INTERNATIONAL 26 / 2019



SUSTAINABLE TECHNOLOGY, PROCESSING & PACKAGING

IFF 2019 - WHERE TRADITION MEETS HIGH TECH



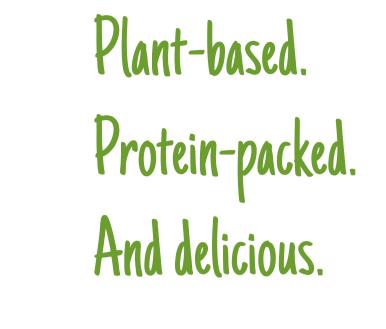






CABINPLANT - 50 YEARS OF CONTINUOUS INNOVATION

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Learn more at wildflavors.com and adm.com





Dear reader,

IFFA - The No. 1 for the meat industry - once again confirmed its position as the largest and most important trade fair for the industry. From the smart meat factory, packaging trends and food safety, to clean labelling, IFFA exhibitors provided answers to the demands of the meat-processing industry and the butchers' trade.

Our team absolutely enjoyed the great fair atmosphere, as we were first time exhibitor at IFFA, and we were delighted to welcome lots of visitors to our booth and had a perfect opportunity to get first hand information about the industry trends and innovations from some of the leading industry players. Thanks



Jenny Smart

to this opportunity, in this edition of the magazine, we put faces to names and continue our sustainability journey beyond reports to ongoing discussion and dialogue around the sustainability topic. See pages 31 - 42.

As clean label trends in ingredients and sustainable packaging are among the core topics we address in this edition, you will find extensive information bout the latest innovations and solutions the meat industry presented at IFFA 2019. Some of the solutions include developing more natural ingredients and new sources of protein. In terms of packaging, engineering recyclable plastics, bio-based materials with reduced carbon footprint, and reusing waste meet expectations of environmentally conscious consumers. These requirements resonate with retailers and brand owners who have set plastic-free or plasticreduction packaging targets. Regulatory and consumer demand for eco-friendly packaging, driven by the desire to combat the scourge of plastic pollution, shows no signs of slowing.

However, how suppliers and brand owners combine technological advancement and increase sustainability is still a key challenge. Yet the question remains as to what the most sustainable path for a more sustainable future is?

Enjoy your read!

Fight food waste with shelf life

A chilled ready meal made with the Micvac system will last for weeks in the fridge without preservatives! The result is less food waste all the way down the value chain!



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MICVAC PARTNERS WITH MIRATORG, RUSSIA'S **BIGGEST PRODUCER OF MEAT**

Swedish food tech company, Micvac, has revolutionised the ready-meal market. Key to the freshness and quality of Micvac meals are in-pack cooking and pasteurisation as well as Micvac's patented packaging components: the Micvac tray and the unique Micvac valve. This innovative system for the sustainable production of fresh chilled ready meals is currently utilised in almost 15 countries around the world. In 2018 the Micvac system received the prestigious SACCNY-Deloitte Green Award for sustainability. In the last few years the company has formed a successful partnership with Miratorg, Russia's leading producer of meat and the country's number one producer of high quality, meat-based ready meals.

Miratorg - a Russian Success Story

As a producer and supplier of meat, Miratorg outstrips its Russian competitors in pork production by more than double - with a total of 400,000 tons of pork per year. Additionally, the company holds first place in Russia for beef production, with a figure of 80,000 tons in 2017. The company invests in cutting-edge technology, highly qualified staff, and firmly upholds international environmental standards. Miratora also produces chilled ready meals using its own excellent meat products. Miratora identified Micvac as the perfect partner for chilled ready meal processing and packaging as they were looking for a truly innovative solution. With the Micvac system they saw the chance to implement an efficient and sustainable production process which would quarantee the freshness and tastiness of their ingredients on a large scale. "We are very excited that Micvac is partnering with Miratora to offer tasty chilled ready meals to the Russian market," says Sandra Krisberga-Sinigoi, Micvac representative in Russia and Baltics. "Miratora is market leader in high-auglity meat production in Russia. The collaboration between our two companies allows them to focus on creating delicious meatbased meals in the knowledge that our innovative processing and packaging system will deliver this taste sensation to the consumer."

High-Quality Meals Lead to Successful Launch

Using the Micvac system Miratorg has successfully launched a series of fresh chilled ready



"We are very excited that Micvac is partnering with Miratorg to offer tasty chilled ready meals to the Russian market," says Sandra Krisberga-Sinigoi, Micvac representative in Russia and Baltics.

meals in the Moscow region. The meals are on offer in shops and supermarkets that cater to office workers looking for a healthy, tasty alternative to their usual business lunch, or an easy, delicious evening meal after work. Miratorg's professional kitchen and team of chefs develop recipes and meals using only the best



Made with the Micvac System: delicious fresh Miratorg ready meal with long shelf life "Chili con Carne" from Miratora's extensive gourmet selection.

ingredients. Micvac's innovative ready-meal production and packaging system ensures that freshness and taste remain consistently excellent from production to supermarket shelf to the consumer's table.

Delicious Food Events and Unique Packaging

In order to introduce consumers to the new line of Miratora products, the company is currently holding a series of tasting and sampling events in shops and supermarkets. Consumers can taste the freshness and quality of the meals for themselves. The reaction has been so positive that, within the tasting periods, the sales in these supermarkets have tripled. With the current success of their new convenience meals Miratorg sees an option to plan distribution beyond the Moscow region in other large



Made with the Micvac System: delicious fresh Miratorg ready meal with long shelf life "Casserole with rice" from Miratorg's extensive gourmet selection.

cities, such as St Petersburg, in the European part of Russia in the future once the products are firmly established in Moscow.

In Miratorg stores the Miratorg fresh ready meals are are easily found as they are accompanied by promotion materials such as posters and signs indicating freshness and in-pack cooking. The slogan "Na poru" – "Made in steam" has been developed to emphasise the healthiness of the meals and the original texture of the ingredients,

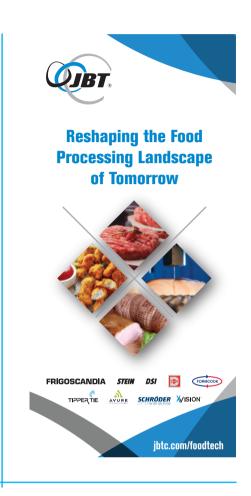


Michael Bogdanski, CEO Micvac AB, praises the successful partnership with Miratorg.

that is maintained during the cooking process. The packaging design is modern and clean, achieving high recognition and emphasising the no-additives and clean food aspect. It also features an information on the innovative Micvac valve that whistles when the food is ready.

Miratorg and Micvac - Modern, Tasty Food Innovation

In order to produce the quantities required for such a big market Miratora opted for a larger Micvac microwave tunnel. Various recipes were developed by Miratora's specialists highlighting the company's philosophy of additive-free, natural and balanced nutrition as well as offering modern versions of Russian favourites. Top selling meals are meat and vegetable stew, and wild rice with beef. Recently, Miratorg has also successfully launched a sausage and cabbage option, and stew with chicken heart. For those consumers who like to mix



and match, Miratorg started selling 330g oval trays and recently they have launched meals in 400g 2-compartment trays and smaller meals in a 200g portion. Miratorg's recipe portfolio is constantly updated and expanded and will soon include 20 choices.

As Michael Bogdanski, CEO Micvac AB, adds, "At Micvac we are proud that our system guarantees the freshness of all ingredients as well as highlighting their delicious flavours. And I would like to add that we are really happy to work with such an innovative and professional partner who has made the best out of our technology."

www.micvac.com

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THREE YEARS OF THE AOUACULTURE LABEL GGN: LEARNINGS, CHALLENGES. **AND TRENDS**

The Ggn Consumer Label for Certified Aquaculture Now Available In Nine Countries

Aquaculture products that come from farms with GLOBALG.A.P. certification can be labeled with the GGN consumer logo with the GLOBALG.A.P. Number (GGN). This is a 13-digit identification number that identifies all participants in the production and supply chain under GLOBALG.A.P. certification.

