permit a barrier coating to be applied to product without the rollers becoming blocked.

Together Sappi and BASF succeeded in developing coating solutions to address these challenges. It required the creation of a water-based polymer dispersion that could guarantee the necessary barrier while providing a stable and fault-free film using the predefined parameters without blockages. For this purpose, the film formation had to be aligned with the blocking response to achieve the optimal formulation.

Test confirms effectiveness

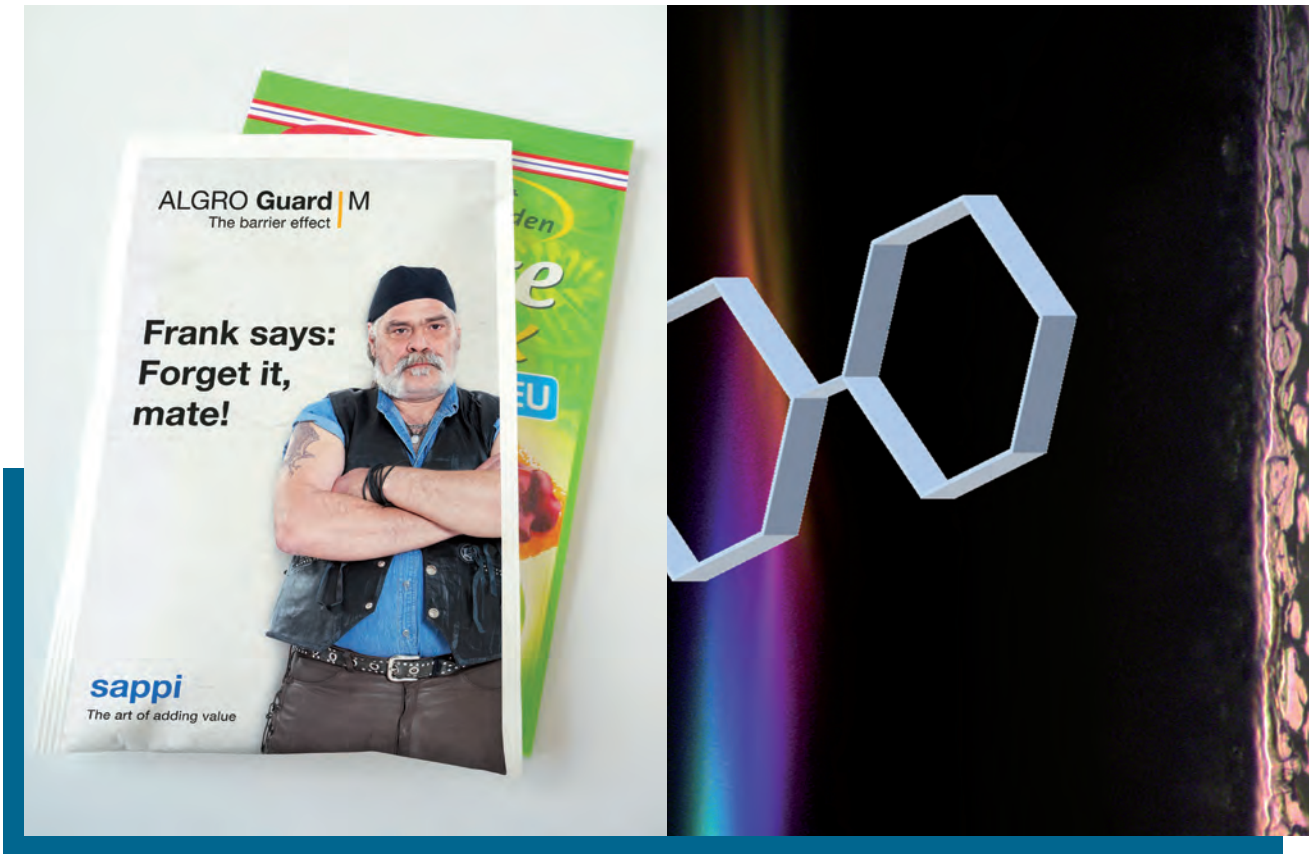
To test the effectiveness of the barrier coating in preventing the penetration of poisonous mineral oils into food and other sensitive products, BASF turned to Eurofins Consumer Product Testing GmbH, an international bioanalytics service provider. This lab focuses on test-

ABOUT SAPPI

Sappi Fine Paper Europe (SFPE) is the leading European manufacturer of coated fine paper, as used for premium magazines, catalogues, books and high-end print advertising. The company has its headquarters in Brussels, Belgium. Sappi Fine Paper Europe is renowned for innovation and quality. The graphical papers includes the brands Magno™, Quatro™, Royal™, Galerie™, GalerieArt™ and Jaz™. Algro®, Fusion®, Leine® and Parade® are the brands for special labels, top liners, packaging paper and boxes. Sappi papers are manufactured in ISO 9001 and ISO 14001 certified factories and all plants in the EU are EMAS-registered. SFPE plants also have chain of custody certification from the Forest Stewardship Council (FSC®) and/or through the Programme for the Endorsement of Forest Certification (PEFC™).

Sappi Fine Paper Europe is a division of Sappi Limited (JSE), a global company based in Johannesburg, South Africa, which employs over 14 000 people and has production sites in seven countries on three continents, sales offices in 50 countries and customers in over 100 countries worldwide. More information on Sappi can be found at www.sappi.com.

sappi



ing and analysing foods, pharmaceutical products and environmental samples as well as consumer goods. Eurofins conducted a three-month test cycle on behalf of BASF.

These and other tests have definitively shown that papers with MOB barriers developed jointly by BASF and Sappi prevent mineral oil residues in recycled cardboard and recycled carton from migrating into food during the standard shelf life of the foods in question: The two new Sappi papers, Algro Guard M and Leine Guard M, have the necessary MOB functionality for a protective period of at least 15 months - in other words, far longer than the normal maximum shelf life of the products - as well as very good sealing capabilities. It is precisely the integrated MOB functionality and the excellent sealing capability of the papers that ensure that no additional processing steps or extra coatings are needed to meet these requirements. This

results in shorter value chains and more efficient overall production times.


Before these tests were conducted, the supervisory bodies in the food industry were of the opinion that the migration of mineral oils could only be safely prevented via functional barriers such as inner pouches. According to information from Eurofins, the material from BASF was the first directly applied coating able to demonstrate appropriate barrier properties.

Thanks to the surface properties of the new MOB papers, they are also very well suited for downstream processing to enhance the packaging according to brand owner requirements. These types of enhancements are not always required, however. For example, tests have shown that the MOB papers also offer excellent aroma protection. This is demonstrated, for example, by protection against

the loss of camphors (peppermint) and limonene in foods packaged using these papers. At the same time, the barrier paper also protects against environmental odours that could impair flavour penetrating the packaged food from the outside.

Conclusion: on the right path

Both of these new Sappi paper types feature two key properties: Guaranteed mineral oil barrier protection for 15 months and excellent heat sealing capabilities. The market interest in this packaging solution is immense.

This confirms for Sappi that its approach in developing a packaging solution with mineral oil barrier was the correct one: The many benefits of paper and carton as packaging materials - renewable, environmentally friendly, recyclable, compostable and biodegradable - now include providing a mineral oil barrier for improved food safety. 

Creating value across the global supply chain for the food and packaging industry.

Our key trading activities generate sustainable value across the global supply chain of metal packaging and raw materials for your daily operations in the food industry. We successfully exploit opportunities in the commodities trading markets.



Seal of Quality

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STEEL FOR PACKAGING, CANNED FOODS, RAW MATERIAL FOR THE FOOD INDUSTRY SINCE EVER



Based in Lugano (Switzerland), Seal of Quality is a trading and consultancy company worldwide recognised as a top marketing and sourcing advisor in the fields of packaging and food. The company employs a young team of some 30 professionals people across Switzerland, Italy and Spain. It is also proud of a 50 years experience in the tinplate and food business.

Within the metal packaging business, Seal of Quality has strong relationships with tinplate and flat carbon steel producers in Europe, Asia, North and Latin America. They provide steel for a wide range of products; from food and aerosols to general line and speciality cans, as well as for easy open ends, twist off closures, crown caps.

In addition to its tinplate activity, Seal of Quality is a leading player in the international trade of food raw materials, with a particular specialisation in dry pulses. The company



Seal of Quality

holds an import/export network that connects raw material producers and canneries across Asia, Europe and America.

The company is also involved in the design and implementation of export strategies for over 30 different canneries in Italy and Spain. Through its key relationships with the world's leading retailers, Seal of Quality offers an effective sales

network for all sort of metal packaging related finished goods, such as canned tomatoes, beans, vegetables and fruits.

"We are very pleased to join INTERPACK, a forward-looking exhibition which is actively contributing in promoting the many advantages of metal packaging.