More than 137 aquaculture products are now available with the GGN logo. They are connected to 82 farm profiles and supplied by 34 GGN licensees from nine countries. With the GGN printed on the product packaging, consumers can learn more about the farms that have produced the labeled products at www.ggn.org - the consumer portal for GLOBALG.A.P. certified aquaculture. The website also explains what good aquaculture practices are and how the farms with GLOBALG.A.P. certification implement them. This direct line between the consumer and the original producer forms the basis of a chain of trust in food production.

Learnings

Traceability: One of the most important learnings of the previous years was the need for a consumerfriendly portal to allow traceability from the final product back to the farm. This has resulted in an overhaul of the existing GGN consumer portal, with faster and better readability and functionality as well as a modern design. The portal will be up and running in the summer of 2019.

Challenaes

A standard must provide a realistic promise by developing criteria based on facts which are practical and auditable. At the same time, the certification process has to be simple in order to enable cost-effective scalability while avoiding duplication.

Trends

There is a clear emphasis on reducing food safety risks as well as increasing animal welfare. A growing number of retailers around the world is interested in clearly communicating and simplifying their purchasing policies but also wishes to limit the number of labels in order to avoid confusion among consumers.

www.globalgap.org



ST700

High-yield skinner for various whole fish, fillets and poultry parts such as turkey, chicken, duck, pheasant, ...



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FOR FISH AND POULTRY PROCESSING MACHINERY

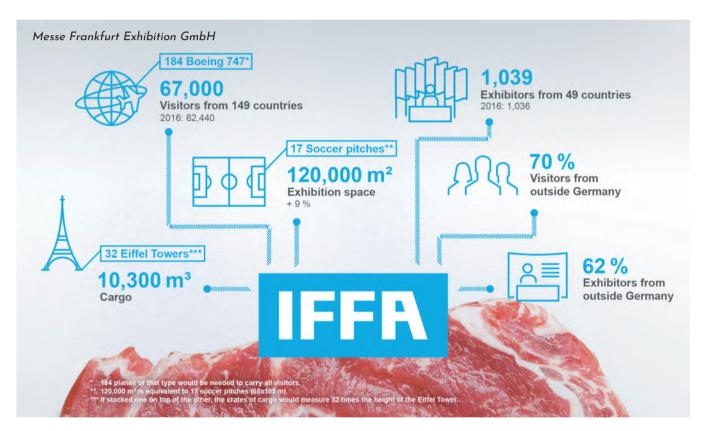
IFFA 2019 - WHERE TRADITION MEETS HIGH TECH

For six days, IFFA - The No. 1 for the meat industry - showed how the sector can get fit for the future. From the smart meat factory, packaging trends and food safety, via clean labelling, to the growing expectations on meat quality, IFFA exhibitors provided answers to the demands of the meatprocessing industry and the butchers' trade. And this

Marzin, President and Chief Executive Officer (CEO) of Messe Frankfurt. "At the same time, IFFA is the family meeting place of the meat-processing sector - the meat industry, the machine manufacturers. the packaging companies, the spice suppliers, the trade and butchers. Many of these companies have been in the hands of the same family for

Welcome to the Future -Innovations at IFFA

As the driving force of the sector, digitalisation put the focus on the smart meat factory. Automation and software solutions make production and processes more intelligent. Food safety continues to be an important subject with the aim being to replace manual activities with automatic processes.



against the background of an excellent investment climate.

"IFFA has once again shown that it is not only one of our longest-established trade fairs but also, above all, the global meeting place for the sector. Seven out of ten visitors came from outside Germany. The mood in the halls, on the exhibition stands and in the aisles was fantastic", summarised Wolfgang

generations and IFFA is where they meet to shape the future every three years".

This was also confirmed by the results of a visitor poll conducted by Messe Frankfurt: 96 percent of trade visitors gave IFFA a positive rating. On the exhibitor side, too, there was also an outstanding echo with an overall level of satisfaction of 92 percent.

In this connection, exhibitors showed, for example, the fully automatic portioning and placement of steaks or cold cuts in packaging materials using feeders or industrial robots. Also important in the packaging field are smart solutions to protect meat and meat products whereby the spotlight is on resource conservation and sustainability in terms of the energy efficiency of machines and process chains, as well as climate-neutral packaging. All

in all, the outlook for meat-industry suppliers is positive with worldwide meat production expected to rise by five percent per annum until 2027.1

85 percent of trade visitors consider the economic outlook to be positive and rate the current situation of the industry as being satisfactory to good.

be seen at the international quality competitions of the German Butchers' Association (DFV). Moreover, trainees had the opportunity to demonstrate their talents in the international young-butchers competition in which the best up-and-coming butchers from six countries competed against each other.

with the range of products and services to be seen at the fair.

A Journey Into the Future: From the Butchers' Trade Exhibition to the World's Leading Trade Fair

IFFA was first held 70 years ago as an exhibition accompanying



Traditional Butchers Score with Quality, Origins and Processing

The significance of meat in society remains very high. Traditional butchers score with consumers by offering quality and regional products. Accompanying this trend are new careers, such as meat sommelier. Innovative sales concepts, such as online shops, clever catering ideas and customer communications via the social media are making the butchers' trade fit for the future. Additionally, artisan skills of the highest order could

The Challenge: a Shortage of Skilled Personnel

Machine manufacturers and the butchers' trade have a challenge in common: a shortage of skilled personnel and trainee problems. Companies must invest more in digitalisation, automation and robot technology to lift the load from employees and simplify all meat- processing stages - such solutions for companies of all sizes and kinds were to be seen at IFFA. This was confirmed by 95 percent of trade visitors who said they were very satisfied

the conference of the Butchers' Association of the US Zone in Frankfurt and has developed over the decades into the world's leading trade fair for the international meat sector. In 2019, 70 percent of trade visitors came from outside Germany - the top ten foreign visitor nations are the Russian Federation, the Netherlands, Spain, Italy, Poland, China, the Ukraine, the USA, Austria and Australia. Particular growth was registered from Latin America (+31 percent) and East Europe (+15 percent).

www.iffa.com

ANOTHER SUCCESSFUL IFFA FOR BETTCHER



Vice-President Sales Ross Stroner, Irish World Champion Butcher Eric Donnelly, President Thomas Holm and the managing director of Bettcher GmbH, Gregor Thomalla, at IFFA

Bettcher's Innovative Tools

This year celebrating 75 years of experience in the industry, Bettcher offers to boost its customers' processes and profitability with a range of innovative trimmers and skinners. Bettcher® trimmers are specifically designed to make meat processing jobs easier, more efficient, and more profitable than using straight knives. To achieve this, the company develops tools that enable simple, clean and ergonomic work on meat production lines. This increases meat yield and leads to more profit in a highly competitive market.

After the successful Frankfurt tradeshow - IFFA, we asked Gregor Thomalla, Managing Director of Bettcher GmbH, what the show brought to Bettcher and himself.

Q. What were Bettcher's highlights of the IFFA show?

Our very traditional company, 75 years young, is a very modern and highly dedicated to our customers



Motors - The Quantum Flex fits any Bettcher motor installation - no need to replace existing motor

and their challenges. We were able to speak with national and international customers about new market trends, new challenges on the meat market, the working environment and energy savings when using our equipment and, we were always able to present the right solution for the customer. Personally, my particular highlight was the presentation of our full range of Quantum Flex Trimmer, which is now lighter in weight, has an increased blade speed, better cutting efficiency, resulting in higher meat yields and a fast return on investment. We also presented the Quantum Skinner. the first electro driven hand-held skinner to feature a powerful, lownoise, Quantum high-speed motor. The skinner's reduced weight and technical optimisation ensure that it is easier to use. Both cutting tools can be used with the new Bettcher motor, making it a truly time and energy saving innovation.

Q. What was new for you **/the business at IFFA?**

Our market is very demanding and most of the exhibitors are using terms like "savings, optimisation etc" We say "redefining" which gives our customers exactly what they are looking for - costs reduction, reliability, dedication and determination.

We think about the working environment, energy savings and for sure about increasing the margins of our customers.

Q. What insights did you get from your customers?

I spent a lot of time in conversations regarding the working environment,



Quantum Flex unique quick-change blade house with cam mechanism

energy consumption and CO2 foot print. I can proudly say that it has been confirmed that Bettcher are moving in the right direction, is fulfilling the demands of the market and that we are considered as a partner in the industry.

Award Winning Irish Butcher

Amongst the Bettcher team at IFFA was Eric Donnelly member of the Irish Winning Team of the 2018 World Butchers' Championship. Demonstrating live in the Bettcher booth, Eric the cutting tool expert, demonstrated how to achieve maximum performance using cutting skills with Bettcher's Quantum Flex skinner and trimmer. The proven professional Donnelly, who has received numerous awards in his trade and international experience in the meat business, is now working as a customer advisor for Bettcher GmbH in Ireland. Gregor Thomalla, Managing Director of Bettcher GmbH says, "We are very proud to have won Eric as a true champion for our very strong team and thus for the show, who demonstrated onsite how the meat yield can be increased."

www.bettcher.com



ADDED VALUE THROUGH INNOVATION

TREIF showcased its latest cutting innovations for dicing, portioning and slicing. The company presented significant competitive advantages for customers with a focus on flexibility, hygiene and quality as well as line expertise and digitalisation.

Dicing

The company's 60 years of experience in this field produces hygienic, reliable systems with flexible solutions, meeting virtually all customer requirements in the best possible way. TREIF has developed unique technical innovations for dicing, including cutting of frozen products with its AVITOS machine, while also setting new standards in this segment with its ease of operation using agile software solutions.

Portioning

The new generation of TREIF industrial portion cutters, the FALCON evolution, offers high-speed cutting with an extremely high throughput and continuously reliable precision.

The FALCON evolution is suitable for processing fresh or chilled products with and without bones for precision weight portioning or for cutting to a specified slice thickness. The FALCON evolution

achieves maximum yields and minimum give-aways even at high speeds, thanks to reliable measuring of every single product and precision in calculating and implementing every single cut.

Our new nanoBlade longlife was specially developed for perfect cutting quality to a precise weight and offers a considerably improved service life with long-lasting high cutting quality. High quality that pays off. The nanoBlade longlife represents a key component of TREIF's all-inclusive package for the industrial sector.

Developing an all-round carefree package was also the focus for the latest software architecture. It allows intuitive user guidance, which, among other things, further reduces the risk of incorrect operation. In combination with intelligent components, such as the different cutting equipment elements and product grippers, this can ensure that the correct machine setup was selected for the specified product.

The development of the new software also focused on ensuring transparency and actively contributing to value and performance for our customers. With the new software version 2.2, TREIF offers users of the FALCON

evolution to query the machine status and performance-related data, including selected preventive maintenance components which can be set individually by the customer, allowing the FALCON evolution to proactively support the respective added value process.

With this digitalisation, TREIF sets out on a new, innovative path for creating special added value beyond the competence field of cutting.

This transparency and the communication capability of individual components become particularly important when it comes to an intelligent line control – from the press and portion cutting, weighing, grouping and sorting to packaging.

With the vision of unattended production, TREIF combines the FALCON evolution with an automated press link and other line components as well as with innovatively modified pick&place robot technology (TREIF Robotic), for automated high-speed single picking of the product.

This is important as the industry is suffering from increased competitive pressure and personnel shortage. TREIF has therefore developed the flexible robot placement line with intelligent software





DIVIDER Startup



DIVIDER Startup Display



DIVIDER Startup Line

control, to increase the degree of automation and process reliability in customer production and to implement cost saving potentials. This also includes achieving constant quality in picking and placing the products at high throughput rates.

architecture which increases ease of operation and can also be used for proactive data analysis. For TREIF does not only see itself as a supplier of cutting solutions, but also as a reliable partner who supports its customers comprehensively and with great passion. The close cooperation with customers

for optimising work and production processes is one of companie's top priorities – successfully for over 70 years!

Consequently, the TREIF theme for IFFA was: "When passion turns into your success, it must be TREIF."

www.treif.de

Slicing

Best quality, intelligent user guiding and a high level of flexibility are fundamental requirements for in-shop machines as well as for industrial systems. TREIF consequently presents the new DIVIDER startup as an entry-level model for slicing. As a mobile standalone solution, it is an addition to the successfully established TREIF slicer machine range, which is still offered as a reliable line component with a high degree of automation.

The DIVIDER startup was developed with the objective of achieving a high output through shorter ancillary times while ensuring a high level of convenience, flexibility and quality.

The new DIVIDER startup also uses the new software



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Formshrink® is perfect for packing of high volume, uniformly shaped retail applications such as whole poultry.

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Conventional Tray

KNOW - HOW FOR VALUE-ADDED FOODS

"We Create Know-How For Value-Added Foods!" - this was the slogan of FESSMANN at IFFA 2019. The smoking specialists from Southern Germany convinced with innovative technologies and new developments in the field of smoking and automation. The latest systems for industrial and manual use were exhibited.

IFFA was a complete success for the world market leader in hot smoking. The booth, which was well attended throughout, attracted visitors from all over the world to linger and be amazed. In addition to the new FOOD.CON 2 control system, the highlights included the CLIMA.LiNE, FESSMANN's new drying and maturing system specially designed for craft businesses, and the second generation of the F.LOADER, the fully automatic loading and unloading unit for the TF4000 continuous production system. In addition, the smoking experts presented the T1900 and the T3000, their two all-rounders for the trade sector, as well as numerous systems for specific fields of application.



Fessmann T3000 with FOOD.CON

With the FOOD.CON 2, FESSMANN presented the successor to the well-known FOOD.CON control system for the first time at this year's IFFA. The newly developed controller enables the monitoring and control of up to four systems in parallel and is technically state-of-the-art. In addition to the overview of all important



Fessmann T3000 with FOOD.CON

system parameters on the smartphone, e.g. for monitoring raw sausage processes running over the weekend, the modern fieldbus communication of important components with the controller via Ethernet connections significantly reduces the downtime of the machine, as possible problems can be identified in advance and eliminated by remote access.

In the maturing sector, FESSMANN presented a further innovation with the CLIMA.LiNE: a system specially designed for craft businesses, which is available in different versions for the maturina or pure drying of products. Thanks to special blinds for precise control of the air flow, the system is particularly suitable for mixed loads of hanging and laying products. In addition, all smoke generators of the RATIO family can be combined with the system. The proven CIP cleaning system

ensures reliable cleaning results even with the most intensive smoke treatments.

A large area of the booth was dedicated to fully automatic production with the TF4000 and the FLOADER. The automatic loading and unloading unit F.LOADER is the link between the filling machines of a production line and the continuous smoking, cooking and cooling system TF4000. In contrast to robotic solutions, the development focus was on offering a purely mechanical system that is both maintenancefriendly and cost-effective. With the F.LOADER, this has not only been achieved in an impressively simple manner, the award-winning system (winner of the FT-Award 2018) has also been further developed to the extent that space savings of 80 % could be achieved with the current version compared to the previous version.

www.fessmann.com

LIMA: A VERY SUCCESSFUL IFFA 2019!



Lima evaluated IFFA 2019 as an outstanding fair, as the company achieved record number and high – quality contacts!

LIMA as a world leader in mechanical separation exhibited:

Meat-bone separators for poultry for the highest quality of mechanically separated meat at high yields with:

* It's LIMA RM 50 S, which with its compact size and low electrical consumption, allows for substantial outputs and it is perfectly sized for chicken meat-bone separation, and is ideal for customers who are wanting to get started in the production of their own Mechanically Separated Meat/Chicken.