Our aim is creating value across the global supply chain for the food industry" said Davide Padovani, Seal of Quality's Managing Director. 

www.sealquality.com



IMMER GROUP, IS ONE OF THE WORLD'S LARGEST MANUFACTURERS OF FLEXIBLE PACKAGING

IMMER GROUP is one of the world's largest manufacturers of flexible packaging materials for the food, cosmetic, pharmaceutical, construction and other industries. It is a company with a 90-year history which is constantly developing and progressing. Clients and long-term partners are both international companies and local manufacturers. It includes two factories - UKRPLASTIC and IMMER DIGITAL, an R & D centre, a design studio, it has branches in 10 countries of Central and Eastern Europe and the CIS.

Its production is certified in compliance with the ISO, the BRC, and the FDA.

IMMER GROUP produces a variety of films up to 11-layers, laminates with flexo, roto and digital printing, ready-made Doypacks, 2D and 3D packages with / without zippers or sliders, sleeve labels with / without notching, self-adhesive film or paper based labels with silk-screen printing, hot engraving, figured die cutting and others. The company's products comply with environmental and legislative requirements of all markets. Packaging is exported to 35 countries; the company is included in the list of official suppliers of the United States and Canada.

IMMER GROUP packaging is used for:

Confectionery products: TWISPAN white, transparent, metallized twist film with a high degree of twist, various laminates with flexo, roto or digital printing



application of specific codes; self-adhesive paper or film based labels with silk-screen printing, hot engraving, figured die cutting and others.

and cold seal, ready-made pouches: flat, standing and 3D pouches with zippers, sliders, easy open and others.

Coffee, tea: three-layer laminates with foil, innovative barrier laminates without foil, ready-made pouches: flat, standing and 3D with zippers, sliders, easy open, vacuum packaging, laser notching, flexographic, rotogravure, digital printing, selective matte varnishing, special interferent inks, the

Dairy products, ice cream, cheese: high barrier films and laminates for the long-term storage of milk (more than 90 days), cottage cheese, cheese, sour cream, and others.

Pearl and metallized films and laminates used for ice cream and glazed cheese, ready-made pouches, flexographic, rotogravure, digital printing, selective matte varnishing, sleeve labels and others.



Sauces, ketchups: high barrier films and laminates without foil for long-term storage, excellent cap welding, laser notching, flexographic, rotogravure, digital printing, selective matte varnishing and others.

Beverages: BOPP labels, sleeve labels, shrink film for group packaging with / without printing with improved strength properties, ready-made Doy-packs, flexographic, rotogravure, digital printing, selective matte varnishing and others.

Meat, fish: high barrier films for vacuum packages, thermoformed packaging, laminates for lidding films with peel-effect, self-adhesive paper or film based labels with silk-screen printing, hot engraving, figured die cutting and others.

Pet food: a variety of laminates and ready-made packages such as Doy-packs, 2D and 3D packages with / without zippers or sliders for dried food and animal-care products, retort pouches for wet food that can withstand the toughest retort processing conditions.

And also, special packaging solutions for chemical preparations, hair

dyes, household chemicals, construction mixtures and others.

IMMER GROUP innovations in digital provide:

- short print runs up to one unit;
- the reproduction of any design in high quality and on-line mode,
- an unlimited number of packages, each having their own unique design,
- personalized packaging.

Ready-made 2D, 3D pouches with / without zippers or sliders, bellows and the bottom can be made of different materials.

PS, PET sleeve labels with or without notching.

Self-adhesive paper or film based labels, with flexographic printing, silk screen printing, hot engraving and the ability for die-cutting.

Interactive packaging, brand protection, hidden coding, Track & Trace and other high-tech solutions.

IMMER GROUP benefits

- its own design studio develops designs compatible with all packaging materials and packaging types;
- the R & D centre offers innovations and helps to improve current packaging solutions;
- service support provides technical assistance and advice to clients 24/7, and it aids in the selection of the packaging equipment and adapting to packaging materials;
- a full production cycle from granules and inks to finished packaging, advanced production equipment, high technological capabilities;
- convenient logistics: two plants in the northern and eastern European region, more than 10 logistics centres and warehouses in the EU and the CIS;
- an individual approach to each client.

IMMER GROUP social responsibility - IMMER GROUP is a member and an official representative of the SAVE FOOD initiative, promoting a smart approach in the use of natural resources.

The packaging of the company prevents food loss and reduces waste throughout the supply chain, is safe for consumers and the environment, and is recyclable.

IMMER GROUP awards: many awards from professional communities: The Best of the Best Packaging from the GAA, the Gold Award from the EFIA, the World Star from the WPO and others.

IMMER GROUP would love to cooperate with you and is confident that we can be successful together! 🏢

www.immer.group

I M M E R GROUP



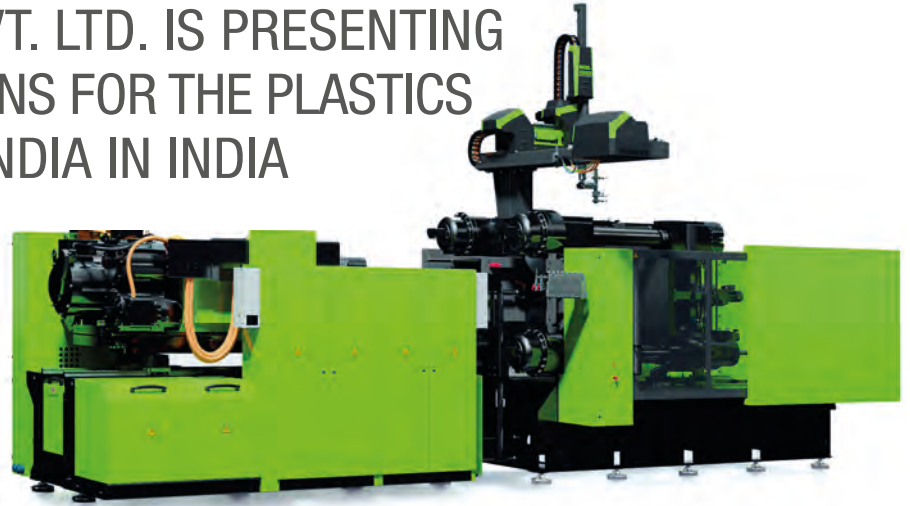
BAUMÜLLER AT PLASTINDIA IN GUJARAT

BAUMULLER INDIA PVT. LTD. IS PRESENTING INTELLIGENT SOLUTIONS FOR THE PLASTICS INDUSTRY AT PLASTINDIA IN INDIA

Baumüller's product portfolio ranges from individual components to complete systems as well as the associated service. The Indian subsidiary of the German automation and drive manufacturer will present future-proof solutions for the plastics industry at Plastindia in Gujarat from February 07-12, 2018 in hall 8 at booth 8D21.

Solutions for plastics machines

Baumüller is a leading manufacturer of drive systems for plastics machines and also delivers customized



A consortium of leading technology companies presented the latest developments in The Full PE Laminate solution as well as other fully recyclable monomaterials during Circular Packaging Event at GEA technology center in Weert.

Baumüller ist ein führender Hersteller von Antriebssystemen für Kunststoffmaschinen und liefert maßgeschneiderte Antriebskonzepte für Extrusion, Blasformen oder Spritzgießen

BAUMÜLLER AUF DER PLASTINDIA IN GUJARAT

Baumüller India Pvt. Ltd. stellt auf der Plastindia in Indien intelligente Lösungen für die Kunststoffbranche vor

Von einzelnen Komponenten bis zu Komplettsystemen sowie dem damit verbundenen Service reicht das Produktportfolio von Baumüller. Die indische Tochtergesellschaft des deutschen Automatisierungs- und Antriebsherstellers präsentiert auf der Plastindia in Gujarat vom 07. bis zum 12. Februar 2018 in Halle 8

an Stand 8D21 zukunftsichere Lösungen für die Kunststoffbranche.

Lösungen für Kunststoffmaschinen

Baumüller ist ein führender Hersteller von Antriebssystemen für Kunststoffmaschinen und liefert zudem maßgeschneiderte Antriebskonzepte für Extrusion, Blasformen oder

Spritzgießen. Lösungen rund um Antriebe im Materialhandling sowie zur Nach- und Weiterverarbeitung gehören ebenfalls zum Produktprogramm. Für den gesamten Bereich der kunststoffverarbeitenden Industrie bietet Baumüller seine Projektierungsleistung sowie Handling- und Automatisierungssysteme an, vom Motor über Umrichter und

drive concepts for extrusions, blow molds or injection molding. Drive solutions in material handling as well as solutions for post-processing and further processing are also part of the product range. Baumüller offers its project planning service as well as handling and automation systems for the entire field of the plastic-processing industry, from motors to converters and control engineering to control systems and software solutions for movement functions. Baumüller India Pvt. Ltd. offers Indian mechanical engineers and machine operators support from its headquarters in Pune for the entire life cycle of machines and systems and beyond. A high-performance alternative drive for maximum efficiency in plastics machines is available to Baumüller customers with the hardware and software package for servo pump solutions. The servo pump combines the advantages of hydraulic power transmission with

Regelungstechnik bis hin zu Steuerungssystemen und Softwarelösungen für Bewegungsfunktionen. Baumüller India Pvt. Ltd. bietet den indischen Maschinenbauern und -betreibern von seinem Stammsitz in Pune aus Unterstützung über den gesamten Lebenszyklus von Maschinen und Anlagen hinweg.