- * And, its LIMA RM 2000 S, simply the biggest LIMA meat-bone separator for chicken, turkey or any poultry bones with an input capacity of up to 20 000 kg / hr (44 000 lbs / hr). It was showcased with new developments such as LIMA's PLC with color touch screen HMI, with special features beneficial to production and maintenance operators.
- * A NEW LIMA RM 160 DSP deboner for pork bones. Its low-pressure technology enables the very important reduction of the calcium levels in the mechanically separated pork meat, whilst keeping optimum yields. The result is a well-structured recovered meat with technological performances similar to a ground meat. This model can process up to 1 000 kg / hr of pork back and neck bones without any pre-grinding.

* A LIMA RM 400 DDM desinewer. thanks to its specially-shaped hopper for sticky products and its anti-bridging arm, it can be fed in large quantities. It is dedicated to the production of very high quality desinewed beef, pork, poultry meat which depending on the legislation can be labelled as meat and not MSM. The main advantages of LIMA's desinewers are: high yields from 80 to 96 %, optimized C/P ratios, low temperature increase. The same machine can also be used as a deboner to obtain high-quality meat in terms of texture, color & very low calcium levels, less than 1000 ppm.

The range of more than 70 different LIMA models can process from 100 to 20 000 kg/hr (220 to 44 000 lbs/hr) of raw product.

www.lima-france.com



JBT IS READY FOR TOMORROW

JBT introduced smart and innovative solutions covering the food processing chain and adding value through yield, flexibility, automation, high-hygiene, food safety, clean label and consistent end-product quality.

Together with customers JBT is reshaping the food processing landscape of tomorrow by designing innovative solutions setting the standard for the food industries growing expectations, needs and demands.

Higher Capacity in Smaller Footprint

The world-renowned range of Frigoscandia® freezing systems continues to be a flagship brand for JBT and the latest model the GYRoCOMPACT® 40 Spiral Freezer was showcased during the IFFA fair. The latest Spiral freezer is a more compact version with even more hygiene benefits and new freezing technology with the highest capacity of any comparable spiral freezer.

Value for our Customers

At IFFA 2019, JBT had the pleasure of demonstrating the DSI® 800



Series Waterjet Portioning System's capabilities. The DSI Portioner is an automated solution for portioning and trimming that has proven to consistently improve product yield and increase productivity. Built for high volume portions, the portioner functions as a precision machine for high accuracy intense cuts.



Processing Power

TIPPER TIE invited visitors to experience live demonstrations of their impressive clipping and packaging solutions. One of the highlights being the worldwide debut of the new SVU6800 high speed automatic double clipper designed for large products such as pumpable ham, large slicing logs and whole muscle loins. It delivers consistent length every time thanks to the strong voider even with sensitive casings.

JBT's meat marination specialist Schröder showcased the full scope of cutting-edge equipment for meat marination and preparation. All designed for customers demand

> nowadays – hygienic design, easier handling and less operational amounts of brine.

On Trend: High Pressure Processing (HPP)

JBT's Avure demonstrated their compelling High Pressure Processing (HPP) technology. With more than 60 years of experience and expertise in HPP science and manufacturing, Avure specializes in HPP systems for food and beverage processing with the fastest and most reliable systems in the industry. Avure helps producers implement HPP from recipe development and process validations to installation, regulatory affairs, and postinstallation support.

Other products exhibited from JBT's portfolio included the Formcook® 618 Contact Cooker for efficient sealing and searing of products and the XVision™ CCPX™ Pack™, an industry leading technology of X-ray Inspection Systems for contaminant detection of case ready, ready meals, and heat and eat products that is making its European debut.

JBT offers customised solutions to food processors production at every stage of the process including portioning, injection, marination, coating, frying, cooking, freezing, chilling & proofing, inspection, clipping & packaging and high pressure processing ensuring the final product requested.

www.ibtc.com/foodtech



"Tastes like cardboard" - No chance of that!

As a leading manufacturer of high-tech systems for smoking, cooking, baking and cooling, with us, it's all about the best taste possible.

If you want to amaze your customers with even better tasting products and are keen on technology that is robust and easy-to-use, you can learn more online now at www.fessmann.com



ULMA PACKAGING PRESENTED ITS INNOVATIONS IN SUSTAINABLE PACKAGING FOR THE MEAT INDUSTRY



ULMA Packaging showcased the meat-industry applications of its latest developments, with an emphasis on reducing packaging and using materials that are recyclable, compostable, and easy to separate.

The company presented some of its recent developments and applications for preserving meat, which feature reduced packaging and recyclable materials. All these developments are part of the **#ULMAweCare** sustainability project, an action plan based on the circular economy that was presented at the fair.

As a provider of comprehensive solutions, the company showcased examples from a wide range of technologies at the trade fair, including flow-pack, traysealing, thermoforming, and vertical packaging. The prime example of flow-pack technology is the FV 55 SD solution, a highly automated machine designed to comply with the strictest hvaiene standards and to make the best use of the benefits of the patented FLOW-VAC® technology, a system in which the film is fed in from below the product and forms a vacuum around it before being hermetically sealed. This method avoids contamination and ensures the preservation of the product, optimising material use. Featured thermoformina machines include the TFS 407 R and the TFS 200 MSV. The first is designed for skin-type packaging and is optimised to have a very high productivity ratio (up to 12% higher than standard configurations of the same kind) and up to 40% film waste reduction. The TFS 200 MSV is highly versatile, compatible with MAP, skin, and vacuum processes, and is optimised for multiple applications with flexible and rigid plastic materials and even combinations with cardboard.

Featured among the traysealing solutions is the TSB 300, a very compact and versatile new machine presented with 100% compostable packaging. Another stand-out with this technology is the TSA 1000, a solution designed for high-volume production and integration into lines that makes use of the LeafSkinTM application, ensuring the preservation of the meat pieces and their attractive presentation on a cardboard base. This system makes it possible to retain the liquid from the product and prevent it from exuding, which slows down microbial growth and enables the package to be displayed vertically on shelves at the point of sale.

At IFFA, the company explained the main benefits of some of the most important systems used by ULMA Packaging solutions. In addition to FLOW-VAC® and LeafSkinTM mentioned above, there is the Tight- BagTM system, developed for vertical wrappers and designed to optimise the volume of bags.

Responses to the Challenges of the Meat Industry

ULMA Packaging's solutions for the meat industry are designed to respond to the main challenges of the sector's packaging companies, who seek high productivity ratios without compromising the hygiene of the process and the correct integration of the processing and packaging lines, in order to comply with the regulations and recommendations of regulatory agencies. In terms of packaging, the type of technology currently in demand, including skin types, highlight the piece of meat and help preserve its appearance and properties for the product's entire shelf life.

The company's innovation efforts have focused on developing solutions that respond to these challenges, while contributing to the reduction of the environmental impact through reducing packaging, using thinner films, incorporating recyclable materials like cardboard and cellulose, and using biodegradable plastics and mono-materials that facilitate separate recycling.

www.ulmapackaging.com



SAFETY

- Unique process to generate perfect sealing surface.
- Guaranteed state of the art seal integrity equal to traditional plastic packaging.

FLEXIBILITY

- Availability of different liners and paperboards offers technical solutions to suit any product.
- Presented for Top Seal, Modified Atmosphere and Vacuum Skin formats.
- Recommended for cheese, fresh meats, processed meat, ready-made products, frozen foods, snacks, salad and fruit.

FULL BRANDING

- 360° Communication on all surfaces of the package.
- High quality graphics for premium branding design.
- Flexibility on communication formats with printing and/or labelling.

80% LESS PLASTIC

- Liner forming station with ZERO technology eliminates all process waste.
- Easy Separation of liner from paperboard for simple and efficient recycling at end of life.

MINIMUM SIZE MAXIMUM SKILLS

- Trays delivered as flat boards significantly reduce distribution storage costs compared to premade trays.
- Liner forming with Zero waste technology reduces cost of final package.
- Reduced inventory with availability of smaller purchase quantities.



U.S. PATENT PENDING

SEALPAC'S ALL-IN-ONE PRO14 THERMOFORMER: PAPER-BASED MODIFIED ATMOSPHERE PACKAGING



Paper-based thermoformer pack for sliced meat

GO Sustainable!

SEALPAC presented a resourcesaving packaging concept for sliced meat products. By using paper-based top and bottom film, it allows cold cuts to be packaged in an attractive and sustainable manner: as if they come straight from the meat counter. The new packaging system is demonstrated on the compact and cost-efficient SEALPAC PRO14 thermoformer.

Looking for a safe, attractive and modern packaging system for your sliced meat products? As part of the "GO sustainable!" initiative, packaging specialist SEALPAC presented a sustainable solution at the IFFA. For this application, the top and bottom film consist of coated paper, which are supplied by film manufacturers BillerudKorsnäs and Wipak. The bottom film is based on paper from sustainable managed forests and requires less heat to achieve an excellent forming result, whilst the top film contains an attractive print and seethrough window. As both films are perfectly matched to each other, they are easy to handle and make any sliced product a true eve catcher at retail. The films are applied on a PROseries thermoformer, which is characterized by highest efficiency. Despite their small footprint. these thermoformers still have an extremely large loading zone. which is accessible from both sides, hence enabling a smooth packaging process. The PROseries thermoformers are known for their modular construction. which make them easy to adapt to the special needs of the users. Depending on the machine type, they reliably package a wide range of products: fresh and processed meat, poultry, seafood, vegetables, snacks, ready meals, bakery products and many more.

The All-In-One Pro14 Thermoformer



SEALPAC all-in-one PRO14 thermoformer Capable of running a whole range of different packaging systems.

SEALPAC PRO14 thermoformer is capable of handling various packaging systems, such as flexible film vacuum, rigid film modified atmosphere, shrink and skin packaging. SEALPAC's innovative tooling quick exchange system, which conveniently operates from the side of the thermoformer, allows for rapid product changes with minimum downtime. At the SEALPAC stand, by applying paper-based bottom and top film on our high-performance SEALPAC PRO14 thermoformer. the company created a completely safe and visually appealing pack for sliced meat products. This resource-saving concept provides a highly attractive appearance at retail.

Rapid Air Forming Saves **Energy and Film**

Like all thermoformers within the SEALPAC PRO-series, PRO14 is standard equipped with the innovative Rapid Air Forming system. This system replaces the traditional stamp mechanism and achieves an improved forming consistency, particularly in the corners of the pack. Higher outputs due to shorter vacuum and ventilation times, as well as the possibility to use up to 10% thinner materials, make our customers' production even more profitable. Combined with extremely precise film cutting, the PRO14 produces optically perfect packs.

Reliable and Efficient Operation

Its robust construction makes the PRO14 less sensitive to maintenance. As an example, the servo-driven chain transport provides an optimal distribution of forces and reduces wear and tear. The lubricant-free four-point lifting systems equally reduce maintenance requirements.

www.sealpacinternational.com

FOODTRAY - NEW SYSTEM SOLUTION FOR SUSTAINABLE MAP PACKAGING

GEA presented a new combined solution for sustainable food packaging at IFFA. The new packaging law, which came into force in Germany on January 1, 2019, requires significantly higher recycling rates for plastic packaging and will have far-reaching consequences for industry. Together with partner companies, GEA developed an ecological carton/film composite solution, known as FoodTray. The two components, which are assembled on a GEA thermoformina packaging machine, can be easily separated later by the consumer in a single motion.

Supplying a growing world population with fresh food only works with the support of safe and secure packaging. The challenge is the consumption of resources, which is constantly rising and yet must be minimized. The German packaging law stipulates recycling quotas which, for example, requires 63 percent for plastics by 2022. "The question is what the packaging industry can do to meet these requirements and how it can ultimately replace plastic," says Hans-Günter Donges, who is responsible for overarching developments in process technology at GEA.

Bundled Know-How for Greater Efficiency and Sustainability

As a result, food manufacturers are making challenging demands on machine technology. GEA has offered a proven alternative to pure plastic packaging for years with a carton/film composite solution, which has now been further adapted to market requirements and quarantees maximum flexibility. Initially, the concept focused on creating a tray from corrugated board that could also meet the requirements of modern food packaging. Thanks to the cooperation with diverse specialists from the corrugated cardboard, film and mechanical engineering sectors, including the Roba Group, Schur Flexibles Germany and Van de Velde Packaging, the requirements could now be met. FoodTray is a system packaging that combines the criteria of product claim, haptics, safety, sustainability and industrial production processes.

Composite Packaging Solution, Yet Still Separable

FoodTray is a packaging solution made from the basic materials: corrugated cardboard and film.

Corrugated cardboard is the most widely used packaging material worldwide and is made almost entirely of natural raw or recycled material. The film provides an outstanding barrier, helping extend food shelf life.

The FoodTray system consists of corrugated cardboard carton with film on the inside, combining the advantages of both cardboard and plastic. "We've reduced film content by up to 70



The integrated carton/film design of the FoodTray is mostly recyclable and can be used for a wide range of applications.

percent," explains Donges. "At FoodTray, fossil-based raw materials are replaced with fibers from renewable raw materials; the recycled content is more than 80 percent. At the same time, we make no compromises in terms of stability. Likewise, the cardboard and film can be easily separated and recycled by the consumer."

The film is thermoformed and sealed directly to the inside of the corrugated cardboard box. After this, the customerspecific packaging process can take place. "The investment costs are low and the result is ecologically sustainable packaging," summarizes Donges. MAP packaging heights range from 20 to 60 mm and skin versions up to 20 mm, with corrugated cardboard used on the outer box.

The brand information can be printed over the entire surface, enables high-quality product presentation and meets increasing product labeling demands. Likewise, companies have the opportunity to demonstrate their commitment to using resources more mindfully by investing in this sustainable solution. "At our production site in Wallau, Germany, we have put a sample system into operation where diverse customer-specific solutions can be tested," concludes Donges invitingly.

www.gea.com

KERRY RESPONDS TO CONSUMER DEMANDS



Leading to Better

Creating healthy, sustainable, tasty and nutritious products are key demands from consumers in today's global marketplace. Without doubt, meat consumers have become increasingly conscious of their meat choices and the corresponding impact these choices have on both themselves and the environment in which they live.

Expectations, in terms of the quality required from the products they consume, are being raised significantly. These demands in turn present many opportunities and, of course, some challenges, for all manufacturers operating within the meat industry.

Kerry is best placed to help its customers to meet these demands through company's leading insights, expertise in taste, nutrition, science and the application of its range of key meat technology innovations, all of which have been designed and developed with these very consumers and their requirements in mind.

Kerry showcased six insight-led concepts demonstrating not only its technology innovation but also its nutrition, scientific and application expertise at the recent IFFA Frankfurt.

Over the course of five very busy days, the company showcased its expertise in Coatings, Freshness, Authentic Stocks, Clean Smoke™ and Plant Protein technologies. Each of these proprietary technologies are very much in-step with the key market and industry trends to emerge from IFFA, namely the mainstream emergence of plant protein into the meat discussion, the desire for health and better for you options as flexitarian diets become more popular amongst consumers, a focus on premiumisation and taste in meats as consumers become more discerning and nutrition aware, a demand for more cleaner labels across all meat categories and finally, an ever-increasing expectation from consumers for their meats to be ethically, responsibly and sustainably sourced.

www.kerry.com

"360° VHISION"- INNOVATIVE PRODUCTS, **TECHNOLOGIES AND SERVICES**



VAN HEES GmbH's IFFA presentation was based on four pillars. The motto is "360° VHISION" and describes a vast and profound range which can be used globally and which is optimised for the future. At the same time, it is a symbol for the strategic alignment of the company which presented itself, not just with innovative products, but also with customeroriented services.

The first pillar is the new "Food.PreTECT competence centre" with which VAN HEES has become an independent solution and service provider for the whole food industry. A group of experts work out individual solutions for food producers in the areas of food safety and food preservability. These experts carry out a risk assessment and develop tailormade customer solutions. Their focus is safety at all product levels and guaranteeing highquality fresh products over their whole shelf life.