Mit dem Hardware- und Softwarepaket für Servopumpenlösungen stellt Baumüller Kunden eine leistungsstarke Antriebsvariante für maximale Effizienz in Kunststoffmaschinen zur Verfügung. Die Servopumpe kombiniert die Vorteile der hydraulischen Leistungsübertragung mit den Vorteilen der elektrischen Servo-Antriebstechnik. Das ganze Antriebspaket besteht aus

Production systems for PET preforms: At Plastindia, Baumüller shows that it offers drive systems with standard components that are tailored to the individual application



Produktionssysteme für PET-Preforms: Baumüller zeigt auf der Plastindia, dass er mit Standardkomponenten individuelle, auf die Anwendung zugeschnittene Antriebssysteme bietet

the benefits of electric servo drive technology. The entire drive package consists of a constant pump, a servo motor, a b maXX 5000 converter and the servo pump control function integrated in the servo pump. The

comprehensive range of dynamic motors and converters in different cooling versions from Baumüller offers the right drive solution for an optimal and energy-efficient process design according to the respec-

tive load profile of the application. A servo motor DSD2 will be shown in the motor area at the trade fair stand. The different installation sizes of the DSD2 series offer a suitable solution for almost every

Efficient solution for hydraulic and hybrid injection molding machines: Baumüller's servo pump combines the advantages of hydraulic power transmission with those of electric servo drive technology



Effiziente Lösung für hydraulische und hybride Spritzgießmaschinen: Mit der Servopumpe kombiniert Baumüller die Vorteile der hydraulischen Leistungsübertragung mit denen der elektrischen Servoantriebstechnik

einer Konstantpumpe, einem Servomotor, einem b maXX 5000-Umrichter und der im Umrichter integrierten Servopumpen-Regelungsfunktion. Die umfassende Palette an dynamischen Motoren und Umrichtern in unterschiedlichen Kühlungsvarianten von Baumüller

bietet hier entsprechend des jeweiligen Lastprofils der Anwendung die passende Antriebslösung für eine optimale und energieeffiziente Prozessgestaltung.

Im Motorenbereich wird auf dem Messtand ein Servomotor DSD2 gezeigt.

Die verschiedenen Baugrößen der DSD2-Baureihe bieten für nahezu jede Anwendung in der Automatisierung eine passende Lösung. Der DSD2 ist geeignet für hochdynamische Anwendungen mit höchsten Anforderungen an Beschleunigungsvermögen und beste Start-Stopp-Qualitäten, wie zum

automation application. The DSD2 is ideal for highly dynamic applications requiring excellent acceleration ability and start-stop qualities, such as in packaging, textile and plastics machinery, material handling equipment, special machinery and small robots.


Highlight of 3-Axis Material Handling

The visitors are expecting a 3-axis handling unit as a highlight. The control unit of the handling unit can

be integrated into existing as well as new production systems via a Euro-map 67 interface or it can be operated as a self-contained system with its own control unit and is also suitable for retrofitting existing systems. The user interface of the control unit is simple and intuitive and the user can easily access the visualization of the production data via smartphone or tablet if necessary.

Learn from the industry experts

Baumüller's experts will be on

hand at the booth to advise trade visitors about the company's products and services. As a system partner, Baumüller provides a complete product range for demanding automation tasks – from individual components to complete system solutions. 

Baumuller India Pvt. Ltd Plastindia, February 07 – 12, 2018 Hall 8/ booth 8D21 – Gujarat, India.

www.baumuller.in

Baumuller India Pvt., Ltd with headquarters in Pune was founded in 2009. With its 40 employees in India, Baumüller works to sell Baumüller products and services at a total of three branches. Baumüller has two branches in Pune. A repair workshop for its own and third-

party brands is located in the southern part of the city, Bhugaon. The sale of Baumüller products for all of India is coordinated from the western part of the city, Kothrud. The employees at the Ahmedabad location are responsible for on-site customer service as well as

for the spare parts sales with their own spare parts warehouse. They create the individual maintenance packages in consultation with the customers. Baumüller India offers training both at the Pune headquarters as well as at the customer's location.

Beispiel in Verpackungsmaschinen, Textilmaschinen, Kunststoffmaschinen, Handlingmaschinen, Sondermaschinen und Kleinrobotern.


Highlight 3-Achs-Handling

Als Highlight erwartet die Besucher eine 3-Achs-Handlingeinheit. Die Steuerung der Handlingeinheit kann über eine Euro-map 67-Schnittstelle sowohl in bestehende als auch neue Fertigungssysteme integriert oder als autarkes System mit eigener

Steuerung betrieben werden und eignet sich auch zur Nachrüstung bestehender Anlagen. Die Bedienoberfläche der Steuerung ist einfach und intuitiv und der Anwender kann bei Bedarf bequem über Smartphone und Tablet auf die Visualisierung der Fertigungsdaten zugreifen.

Branchenexperten informieren

Den Fachbesuchern stehen die Baumüller Experten am Messestand für Produkt- und Beratungs-

gespräche zur Verfügung. Baumüller bietet als Systempartner das gesamte Spektrum für anspruchsvolle Automatisierungsaufgaben, von der einzelnen Komponente bis zur kompletten Systemlösung. 

Baumuller India Pvt. Ltd Plastindia, 07. Februar – 12. Februar 2018 Halle 8/ Stand 8D21 – Gujarat, Indien

www.baumuller.in

Baumuller India Pvt., Ltd mit Stammsitz in Pune wurde 2009 gegründet und ist in Indien mit seinen gut 40 Mitarbeitern für den Vertrieb von Baumüller-Produkten und Serviceleistungen in insgesamt drei Niederlassungen tätig. In Pune hat Baumüller zwei Niederlassun-

gen. Im südlichen Stadtteil, Bhugaon, befindet sich eine Reparaturwerkstatt für eigene und fremde Fabrikate. Vom westlichen Stadtteil Kothrud aus wird der Vertrieb der Baumüller Produkte für ganz Indien koordiniert. Die Mitarbeiter im Standort Ahmedabad sind für den Ser-

vice beim Kunden vor Ort sowie für den Ersatzteilverkauf mit einem eigenen Ersatzteillager zuständig. In Absprache mit den Kunden schnüren sie individuelle Wartungspakete. Baumuller India bietet sowohl am Stammsitz Pune als auch beim Kunden vor Ort Schulungen an.

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A SECOND LIFE FOR FLEXIBLE PLASTIC PACKAGING

NEW BARRIER SOLUTION FOR FULLY RECYCLABLE MONOMATERIAL

According to research of the MacArthur Foundation (EMF), merely 14 percent of the plastic packaging used globally makes its way to recycling plants, while 40 percent ends up in landfill and only 1/3 in fragile ecosystems. By 2050, it is estimated there will be more plastic than fish in the world's oceans. Contributing to the transformation of global plastic packaging material flows is essential for each stakeholder of the plastics value chain.

Based on this claim, a consortium of leading technology companies, comprising of BOBST, BOREALIS, ER-EMA and HENKEL, hosted a Circular Packaging Event and of last year at GEA in Weert, The Netherlands. During this day experts from the industry presented the latest developments in The Full PE Laminate solution as well as other fully recyclable monomaterials and shared insights into recyclability properties and second life possibilities. One of the main innovations presented at the event is the brand-new barrier solution for fully recyclable monomaterial, suitable for flexible food packaging. The innovation was demonstrated on the GEA SmartPacker CX400. Guest speakers from the European Organization for the Packaging and the Environment (EUROPEN) and SUEZ, gave another dimension to the day and helped close the circle.

Current challenges of flexible packaging

As sustainable and recyclable packaging is becoming an increasingly important topic in the market for flexible



A consortium of leading technology companies presented the latest developments in The Full PE Laminate solution as well as other fully recyclable monomaterials during Circular Packaging Event at GEA technology center in Weert.

packaging for both brand owners and end users, the plastics and packaging industries are looking for ways to ultimately move to monomaterial structure to facilitate recycling. Current structures cannot be recycled because of the use of mixed polymers in the structure, such as barrier or printed substrates/films typically involving PET laminated to sealant substrates consisting of PE, OPP or CPP dependent upon the application.

To deliver a full PE barrier laminate structure is not easy as the mechanical properties of PE are not optimised for web transportation, stability and conversion and the heat sensitivity of the film also creates additional challenges when using vacuum deposited barrier layers.

The Full PE Laminate

The Full PE Laminate solution by Borealis and Borouge is a step-change concept in flexible plastic packaging. It is based on the proprietary Borstar® Bimodal Polyethylene (PE) Technology in combination with machine direction oriented (MDO) processing technology.