The second pillar is the new development of the Kurt-van-Hees research funding focussing on the area of CLEAN-LABEL products. Thanks to the newest process technology, the innovative ripening culture PRIMAL® SK Royal Rapid M produces a mild, full-bodied flavour profile typical of long-term matured raw sausage in a short period of time. The use of flavour enhancers, aromas or fine mould cultures is not necessary. This is a new route for culture manufacture

where selected yeast develops the typical flavour components in a special nutrient broth.

The third pillar is captioned with "TASTY TEXTURE". VAN HEES presented several new products which contribute to a significant increase in quality, to greater production security and to improved costeffectiveness. Among others, these are PRALLO® Protein Tech. a new protein network which stabilises the meat matrix of boiled sausage more effectively, SCHINKO® Universal, a new brine additive for cooked cured products which quarantees a particularly high yield of between 60 and 100 percent with a universal injection rate, and PRALLO® DWS Tech, a highly effective stabiliser for meat based convenience products. This processing additive serves to firm up the texture of meat products which are eaten hot. The simple and direct treatment as well as the significant increase in costeffectiveness are characteristic of this product.



With the fourth pillar, the area of ETHNIC FOOD, the focus is on the continually growing halal market as well as the doner market. With the new binding









Visit us: Stand ⊕ www.prosur.es
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September 25-26, 2019 Centro Citibanamex, México

system PolterGOLD® Solution, VAN HEES has expanded its tried and tested PolterGOLD® binding systems to include a product which guarantees additional safety. It doesn't just minimise all risks during the production of revolving spits, but also ensures a perfect grill result without any off-flavour.

www.van-hees.com

HEALTHY AND NATURAL FLAVOURS FROM FRATELLI PAGANI



110 years and 5 generations of emotions through flavours and ingredients of the highest quality, respecting Italian tradition and a healthy way of eating. This has always been the mission of Fratelli Pagani and once again it has been the winning card for the company's success of this edition of IFFA.

The attention of the international public has rewarded in particular the new Healthy line, which is completely natural. Its ingredients, flavours and mixtures are all Allergen-Free, Clean Label, organic and the packaging allows Smart Dosages. In addition, there is a complete line of Starter Cultures, ideal to ensure the perfect protection of the product and its organoleptic characteristics for the entire shelf life of the end product. The Healthy line includes the new Natural Flavours, designed by the Flavour Laboratory and particularly appreciated for their taste, innovation and auality. Some of them are:

MIX DRY PUPA: natural flavour with a functional effect, with a sweet note of allergen-free milk, designed for mortadella and salami.

AROMA SMK: natural flavour without smoke derivatives, ideal to replace the classic smoke flavour.

AROMA SANGIOVINO: natural flavour ideal to replace the wine powder in all applications (meat, sauces and gastronomy).

ENHANCER UMAMI NATURAL: natural enhancer of the taste and flavour of all meat products, ideal replacer for alutamate.

www.fratellipagani.it

ADM RESPONDS TO CURRENT AND FUTURE TRENDS WITH HIGH-QUALITY PLANT BASED PROTEIN **INGREDIENTS**

Archer Daniels Midland Company (NYSE: ADM) resented its latest plant based protein ingredients that allow cost-effective meat processing as well as vegetarian and vegan alternatives to serve current consumer trends.

Meat applications: functional and cost-effective

ADM protein specialists showcased the Arcon® range, high-quality functional soya concentrates with a protein content of at least 67 percent. The Arcon range has a clean taste and a natural light color and is suitable for countless meat applications.

On the ADM stand, a tasting menu including a variety of meat applications were demonstrated the benefits the Arcon range provides. Reformed chicken ham, for



example, extended by 60 percent using Arcon SM demonstrates excellent water binding capacity and sliceability. Vegetarian and vegan alternatives: On-trend solutions to convince in texture and taste.

Due to the growing demand for complete meat substitutes ADM protein application experts developed vegan alternatives based on the unique Textura® fibrous soya, in combination with the Arcon T textured soya concentrate range. Textura in combination with Arcon T will create a typical fibrous structure and other attributes of original meat products without compromising on taste and texture. On the ADM stand, a plant based tasting menu replicating popular meat dishes such as chicken nuggets and pulled pork were available. "As one of the world's largest

agricultural processors and suppliers of food ingredients, we know how to balance various ingredients to ensure perfect results. Our deep consumer understanding together with our extensive know-how in plant-based proteins, flavoring and applications make us the partner of choice to help manufacturers get to market quickly with modern solutions", says Jochen Heininger, Vice President Marketing and Product ManagementEMEAI, ADM Nutrition/WFSI.

www.adm.com

RAPS NEW HAM AND CONVENIENCE SPECIALITIES HIT THE SPOT



Checked in and ready to go: At the airport-themed IFFA stand, RAPS served new products from its cooked ham and sausage range, along with other convenience offerings.

The stand of RAPS GmbH & Co. KG was a real visitor attraction at IFFA. Under a specially designed dome, the spice specialist showed the future of tailor-made product developments perfectly

illustrating the motto "German heritage - worldwide expertise": Those products include functional additives, such as injection brines and structural enhancers, and compounds and seasonings, all demonstrating a breakthrough in both taste and technology.

The entrance to the culinary experience led visitors through check-in, and into the arrivals area, where they enjoyed a

welcome in their native language from the Kulmbach RAPS team, along with colleagues from all subsidiaries and the worldwide distributor network. The quests' final destination was the "baggage conveyor belt" with freshly prepared product applications and vending machines, where samples in snack format were offered in an appetizing package. The favourites among butchers and representatives of the meat industry were finely spiced juniper ham, followed by coffee ham and sous-vide cooked pork belly. The triumphant taste was achieved using the latest generation of RA-LAK injection brines, perfectly complemented by the new LAK-TOP seasonings.

RAPS Managing Director Florian Knell says: "At the largest meeting place for the meat industry, we observed a strong international demand for clean and functional product concepts. For us, this is confirmation that we are on the right track with our sustainable approach, and graduated clean foods solutions. Personally, I felt enriched by the welcome presence of international colleagues and partners. We answered an enormous number of enquiries about customer-specific solutions and market-specific quality requirements, for example, for Eastern Europe."

www.raps.de

SUSTAINABLE NOVELTIES FROM MOGUNTIA FOOD GROUP

The Moguntia Food Group offers sustainable novelties and holistic concepts, such as free-from-products, vegetarian compounds, the award-winning counter concept "Les Trésors" and the product revolution "Liquid Spice".

Liquid Spice

Liquid Spice achieves the revolution of marinating, as this new range combines the advantages of dry and wet seasoning in a unique way - for the optimal refining of premium meat. It lifts the meat instead of covering it. This way, the meat quality remains visible. "Liquid Spice gives the meat an appealing, shiny appearance and excellent taste with maximum vield. We recommend an addition of just 50 grams to one kilogram of product, "says sales manager Jörg Hecker.

The small addition and the fine ingredients like for example truffles, fine herbs, smoked paprika and whiskey give rise to a number of advantages:

- * No drying out * No layer of fat
- * No dripping and consequently less danger of a BBQ fire
- * Sustainable, due to less produce used, conservation of resources and less transport needed
- * Perfectly suited for FlatSkin®packaging*

We start with 19 varieties of this innovative product range. Every taste and almost every country's cuisine is represented. In addition to classics such as Asia, Canadian, curry and paprika, our traditional company will be showcasing the new taste trends Picobello, Whiskey western and Speculoos. "A highquality range such as Liquid Spice does not need any additives. We also refrain from using palm fat, yeast extract, hydrolysed vegetable protein and synthetic flavourings", adds Olaf Müller, head of product development for liquid products at the site Georgsmarienhütte. (*FlatSkin® is a registered trademark of the Sealpac GmbH. Processing depends on the application parameters such as temperature progression, raw material, etc.)

Starter Cultures

Apart from the right spices, it is a starter culture specially selected for the process that is responsible for the characteristic and pronounced aroma of raw sausages.

The Moguntia Food Group is almost unique in combining the development and production of starter cultures throughout Europe with its range of suitable maturing and seasoning mixtures.

"This allows our customers to benefit from efficient processes, maximum product safety and tailor-made solutions that are optimally tailored to their needs and processes," explains Konrad Höffmann, business manager for starter cultures, and adds: "Our starter cultures give sausages a harmonious flavour profile, even when speed is of the essence."

Convenience-Food

We expect things to be convenient, comfortable and fast even when we are having our meals on top of that, the daily diet





plan should also be delicious, varied and healthy. All these requirements are met by the so-called convenience food. The Moguntia Food Group show that good convenience products now taste as good as if they were home cooked.

"Convenience food offers shops in petrol stations and kiosks a variety of different uses in the area of snacks and take away food. These meals that are so quickly prepared are also used in many university refectories as well as in the canteens of big companies", says expert consultant Bernhard Habicht.

The convenience trend continues unbroken and is served by the Moguntia Food Group from starter to desert and via all national cuisines.



Vegetarian

Vegetarian and vegan products are no longer a fad, but have become socially acceptable and are now part of everyday life for many customers. "Real" vegetarians and vegans are among the main buyers of meat alternatives, but also so-called

flexitarians, i.e. people who have a partially meat free diet. The increasing environmental awareness, especially of young consumers, favors a temporary or complete abstinence from meat.

Customers who want to restrict their meat consumption, but nevertheless do not want to miss out on the pleasure of eating meat, will find a variety of vegetarian and vegan alternatives in the Moguntia Food Group program.

"What matters in the end is the taste", says product manager Jens Trautmann and adds "because with our range of meat alternatives, people who want to give up meat, need not do without the usual taste and accompanying texture."

www.moguntia.com

Highly flexible convenience food production **NEW CONVENIENCE LINE**

Marel's new convenience food production line offers innovative solutions for forming, coating, frying and cooking.

- Can create a wide variety of tasty added value products
- For both homogeneous and QSR home-style coating
- High flexibility in line set-up with easy changeovers

Contact us to find out more: +31 485 586 122 info.fp@marel.com





THE BRANDS WIBERG & GEWÜRZMÜHLE NESSE **EXPAND THEIR BARBECUE RANGE** IDEAS FOR THE SUMMER BARBECUE SEASON

The WIBERG and Gewürzmühle Nesse professional spice brands are expanding their range of dry and oil marinades. They offer plenty of new ideas for the summer barbecue season.

Plus line, Churrasco contains no flavor-enhancing additives, no allergenic ingredients subject to classification under EU law, no veast extracts, broths or seasonings, and no added flavorings. The new addition fresh longer, thanks to the integrated preservatives. The marinades also contain a special, natural tenderizina agent. The introduction of newcomer Grillfix Churrasco was also the perfect opportunity to revise and optimize Grillfix Herb Butter style. This full-bodied herb mixture lends a delicate buttery note to every barbecue and is now even more color-stable and stays fresh on the counter for longer.



Grillfix dry marinades can be combined with honey, yoghurt, milk, cream, soy sauce, various juices, or lemonades for delicious results, allowing you to impress your customers by conjuring up original flavor creations!

Marinades With a Difference

What is the taste of spring? Fresh wild garlic and spring onions! Along with a delicate hint of garlic, these are the



The Grillfix Newcomer

Churrasco is a South American method of cooking meat over an open fire and represents the pinnacle of the art of grilling. Its onomatopoeic name imitates the crackling noise of fat dripping into the fire. The new WIBERG Grillfix Churrasco dry marinade tastes just as fiery as its name suggests: a full-bodied, spicy flavor, complemented by subtle smoky undertones. Black pepper, paprika, pink berries, smoked salt and chili all contribute to this unique flavor. This newcomer is an excellent accompaniment to beef, pork or poultry. As part of the Pure to the range of dry marinades for the 2019 barbecue season!

The Grillfix Product Range

WIBERG dry marinades make good meat even better! Meats prepared for grilling with the Grillfix dry marinades will stay





aromas of Gewürzmühle Nesse's Wild Garlic Seasoning Marinade OG. Packaged in a 4-kg bucket, this oil marinade will help you create a delicious barbecue without added flavor enhancers.

www.frutarom.eu



Harald Suchanka

Managing Director, Albert Handtmann Maschinenfabrik GmbH



Q. How would you evaluate IFFA 2019? What kind of innovations did you showcase at the fair?

IFFA was indeed a great success. We received a record number of visitors to our stand, many of which showed firm interest in our solutions and also decided to place orders. We again presented lots of innovations in virtually every application: from the new AL"plus" linkers, through to the flexible ConProCompact entry model for alginate coextrusion technology, which can also handle normal casings, to new forming equipment for the manufacture of trend products and snacks. As part of our digital strategy we introduced a new product segment called "Handtmann Digital Solutions (HDS)" which comprises of a comprehensive range of smart solutions that help meat processors optimise their production more efficiently. These HDS solutions range from data interfaces with superordinate ERP or MES software, to our HCU software which connects filling machines, records process data and calculates key performance indicators such as OEE (Overall Equipment Effectiveness). Another premiere at IFFA was the Handtmann Machine Cockpit (HMC). This is an online tool that stores defined data such as operating hours, pressure curves and error messages in the Handtmann Cloud. This will also notify managers and service staff when certain incidents occur. As a result, machine uptime and

Q. What makes your solutions unique and what differentiates you from your competitors? What's your unique selling point?

product quality can be enhanced.

It is quite difficult to reduce the benefits of a Handtmann product to a single point because there are so many. Our aim is to give our customers the good feeling that you have when you buy something from a trusted partner. Something that you know is highly innovative and will be performing well, and help you increase productivity through high output, gentle product

treatment and accurate portion weights. That said, I believe we can claim our unique selling point is "peace of mind".

Q. How do you ensure resource efficiency and sustainability of your equipment? What sets you apart from your competitors and how would you define your unique selling point?

Of course, we use the latest servo drive and control technology in order to achieve best-in-class energy efficiency. In fact, our new VF 800 Vacuum Filler series received an official certificate by the independent German TÜV institute for its outstanding level of energy efficiency. But our most important contribution to sustainability is the fact that Handtmann machines are built to the highest quality standards and can therefore be used for many years and even decades. We supply spare parts and provide servicing for machines sometimes aged 30 years or older. That is why Handtmann machines hold their value well, even after many vears of intensive use.





Maximilian Laska

Managing Director, Maschinenfabrik Laska

LASKA

Q. How would you evaluate IFFA 2019? What kind of innovations did you showcase at the fair?

We presented a variety of new developments at what was our most successful IFFA to date. The positive feedback was overwhelming. The trade fair itself eclipsed everything that came before, with more visitors, more innovations and more internationalism

We exhibited 14 Laska machines, along with a complete boiled sausage production line, which was the star of the show. In the WWR 200, visitors were able to see the first grinder in the world with Hygienic Design Weihenstephan certification, in addition to our WWB 200 Plus and WWB 300 Plus grinders with new hygienic design.

Q. What makes your solutions unique and what differentiates you from your competitors? What's your unique selling point?

We strive to achieve perfection and take that commitment seriously. Along with improving our machines' performance and longevity, we have been dedicating ourselves to the idea of hygienic design - down to the finest detail. We're certainly not the only developer and manufacturer of processing machines that employs hygienic design principles, but there are probably no greater perfectionists than us when it comes to pursuing this approach. When working on the new machine design, our engineers even decided to develop a new custom screw to ensure that the very highest standards could be met.