Packaging solutions of The Full PE Laminate are as efficient in terms of performance as other flexible packaging structures and serve as 100 percent substitutes for multi-material film solutions in pouches and packs. Most compellingly, the recyclate gained from The Full PE Laminate packs can be used for valuable end products with no loss in efficiency, and can even be used to produce PE film products.

Importance of recyclable packaging

Additionally, Henkel gave more insights about the growing importance of recyclability in the flexible packaging industry. Both, from a brand owner's perspective for Laundry & Home Care products and as technology leader for adhesives & coatings, Henkel showcased different packaging design solutions and concepts towards a circular economy, such as the Full-PE Laminate for laundry detergents or the Megaperls pouch with recycled plastics and highlighted the role of adhesives & coatings in a circular economy. Extensive tests, performed by Henkel, partners and other market participants, have successfully demonstrated the viability of recycling PU laminated films into high quality secondary materials when mutually compatible films are used.

Barrier solution on fully recyclable PE film

As part of the collaborative project with the other partners, BOBST utilized its world leading Competence centers in Bobst Manchester and Bobst Italia to provide a full turnkey solution for the conversion of the newly created MDO PE film. The film was first AIOx coated on a new BOBST K5 EXPERT metalizer, a unique barrier topcoat was then applied using an AIOx optimized BOBST CL 850D coating & laminating machine, the film was then printed on a new RS 6003C HS gravure printing press and finally laminated on the CL 850D machine. As well as being recyclable, the new packaging solution also needs to meet barrier targets which are to achieve barrier levels equivalent to that of metallized PET (OTR - 1 cm³/(m²d) & WVTR - 1 g/(m²d)), BOBST is now heading towards achieving this important market requirement.

Stand-up pouch (SUP) manufacturing

The new material has been tested on Vertical Form Fill Seal equipment by GEA experts in Weert, who were entrusted with the task of adapting the



Jacques Timmermans, the product application specialist at GEA showed the adjusted pack line GEA SmartPacker CX400 Quatro Seal during a live demonstration.

packaging equipment GEA SmartPacker CX400 Quatro Seal for use with the new film material. Jacques Timmermans, the product application specialist at GEA, who was in charge of the project, said, "We managed to adjust our pack line for the flexible PE film so that we can now work in continuous mode without a loss of speed or efficiency. The Full PE laminate runs well on GEA two-line with rubber in-lay seal profiles - special profile."

Addressing sorting and recyclability

When talking about the recycling of packaging, one has always to consider both - the recycling of production waste generated during the production of the packaging and of course the impact on the postconsumer recycling performance.

Production waste recycling

Whenever it is possible during the design phase to make packaging less complicated in terms of the recyclability, this also has a positive impact on the recycling of production waste. Material costs during the production of packaging account for about 80 percent of the total production costs. This means the recycling of the production waste, which can be up to 30 percent, is crucial for economical packaging production. The recycling can be handled in-house by

the packaging producer or by recyclers using this industrial production waste. "In the case of monomaterial solutions the respective pellets can be used for a broader field of applications in the next product life - e.g. the Full PE laminate pouches can be used again for film applications which is not possible with PET/PE packaging, according to EREMA experts.

Post consumer recycling

A test carried out at the SUEZ Rotterdam sorting plant indicates that the large majority of the tested sheets were recognized as film and sorted out in a fraction that is being sold to specialized PP/PE film recyclers. These recyclers are currently suffering from the loss in yield and quality due to the presence of multi-layer packaging in the film fraction. The quality of the multilayer packaging waste fraction is significantly increasing by incorporation of the Full PE laminate.

Also in industrial sorting plants, these Full PE pouches can be sorted out with the PE film fraction from the technical point of view. It can also be the case that it is collected with the mixed film fraction. In that case monomaterial solutions are in general a contribution to make these fractions less complicated. 🏭

at gea.com

YOUR EVERYDAY WORK IS TOUGH ENOUGH



Understanding the market's needs is the most important part of creating the perfect product.

The first step to achieve this is to recognize the threats and demands of the industry. Food processing workplace is a very specific one - constant necessity of quality control, contact with sharp and dangerous tools, food parts and liquids is the everyday struggle of the people working in food processing environment. And yet, the last but not least component - time. Every producer strives to combine these elements in order to achieve the high quality product manufactured in the shortest period of time possible.

Everyone who struggles with this challenges sooner or later realizes that the final score depends on every component of the process - it is highly important to use only the tools which were created especially for this kind of jobs. That's what OHAUS company takes for its first priority - creating the tools that will help their customers become the leaders in their class. When asked about the company's main foundations in creating new products, Zbigniew Pobocho, General Manager, says: "For more than 100 years OHAUS is trying to make people's job easier. The first question that we ask ourselves while creating a new product is, who is going to use them. Then we gather information about those people line of work. Creating the scale for Food Processing Industry is one of the most difficult tasks. We have to think about every possible situation that can threaten our scales' operability. But in the end it's really satisfying to create something that will make Customers work faster and easier - their everyday job is tough enough and they should not have to worry about damaging



their scale simply by spilling the liquid on it. I trust that after all the years we have finally succeeded - our Customers are highly satisfied with our new Valor 2000 and 4000 scales, created especially for food processing jobs." OHAUS latest proposal for food industry jobs are Valor 2000 and 4000 Compact Bench Scales, certified and highly resistant. Looking at their features it is clearly visible that they are the perfect tool for the food processing.

The designers of the scales have considered the need of Valor's 2000 and 4000 resistance to the sharp objects, commonly used in the food processing activities - the scales are equipped with polycarbonate knife proof keypad. It prevents damage from knives, repealing stains, moisture, corrosive fluids and food contaminants.

The scales' Flow Thru Design protects the scales from fluids and condensation that may form inside the scale from constant temperature changes

in typical food processing environments. The Valor 2000 and 4000 scales are NSF Certified and have OIML/EC Type Approval.

All those combined features make the Valor Compact Scales safe, fast and highly durable. Designed especially to endure in the harsh food processing jobs, they are certainly the right tool for the toughest jobs. 🏠

www.ohaus.com

OHAUS manufactures an extensive line of high-precision electronic and mechanical balances and scales that meet the demands of virtually any weighing need. The company is a global leader in the laboratory, industrial, and education channels as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. OHAUS products are precise, reliable and affordable, and are backed by industry-leading customer support.



Valor™ 2000 and 4000 Food Industry Scales



*The right tool
for the toughest jobs*



Valor™ 2000



Valor™ 4000

The new Valor™ scales combine many features that make them capable of handling the toughest food processing jobs. The keypad made of polycarbonate prevents damage from sharp objects, repelling stains, moisture, corrosive fluids and food contaminants. The Flow-Thru Design protects the scales from fluids and condensation that may form inside the scale from constant temperature changes in typical food processing environments. With their fast and accurate results, practical touchless sensors, waterproof and durable design, Valor™ 2000 and 4000 are performing at their best even in harsh environments.

www.ohaus.com/valor4000

ISHIDA X-RAY FLEXIBILITY ENSURES PREMIUM PRODUCT QUALITY

ISHIDA X-RAY INSPECTION TECHNOLOGY IS HELPING TO MAINTAIN THE PREMIUM QUALITY REPUTATION OF ONE OF RUSSIA'S MOST POPULAR TRADITIONAL SNACK BRANDS

The 'ROSTRAGROEXPORT' company was founded by Mr Boris Aleksandrov in 1995, who spotted a niche in the Russian food market for a good quality traditional curd snack. Its 'B.Y. Aleksandrov' brand, named after the company's founder, represents the 'ideal' curd bar created using only the finest natural ingredients. Currently there are 16 different kinds of 'B.Y. Aleksandrov' bars covered with the finest milk, dark or white Belgian chocolate. The range also includes a special set of 6 small chocolate-covered sweet cottage cheese bars with a small board game or toy.

Because the 'B.Y. Aleksandrov' brand is positioned as the highest quality product on the Russian dairy market, maintaining impeccable quality control is the key requirement for the 'ROSTRAGROEXPORT' company.

After production the cottage cheese bars are sealed in the 'flow-pack' foil and are then placed in individual small carton boxes. Following this, packages of 12 individual boxes are formed. There is no possibility to use common metal detectors for quality control as the 'flow-pack' foil is metalized. More significantly, the metal detectors are not able to identify if a product has any glass or plastic insertions broken or empty packaging. The Ishida IX-GA-4075 X-ray inspection system is able to perform a num-



ber of quality control procedures. It can detect potential contaminants in the curd bars, such as metal parts

from the production machinery, metal flakes which may be present from the containers in which sugar is

stored, and stones from the harvesting of the raisins. The system can also spot damaged packs, and uses weight estimation to identify missing packs or items, for example missing toys in the children packs.

The IX-GA-4075 is operating reliably in conjunction with current line speeds of up to 60 packs per minute in a 24/7 production environment.

Key to the machine's versatility is Ishida's unique Genetic Algorithm (GA) technology, which uses image data analysis over a number of inspections to build up a more precise calibration protocol. Any case that is out of the protocol is memorized as a problem and is rejected. This enables permanent or common recurring defects to be more easily identified and their location in the pack to be pinpointed.

The 'ROSTRAGROEXPORT' company representatives say the Ishida IX-GA-4075 delivers a number of important competitive benefits. "The X-ray system's ability to successfully detect all types of contaminants is a vital safety check, which is particularly essential for a product so popular among adults and children," explains Mr Pavel Kubakhov, head of innovations and new technologies department.

"No less important is the fact that the high level of quality assurance is necessary for the supermarkets and retail chains that we deal with. Due to our X-ray system, we have a full record of every pack inspection so we can prove the quality of our product and packaging, which is useful in the event of any subsequent consumer complaint."

"The Ishida IX-GA-4075 is performing extremely reliably," says Mrs Lubov Lukashevitch, head of cottage cheese bars production. "Since its



installation, we have had no problems or breakdowns. The machine is configured with software in Russian and is extremely easy to operate and maintain. We have inputted 40 presets, and changeovers between products for inspection take just a few seconds."

Above all the IX-GA-4075 represents a sound investment for the company. "Ultimately you cannot put a price on quality or the cost implications if quality levels fall in any way", con-

cludes Mr Kubakhov. "On that basis alone, there is no question that the machine will have paid for itself."

For the moment up to 400,000 packs of 'B.Y. Aleksandrov' bars are produced daily, representing around 30% of the company's total production. Since its launch in 2008, total production has grown eight times. 🏠



OUR PANS & NON-STICK COATINGS, AROUND THE WORLD



Pans & Non stick Coatings

Turbel Company has been in the business of manufacturing industrial baking pans and applying industrial coatings (non-stick Teflon and Silicone) for the past 25 years. It is the first Licensed Industrial Applicator of Dupont in Turkey and the worldwide growth award in year 2008 from Dupont.

Currently, it has four plants in Turkey. Three factories are working for the top-quality non-stick coating appliances and one factory is producing trays with its high-tech equipment and technical team.

After being very successful in Europe from Turkey, the management decided to open a place in Germany in order to be at close proximity to its biggest customers and serve faster for their needs.

In May 2015, first foreign investment of Turbel; a coating factory, is opened in Wassenberg – GERMANY. With its best location, Turbel serves very quickly to its customers in Netherlands, Belgium, UK and France in addition to Germany.

It also became entitled to receive a government grant from NRW Bank for its direct investment in the region.



With more than 25 years experience in this field Turbel is the market leader in Turkey and one of the biggest players all around the world.

Turbel supplies special coating systems - developed in their own laboratory - as well as baking pans and trays of own construction, selling worldwide to more than 46 countries. It has its own tooling department to meet with customers' exact needs, upon their production lines.

Turbel is mainly serving for the largest cake and bread line producers all around the world. In addition, it has many reputable customers in indus-

trial cake and bread production business. Due to its experience in the sector, Turbel can respond immediately to the individual demands and push on innovations. It can provide tailor-made solutions for your unique working environment and keep track of the products for further development. Turbel gives highest priority to after sales services because they aim for the happiest and the most satisfied customers with their products in terms of; quality, delivery time and price.

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SMI GROUP MAI DUBAI LLC



Mai Dubai LLC is a new, exciting and daring commercial initiative in the mineral water bottling sector and launched its production business at the beginning of 2014. This new company's goal is to quickly reach positions of primary importance in the industrial reference overview. For this reason Mai Dubai LLC is planning major investments in technology and people, which will enable it to obtain a product that will live up to the reputation of the brand that produces it.

Dubai is one of the richest cities in the world, where glitz coexists with tradition and skyscrapers overlook the desert. Dubai is the city of greatness and challenges. This is why DEWA (acronym for Dubai Electricity

& Water Authority) – decided to build a plant from scratch to bottle drinking water, for the production of 12,000 bottles per hour. The development of the entire project, which was named Mai Dubai, was entrusted to the SMI Group in San Giovanni Bianco (Italy) as sole supplier. The task entrusted to SMI designers soon turned into a big challenge: to design, implement and install a complete turnkey system comprising the entire process, filling, storage & distribution technology as well as all the relating management and control systems. SMI proposed itself as the sole supplier to handle all the major stages regarding the design and construction of the plant, with the primary objective of providing a first-class product and demonstrating its technical and managerial skills to the customer.

Three production lines for three market needs

The agreement between DEWA and SMI was signed in 2013 after a long selection process that took place through a bid issued by the Emirates. In the end, the latter deemed that SMI was the supplier that best reflected the qualitative, economic and technological characteristics required by the invitation to tender.

The turnkey solution proposed by SMI for Mai Dubai also includes, besides the actual bottling plant, all the ancillary equipment necessary to run the production lines, from the desalinated water treatment system to the palletizing of the finished packs. With this new investment, Mai Dubai Water aims to become one of the leading companies in this

sector. The company's goal is to win significant market shares both from the private consumer – to which the 12,000 bph PET line is dedicated for the bottling and packaging of 1.5-liter, 0.5-liter and 0.33-liter PET bottles – and from the industry and service sector – to which the production of bottled water in 5-gallon containers is intended. Finally, Mai Dubai also aims at the airlines' niche sector through the production of the line that packages water in small plastic cups.

"Blue gold": an important source of wealth

The production of drinking water is undoubtedly the biggest challenge for a place like Dubai, which does not have a river system and has limited rainfall; challenge that DEWA decided to face, to expand in the promising market for the production and bottling of the so-called "blue gold".

The Mai Dubai project is part of a broader strategic vision of the company's mission of providing products and services of high quality.

Desalinated water is now the main source of drinking water in the United Arab Emirates, the demand for which is growing rapidly, and therefore requires massive investment in advanced systems and technologies. Since sea water is desalinated using special equipment owned by the customer, SMI's supply begins from the treatment that makes desalinated water potable and ends with the palletizing of the finished packs, ready to be distributed and sold on the market.

"Customer priorities: meeting deadlines and quality excellence"

Mai Dubai commissioned SMI both for the technical design of the bot-



tling line and the construction of the plant that houses the line, supervised by the SMI Group's QHSE (Quality, Health, Safety & Environment).

The priorities highlighted by the company in the bid mainly concerned the timing involved in the implementation and start-up of the new production lines as well as the technological content of the machinery making up these lines; all this to achieve a state-of-the-art plant in the UAE that would ensure constant and efficient production flows of excellent quality in all three bottling lines installed in the new plant of 22.123 m². 🏠

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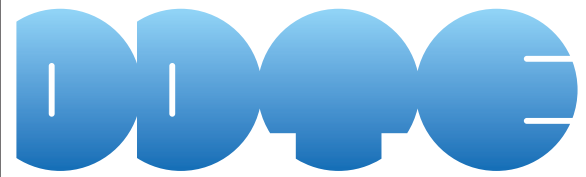


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EUROPAIN INTRODUCES THE BAKERY OF 2020



In 2018, the new edition of Europain will introduce a simplified structure segmented into three sections – MANUFACTURING – SELLING – MANAGING – which will make it easier to identify the latest services, products and equipment. How to manage a business? Optimise organisation? Treat customers? In an industry that is experiencing deep transformations, it is essential to make the right choices and find the best solutions. Europain brings together in one place all the major players concerned with the management of businesses in the bakery pastry industry

SELLING: A FRIENDLY LIVING SPACE

Today, when entering the shop customers want to find more than a simple baguette or a cake. They want to be able to sit down and enjoy a pleasant moment, find hot beverages, delicacy snacks to take away or savoury products at meal times. For professionals in the industry, creating a coffee corner or a workspace, as well as optimising design and layout are some of the opportunities available to help boost sales, but they also represent challenges to keep up with the customers and the market.

The exhibitors attending Europain 2018 will present a varied offering including cafeteria products, ingredients and finished products for bakery catering, but also small equipment, appliances and services to help professionals transform local shops into versatile places where customers can come to eat and exchange.

SELLING: THE CONNECTED SHOP

Digital is also affecting consumer habits significantly throughout the whole Food Service industry, including bakery pastry naturally. From checking opening hours to online sale, mobile payment and click & collect, new technology is changing the business and the services that customers have come to expect, in particular the millennials.

All the players who can help professionals ensure the transition will be present at Europain: advice, dedicated technology and equipment etc., with an emphasis on central questions such as online ordering and managing unsold products.

MANAGING: MANAGEMENT MADE EASY

All the aspects related to running a bakery pastry business will also be ad-

dressed: legal support, insurance, accounting, production planning, and of course, training and human resources management. Visitors will find for instance software packages covering all the facets of staff management.

Many technological solutions designed to save time and optimise sales will also be featured: automatic debit, stock management and staff turnover are among the many examples together with numerous other services proposed to professionals in the bakery pastry industry, regardless of the size of their business.

Finally, in the heart of the “Managing” section, the Schools street presents training programmes for all the trades in the sector. The industry is flourishing and many types of training programmes are available today: basic training, continuous training, online, short-track, etc. Students or entrepreneurs retraining in the sector will find here information on the training programmes available and possibly future collaborators. 🏠

www.europain.com

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UPCYCLING IN THE PRODUCTION OF FOOD: OPTIMAL ADDED VALUE BY UPGRADING BY-PRODUCTS

Sustainability and environmental management play an important role in the food industry. Nevertheless, regardless of how efficiently the machines work and how resource-friendly they produce, at the end of the day the manufacturers are still faced with the question: What to do with the waste materials that are left over? Anuga FoodTec from 20 to 23 March in Cologne holds answers in store for the visitors. Upcycling strategies and innovative methods for the recovery of materials from industrial by-products is the focus of the international industry meeting point.

Added value gained from waste products holds enormous potential for the food manufacturers. On the one hand, the upcycling of by-products that arise in partly large volumes while processing vegetable and animal-based raw materials is resource-friendly and ecological. On the other hand, the biomass contains a multitude of substances that can be implemented as ingredients for new foodstuffs. Modern machinery and innovative methods for the recovery and upgrading of by-products are of particular interest here.

From waste material to a superfood

The initial starting point of every upcycling strategy is always the homogeneous separation of the arising vegetable and animal-based secondary raw materials. Whey is a prime example of successful upcycling. The former waste product that arises in



large volumes during the production of curd cheese and cheese is turned into coveted "superfoods" that no longer just create added value in fit-

ness studios.

Thanks to its protein, vitamin and mineral content, the popular ingredient is in the meantime added to pud-



dings, drinks and smoothies - and it is also implemented as a demineralised concentrate in baby food. Numerous exhibitors at Anuga FoodTec will be presenting a wide spectrum of established technologies for the isolation of whey components and for the further processing of the recovered ingredients into liquid and powder products.

Separating methods isolate the valuable components

The membrane separation method plays a key role, especially ultrafiltration. It allows the whey protein to be concentrated by up to 35 percent. In protein isolates up to 90 percent, the whey is freed from the fat by means of microfiltration.

Lactose and minerals like calcium and phosphorus can be recovered from the permeate flow of the protein isolation by means of nanofiltration or reverse osmosis. In this way, by cleverly combining dynamic filtration methods enriched products can be produced that contain the high-quality components in the desired concentration.

In addition to the membrane filtration method, the separator technology has also established itself as a further upcycling method. Among others its strengths lie in lecithin, which occurs as a by-product when

soya beans, sunflower seeds and rape seeds are processed. The lipids are highly appreciated in the food industry as a natural alternative to synthetic emulsifiers and stabilisers. High-speed separators that separate the lecithin and raw oil have to be implemented to recover lecithin. Exhibitors, who will be presenting these methods at Anuga FoodTec can be found on the website <http://www.anugafoodtec.com/aft/exhibitor-search>

New ingredients from residues

Thanks to upcycling the offer of natural food additives is becoming more comprehensive, as one can see from the example of pectin. The by-product that is generated during the production of apple juice is used as a gelling agent, which is in the meantime indispensable within the food industry. Polyphenols that are found in the pressing residues are in future to be used to add a further brown shade to the palette of natural colourants for food. The aim of a project supported by the Federal Ministry for Economic Affairs and Energy is to develop a large-scale technical process that uses the waste products left over after making juices as an alternative for caramel colouring.

Focus on resource efficiency

The outlook of Anuga FoodTec dem-

onstrates that like recycling, upcycling - the transformation of industrial by-products into important substances - has firmly established itself in the industrial environment of food production. The machines presented at the Cologne fair grounds can already be integrated into all common processes. Rising prices for raw materials and a worldwide growing ecological awareness demand the friendly and efficient handling of natural resources. The opening conference "Resource efficiency - challenges and opportunities" which is taking place at the Cologne fair grounds on 20 March picks up on these aspects. An additional expert forum on 22 March is dedicated to the theme of upcycling and the use of by-products.

Koelnmesse - Global Competence in Food and FoodTec:

Koelnmesse is an international leader in organising food fairs and events regarding food and beverage processing. Trade fairs such as the Anuga, ISM and Anuga FoodTec are established world leaders. Koelnmesse not only organises food trade fairs in Cologne, Germany, but also in further growth markets around the globe, for example, in Brazil, China, Colombia, India, Italy, Japan, Thailand, the United States and the United Arab Emirates, which have different focuses and contents. These global activities enable us to offer our customers a network of events, which in turn grant access to different markets and thus create a basis for sustainable and stable international business. 🏛️

Further Information is available at: <http://www.global-competence.net/food/>



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Meeting Point of the Sectorial Professionals In 2016, IBATECH Istanbul hosted thousands of visitors from Asia, Europe and Africa. Opening its doors once again for the world's leading brands to show their latest products, IBATECH Istanbul will represent the present and the future of the industry. IBATECH ISTANBUL 2016 has broken its own visitor record by a total number of 74.563 from 114 countries.

The efforts have been continuing for record breaking number of participation. The trade fair was held for the first time in five exhibition halls covering a gross exhibition area of around 50,000 square metres. After the record figure in 2014, the amount of exhibition space therefore increased once again by 5,000 square metres. IBATECH Istanbul 2016 also attracted a record number of exhibitors. A total of 366 companies from 18 countries, i.e. a marked increase of just under 27 per cent compared with 2014, took part in the trade fair. For example, a large number of international market leaders presented their latest technologies and products. Visitors rated their attendance at the trade fair as extremely positive. Due to their satisfaction, nearly every visitor (98 per cent) also wanted to come back to the trade fair in 2018. 99 per cent of respondents were intending to recommend the event to work colleagues, superiors or business associates while 90 per cent believed that the trade fair would become more important in future. Confectioners represented the largest visitor group at



47 per cent (2014: 45 per cent), followed by bakers at 21 per cent (2014: 33 per cent). There was a substantial rise in the proportion of manufacturers of chocolate and confectionery (15 per cent compared with 9 per cent in 2014) and ice cream producers (17 per cent compared with 7 per cent in 2014).

In general, visitors demonstrated a high propensity to invest. 80 per cent of them were involved in purchasing and procurement intentions. In the official trade fair survey 82 per cent of visitors said they would definitely or probably make investments.

Visitor delegations from numerous countries such as Azerbaijan, Uzbekistan, Kosovo, Tunisia, Oman, Cameroon, Bulgaria, etc. came to the trade fair to obtain information and were welcomed at the opening ceremony by Cevdet Yılmaz, the Turkish Minister of Development.

The next IBATECH Istanbul will be held in Istanbul from 12 to 15 April 2018. Be part of this success story and shape the future of the rising market with us! 🏛️

More information
www.ibatech.com

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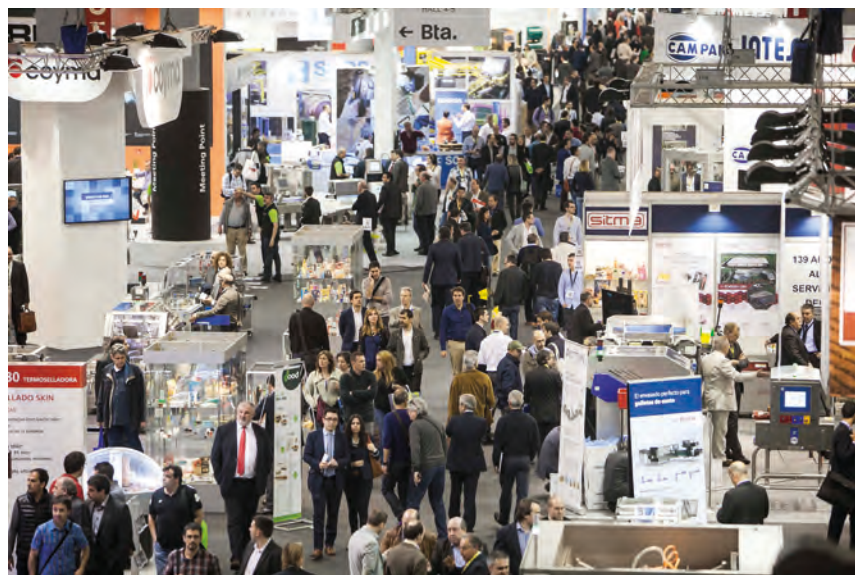
The event articulates an ecosystem around packaging with the convergence of innovation, industry and market

HISPACK 2018 FUSES PACKAGING, PROCESS AND LOGISTICS IN AN EDITION MARKED BY GROWTH

- With six months to go, the show is already bigger than in 2015
- Hispack expects to bring together more than 700 direct exhibitors
- Held at the same time as FoodTech Barcelona (8 - 11 May)

Hispack is preparing an edition marked by growth in line with the strong performance shown by the packaging industry, which is rapidly consolidating its recovery. From 8 to 11 May, Hispack will host the largest packaging ecosystem in the Iberian market, adding process and logistics to its offering and activities, showcasing world-class innovation and attracting professionals from different sectors that are users of package and packaging solutions. Thus, the show expects to bring 700 direct exhibitors to three halls in Fira de Barcelona's Gran Via Exhibition Centre in 35,000 square metres net of exhibition space, which will mean a 15% growth in the number of stands and a 12% growth in the area occupied compared with the last edition three years ago.

With six months still to go, the prospects are excellent, as Hispack has exceeded the area occupied in 2015 and, at this moment, has confirmed the presence of 500 direct exhibitors from 19 countries.



Hispack will be offering bespoke packaging, processing and logistics solutions to manufacturers and distributors of food, drinks, chemicals, pharmaceuticals, cosmetics, perfumes and drugstore products among other industrial and consumer sectors.

At the same time, Hispack will once again share its dates and venue with FoodTech Barcelona, the new name for the trade fair for food industry technologies that will be showcasing every aspect of food manufacturing. Food

industry professionals will be able to find solutions at this double trade fair, to everything from ingredients to production processes via packaging and arrival at the point of purchase.

Javier Riera-Marsá, President of the Organizing Committee, explains that Hispack 2018's proposal "offers a strategic, multidisciplinary approach to packaging that encompasses its entire life cycle and its interconnections with other processes and with the supply chain, and also involving different professional profiles".

Thus, Hispack 2018 will present packaging as an economic driving force and a key ingredient in industry's digital transformation, putting the spotlight on four major challenges that the package and packaging industry needs to address: sustainability, automation and digitisation, logistics and user experience. These challenges will be reflected both in the trade offering and in the programme of activities.



A broader offering and internationality As is customary, the sectors specialising in machinery and accessories used to manufacture packages and packaging and processing, bottling or coding and marking equipment make up more than half of the show's exhibitors. However, this year, Hispack is promoting particularly the presence of raw materials, logistics and automation suppliers, which already account for 40% of the confirmed stands. There is also strong growth in the presence of companies in the Premiumpack area, reserved for suppliers of materials, finishes and packaging for mid to top-of-the-range products, particularly in the gourmet food, beverages, cosmetics, perfumes and pharmacy segments. POS, engineering, consulting and services companies, associations and organisations, and also recovery and recycling firms complete the show's trade offering.

At the same time, Hispack plans to grow in internationality, with almost one third of its direct exhibitors coming from abroad. After Spain, the country that is contributing most companies so far is Italy, followed by Turkey, Germany, France, Holland, Portugal and China.



The presence of more international brands confirms the renewed appeal of the Spanish packaging market for its dynamic demand and Hispack's role and capacity to draw professionals from other markets abroad that are geographically and culturally close to Spain, mainly from Europe (led by Portugal), Latin America and Mediterranean countries.

As Xavier Pascual, the show's manager, explained, together with FoodTech Barcelona, Hispack is undertaking direct promotion activities in 14 countries (Chile, Colombia, Mexico, Peru, Algeria, Morocco, Tunisia, Turkey, Poland, Portugal, France, Italy, Germany and the United Kingdom), to identify buyers with specific projects that could be invited to the show. It is also organising trade missions in another 7 markets with growth potential (USA, Argentina, Iran, India, Indonesia, Thailand and Ghana). The aim is to attract about 4,000 foreign professionals to the show. Together with FoodTech Barcelona, Hispack expects to exceed 38,000 visitors in total.

New content generated from shared knowledge

In order to encompass the entire packaging ecosystem, Hispack has formed four collaborative task groups for each of the main challenges defined for this year (sustainability, automation and digitisation, logistics and user experience), whose members include more than 45 experts among representatives from the supply, demand and industry organisations. According to Xavier Pascual, these groups perform a two-fold function: "on the one hand, to define Hispack's value proposition

in each of these areas and, on the other hand, to build with us Hispack's programme of activities, giving tangible form to packaging innovations and knowledge and offering answers to the needs raised by the demand sectors and also by very diverse professional profiles".

Hispack will also include the Graphispag area, which will show the latest contributions by the printing industry to the packaging world. Here, suppliers will show examples of printed applications and specific finishes for packages, packaging and POS, together with graphic services companies.

The show will also have a Lecture Corner specialised in packaging and retail, run by the Graphispag Asociación, where experts will talk about trends, success stories and solutions. In addition, the award-giving ceremony for the recently decided Liderpack Awards 2017 will be held as part of Hispack.

Lastly, Hispack has signed cooperation agreements with some 50 professional associations, clusters, technology centres or foundations from around Spain that represent the transversality of the packaging industry, from both the supply and demand sides. The aim is to structure an ecosystem that encompasses innovation, industry and market and facilitating knowledge exchange and professional networking, not only during the show but also between editions through the Pack Experience agenda. 🏛️





upakovka

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23^{TO}-26 JANUARY 2018

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MEMBER OF INTERPACK ALLIANCE

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REGISTRATION WINDOW FOR UPAKOVKA 2018 NOW OPEN

After successful premieres this year: special shows innovationparc and SAVE FOOD once again to be part of the trade fair in Moscow

Interested companies can now register for upakovka 2018, to be held at AO Expocenter Krasnaja Presnja in Moscow from 23 to 26 January 2018. Exhibitors already signed up for the coming trade fair include Sollich, Krones, Konica Minolta, TMI and Comexi. There will once again be an official German federal participation in 2018 with a registration deadline of 22 September of this year.

Despite the current political climate Russian food production is expanding and both Russian and international companies are continuing to invest in setting up and developing local production capacities. The resulting upswing at the last edition of upakovka with considerable rises in visitor numbers and satisfied exhibitors is now impacting companies' general registration behaviour: there is a clear trend towards enlarged stands.

As part of Messe Düsseldorf's international interpack alliance, upakovka benefits from the successful and established special themes at interpack as the world's most important event in the packaging sector and related process industries. For instance, the last upakovka saw the innovationparc celebrate its highly regarded premiere. The forum for this parc was very well attended on all days of the trade fair with trade visitors appreciating this opportunity to gather information on selected innovations and discuss creative and future-oriented packaging solutions. The focus at the forthcoming innova-



tionparc, like the special theme at interpack 2017, is the topic of Industry 4.0. It generated a great deal of interest in Düsseldorf. Visitors in Moscow can now expect application examples of solutions from the packaging machinery and process technology sector that open up new dimensions in terms of safety, tracking, protection against copying and plagiarism as well as custom packaging. The area of the special show organised in collaboration with the food processing and packaging machinery association within the German Engineering Federation (VDMA) is set to grow in size compared with last year.

Also part of the supporting programme again – after the launch of the initiative in Russia at the last

upakovka – is the special topic SAVE FOOD featuring a presentation of new projects on the first day of the trade fair (23 January). The Russian office of the United Nations Food and Agriculture Organisation (FAO) headed by director Eugenia Serova invited high-ranking representatives from ministries and industry to the 2017 premiere to focus on food loss and waste in Russia and to present solutions. Amongst others, the Dairy Union of Russia and the Food Bank "Rus" joined the SAVE FOOD initiative. The programme for SAVE FOOD at upakovka 2018 is currently under preparation.

Exhibitors can register for upakovka 2018 at:

www.upakovka-tradefair.com 

NEWSROOM: NEW INFORMATION PLATFORM FOR FACHPACK IS ONLINE

- Content for all target groups laid out intuitively and attractively
- All relevant content grouped together
- Industry articles report on trends in the sector

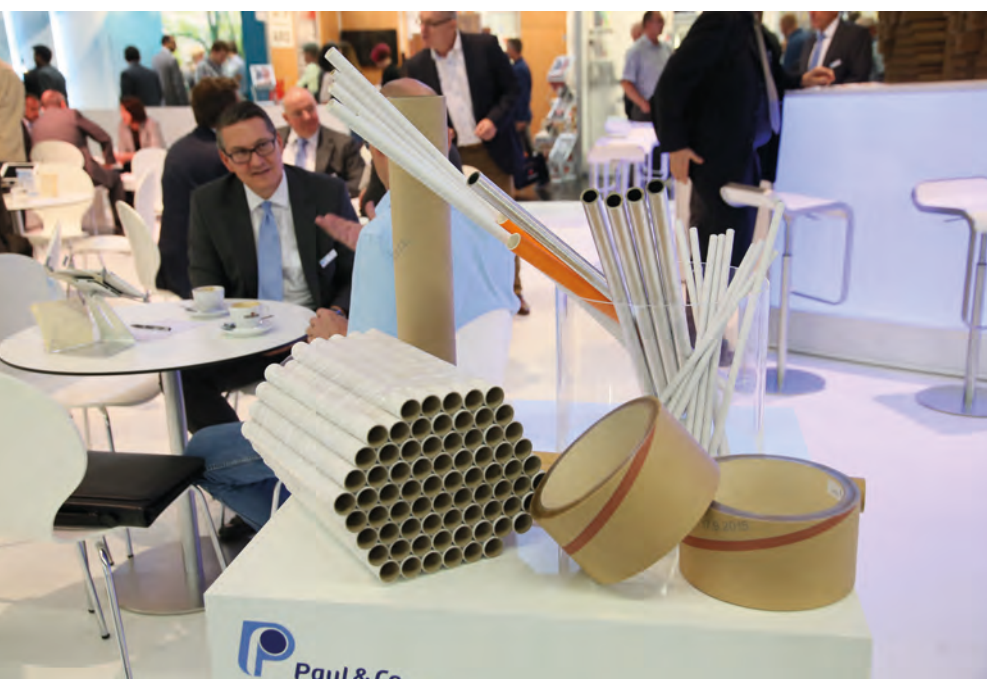
With ten months to go before the next FachPack event cycle, preparations are in full swing. The European trade fair for packaging, processing and technology is launching a new information platform aimed at the wider professional community. The Newsroom offers exhibitors, interested companies, trade visitors and media representatives the latest information about the exhibition in a clearly structured form that is easy to follow.

Regular industry articles will deal with a wide variety of trending topics in the sector, providing inspiration and encouraging discussion.



The new “News” tab (www.fachpack.de/en/news) on the FachPack website brings together press releases,

photos and videos relating to the event, and is available now. The interested professional community will also find new developments in the packaging industry in the “Industry News” section. Cornelia Fehlner, FachPack Exhibition Director, explains: “With subjects like consumer trends, Industrie 4.0 or Smart Packaging, we are giving our exhibitors and visitors relevant stimuli in the months leading up to the event, as well as a foretaste of the new developments and solutions that will ultimately be presented during the three packed days of the show in Nuremberg on 25-27 September 2018.” She continues, enthusiastically: “Bringing together all the relevant information about FachPack in a central location, and the overview that the Newsroom provides about the latest industry topics, create an advantage for our





All exclusive services for media representatives, like the press calendar, inclusion in the press mailing list, services for journalists on-site and accreditation guidelines, are provided in the “For Journalists” section (www.fachpack.de/press).

FachPack 2018: preparations under way

The European trade fair for packaging, processing and technology is taking a scheduled break in 2017, and will resume its two-year event cycle in September 2018.

With ten months to go before the next event, preparations are already in full swing, and the team is counting on having all twelve exhibition halls fully booked by the end of the year.

Save the dates!
 25-27 September 2018
 24-26 September 2019

About FachPack
 FachPack is the European trade fair for packaging, processes and technology. Over a compact three-day schedule in Nuremberg from 25 to 27 September 2018, it will present its extensive range of solutions for the packaging process chain for industrial and consumer goods. Its new brand

image “Tomorrow begins when you create it” makes FachPack more up-to- date and more dynamic and gives it a more distinctive look.

It is solution- driven and focused but as reliable and pragmatic as ever. With a unique trade fair portfolio from the segments packaging materials, packaging and packaging accessories, packaging machines, labelling and marking technology, machines and equipment in the packaging periphery, packaging printing and finishing, intra-logistics and packaging logistics, and services for the packaging industry, FachPack is the No. 1 industry gathering for the European packaging market that attracts trade visitors from all packaging-intensive sectors: Food/beverages, pharmaceuticals/medical technology, cosmetics, chemicals, automotive and other consumer and industrial goods. 🏛️

www.fachpack.de

cross-media communications. I also think the lively presentation, with lots of images and explanatory graphics, has worked out very well.”

Compact and attractive presentation

The FachPack Newsroom scores with its multi-media linking of text, image and video material, while keeping it all completely user-friendly.

In addition to regular information updates, on important deadlines or services, for example, it also provides impressions from the last event in the form of images and videos, as well as an overview of the latest press releases.

The individual subject fields are presented in compact form and divided into easy-to-follow modules.

FachPack
 25.-27.9.2018 | NÜRNBERG

EXHIBITIONS - EXHIBITIONS

EXHIBITIONS

2018 2018

SIGEP - AB TECH

20-24/01/2018

RIMINI

Fair for the artisan production of ice-cream, pastry, confectionery and bakery.



PROSWEETS

28-31/01/2018

COLOGNE

Fair for the sweets and snacks industry.



EUROPAIN

03-06/02/2018

PARIS

International show for the bakery and confectionery Industry.



FRUIT LOGISTICA

07-09/02/2018

BERLIN

International fair for fruit and vegetables.



ANUGA FOODTEC

20-23/03/2018

COLOGNE

International food and beverage technology exhibition.



mcT ALIMENTARE

05/04/2018

MILAN

Exhibition on technology for the Food&Beverage industry.



VINITALY

15-18/04/2018

VERONA

International wine & spirits exhibition.



mcTER

03/05/2018

ROME

Exhibition on technology for the Food&Beverage industry.



CIBUS

07-10/05/2018

PARMA

International food exhibition.



HISPACK

08-11/05/2018

BARCELONA

Exhibition for the packaging industry.



MACFRUT

09-11/05/2018

RIMINI

Exhibition of machinery and equipment for the fruit and vegetable processing.



SPS/IPC DRIVES/ITALIA

22-24/05/2018

PARMA

Fair for manufacturers and suppliers in the industrial automation sector.



IPACK-IMA

29/05-01/06/2018

MILAN

Exhibition for the packaging industry.



GLASS PACK

13-14/06/2018

BRESCIA

Fair on design and production management of glass bottle and containers.



FISPAL

26-29/06/2018

SÃO PAULO

Exhibition for product from packaging materials industry.



mcT COGENERAZIONE

28/06/2018

MILAN

Conference and Exhibition on applications of cogeneration.



IBA

15-20/09/2018

MONACO

Fair for the bakery and confectionery industry.



FACHPACK

25-27/09/2018

NUREMBERG

International packaging trade fair.



PACK EXPO

14-17/10/2018

CHICAGO

International packaging trade fair.



BRAU BEVIALE

13-15/11/2018

NUREMBERG

Fair of raw materials, technologies, logistics for production of beer and soft drinks.



EMBALLAGE

26-29/11/2018

PARIS

Exhibition about packaging technology.



EXHIBITIONS - EXHIBITIONS - EXHIBITIONS

MEDIO ORIENTE

GULFOOD

26-02/02-03/2017

DUBAI

Fair for food and hospitality.



DJAZAGRO

09-12/04/2018

ALGERS

Fair for companies operating in the agro-food sector.



DUBAI DRINK TECHNOLOGY EXPO

07-09/03/2017

DUBAI

Fair for the beverage industry.



DINE

14-15/04/2018

DUBAI MARINA

Café & Restaurant show in Dubai.



WORLDFOOD

29-31/03/2017

UZBEKISTAN

Fair for suppliers, manufacturers, dealers and professionals.



IRAN FOOD BEV TEC

24-27/06/2018

TEHRAN

Fair for food, beverage&packaging technology.



DJAZAGRO

10-13/04/2017

ALGERS

Fair for companies operating in the agro-food sector.



GULFOOD MANUFACTURING

06-08/11/2018

DUBAI

Fair for processing and packaging technology and Food&Beverage plants.



FOOD WEST AFRICA

17-19/05/2017

LAGOS

Fair for food, beverage&packaging technology.



IRAN FOOD BEV TEC

23-26/05/2017

TEHRAN

Fair for food, beverage&packaging technology.



GULFOOD MANUFACTURING

31-10-02/11/2017

DUBAI

Fair on processing and packaging technology and Food&Beverage plants.



GULFOOD

18-22/02/2018

DUBAI

Fair for food and hospitality.



RUSSIAN-CHINA

UPAKOVKAUPAK ITALIA

24-27/01/2017

MOSCOW

International packaging machinery exhibition.



BEVIALE MOSCOW

28/02-02/03/2017

MOSCOW

International trade fair for the beverage industry.



MODERN BAKERY

13-16/03/2017

MOSCOW

Fair for bakery equipment and food ingredients.



INPRODMASH & UPAKOVKA

12-14/09/2017

KIEV

International packaging machinery exhibition.



UPAKOVKA - UPAK ITALIA

23-26/01/2018

MOSCA

International packaging machinery exhibition.



BEVIALE MOSCOW

27/02-01/03/2018

MOSCOW

International trade fair for the beverage industry.



MODERN BAKERY

12-15/03/2018

MOSCOW

Fair for bakery equipment and food ingredients.



BAKERY CHINA

09-12/05/2018

SHANGHAI

Fair for the bakery and confectionery industry.



EXHIBITIONS - EXHIBITIONS - EXHIBITIONS

EXHIBITIONS FIERE - EXHIBITIONS

EXHIBITIONS

2019

INTERSICOP

23-26/02/2019

MADRID

Salone di panetteria, pasticceria e affini.



POWTECH

9-11/4/2019

NUREMBERG

The trade fair for powder processing.



IFFA

04-09/05/2019

FRANKFURT

International trade fair for the meat processing industry.



TUTTOFOOD

06-09/05/2019

MILAN

International B2B show to food & beverage.



ANUGA

05-09/10/2019

COLOGNE

International exhibition of Food & Beverages.



SNACKEX

27-28/06/2019

BARCELONA

International savoury snacks and nut trade fair.



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