Q. How do you ensure resource efficiency and sustainability of your equipment?

After almost 140 years of experience and expertise, Laska machines are some of the most robust and technically advanced in the world. Our carefully developed machine design ensures long machine life and lower costs resulting from wear. Since we manufacture the machines completely in-house, there's always a guaranteed supply of spare parts and cost-reducina maintenance available. Innovative solutions and detailed technical fine-tuning make sure that materials and resources are used efficiently when processing the product. And the hygienic design reduces cleaning time and costs, as well as the risk of adulterated goods and ensures longer shelf lives for the food produced.



Torsten Giese

Vice President Corporate Marketing, Ishida Europe Ltd



Q. How would you evaluate IFFA 2019? What kind of innovations did you showcase at the fair?

We have been exhibiting at IFFA since 2001 and this year's exhibition has been our best yet, with excellent leads from all major regions covering an interest spectrum that ranged from single multihead weighers to wall-to-wall solutions.

At IFFA 2019 Ishida showcased two innovative automation solutions for protein applications:

A high-speed robot grading, sealing and inspection line for packing fixed weight meat, poultry and fish into trays. It also features innovative dual energy X-ray inspection, portioning and pick and place technologies.

A weighing, marination, sealing and case-packing line for fresh poultry, featuring Ishida's awardwinning Orbicote after-weigher marination system.

Q. What makes your solutions unique and what differentiates you from your competitors? What's your unique selling point?

Our key differentiator is our ability to provide full line solutions for weighing, grading, packing, inspection and end-of-line packing of protein products, with all key equipment built by Ishida.

While other suppliers focus on optimising the capabilities of their specialist products such as traysealers, the combination of Ishida equipment is able to optimise the full performance of the complete line, thus offering a more complete and all-encompassing solution.

Q. How do you ensure resource efficiency and sustainability of your equipment? What sets you apart from your competitors and how would

you define your unique selling point?

All our weighing, grading and packing equipment significantly contributes to reducing or minimising product and packaging waste.

Our inspection solutions are designed to protect the consumer and the customer's brand by: minimising risks of product contamination (such as metal, glass or bones), identifying leaking MAP packs, incorrect weights, out-of-spec labels, and even damaged products and packs.

Our USP is our ability to offer a complete solution for our customers that ticks all the boxes in terms of performance, reliability, lower Total Cost of Ownership, maximum brand protection and future-proofing.

Q. What's your company's greatest achievement in terms of sustainability? What are

your future sustainability goals and the challenges your company & the meat processing industry are facing?

Our greatest sustainability achievement is that we offer customers a significant reduction in food and packaging waste by ensuring that each finished pack has the correct weight, is free from foreign bodies, is perfectly packed, is not leaking and is correctly labelled.

Some of the challenges facing the meat industry:

- Reducing both the amount and the cost of packaging used
- * Making smaller pack sizes (due to smaller household sizes) more cost efficient
- Reducing the footprint cost of automation solutions
- * Making automation work for smaller businesses and for companies that require fast and frequent product changeovers.





Petya Todorova

Marketing Leader Europe, Krehalon UK



Q. How would you evaluate IFFA 2019? What impressed you the most?

We were certainly impressed by the number of international visitors yet again this year. Reading the official statistics, the show attracted 67,000 visitors from 149 countries, so this was truly a great opportunity to promote our business worldwide. We were particularly pleased with the number of visitors we received from Latin America, Asia, Russia and Australia and the overwhelming interest in packaging automation solutions.

Q. Sustainability has become a major factor in the decision-making process of consumers. What kind of solutions, technologies and products did you present at IFFA? What sets you apart from your competitors.

The fair was an ideal platform for us to present our sustainability commitments and progress so far.

We showcased our Formshrink® solution for packing of fresh

whole chicken which offers 80% packaging weight reduction compared to the conventional pack format.

We presented case studies proving the packaging waste reduction that could be achieved through Krehalon's automated Shrink Bag Replacement (SBR™) concepts – Formshrink® and Flovac™.

We realized that there is lack of consumer understanding of the important role that plastic packaging plays in reducing food waste. So we wanted to break the myths, and conducted a research and presented our findings at the show which showed that packaging has much smaller carbon footprint than the product it preserves.

Extending food shelf life through Krehalon's speciality materials and sealing technologies, can prevent such waste.

Following this, we are due to launch our broader 'Let's talk facts. Not perceptions.' education campaign in July. We will be publishing an array of facts, translated in the language of our industry, that can hopefully raise awareness of the positive contribution of Plastics to the environment.

People and organisations are becoming cynical towards all the 'pledging' and promises issued by companies over the past year. We didn't want to be yet another 'bold statement' brand. We put a progress report together that outlines our success and efforts over the past 40+ years in making our products more sustainable. Under the name 'Transparent View on Plastics', this outlines our commitments

and aspirations on sustainability, taking a 'transparent' – honest and open approach to the issue.

Q. What's your understanding of circular economy and sustainability? What do you offer in terms of plastic and packaging reduction?

As a leading global packaging manufacturer, our core purpose is to preserve the quality of fresh foods whilst maximizing their shelf life and appeal. We use polymer science and engineering expertise to tailor our packaging structures to match customer requirements for sealability, formability and strength of materials, extended shelf life, attractive presentation and all-time-high food safety and hygiene controls.

Simplifying multilayer structures without sparing vital functionalities is therefore not an easy task, but one that will increase the chance of our materials to be further processed by the supply chain and successfully carried through onto their next product cycle.

A circular economy for our products, as we see it, means creating a product featuring exceptional environmental efficiency with little or no compromise on performance. A product which leaves no indelible mark on the Planet and sits comfortably within a focused, closed-loop system.

We believe that 'reduce' is the very first step of any successful packaging sustainability strategy. For more than 15 years, Krehalon has been supplying our range of ML40 barrier shrink bags that are, on average, 23% thinner compared to corresponding competitor offerings. The innovative construction of Krehalon's core ML40 technology

gives the exceptional advantage of reducing material thickness without compromising material's barrier properties and strength, allowing us to develop 'thinner but stronger' food packaging materials that constantly challenge competitors.

Q. What's your company's greatest achievement in terms of sustainability? What are your future sustainability goals and the challenges your company & the meat packaging industry are facing?

We recently won a Starpack Silver & Greenstar Sustainability awards for our speciality lidding films enabling a hermetic seal to a 100% recyclable Mono-APET base for minced meat applications. This development, in collaboration with Co-op and Dunbia, enabled the removal of 163 tonnes of hard-to-recycle plastic in the UK.

We are part of CEFLEX, at a European level, and the UK Plastics Pact and ork collaboratively with all members of these organisations towards the delivery of their ambitious sustainability targets. Sustainability developments like this can be challenging of course. As mentioned above, our ultimate goal is sustainability without compromising performance. And 'without compromise' for the meat industry can mean ticking the boxes on a long list of requirements, including uncompromised shelf life, seal integrity, food safety & hygiene, productivity & output, existing packing equipment as well as customer convenience. Managing 'cost neutral' expectations for sustainable packaging innovations remains one of the biggest challenges yet.



Doris Bregulla

Press and Public Relations, Poly-clip System GmbH & Co. KG



Q. How would you evaluate IFFA 2019? What impressed you the most?

IFFA once again proved to be The No. 1 for the meat industry. From automation solutions and sustainable packaging trends to food safety, exhibitors provided answers to the demands of the meat-processing industry.

Q. Sustainability has become a major factor in the decision making process of con-sumers. What kind of solutions, technologies and products did you present at IFFA? What sets you apart from your competitors?

Poly-clip System's sustainable solution is the "clip closure packaging". The study by the Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT calculated up to 81% less greenhouse gas emissions compared to e.g. thermoformed packaging for cold cuts. The carbon footprint of our packaging is significantly better.

Q. What's your understanding of circular economy and sustainability? What do you offer in terms of plastic

and packaging reduction?

The Fraunhofer results demonstrate the climate-friendly benefits of clip closure solutions compared sausage in cups or thermoformed packaging. With fewer processing steps, less waste and also lower costs, the designation 'minimalist packaging' is more than appropriate. We embrace the motto "Less is more".

Q. What's your understanding of circular economy and sustainability?

In general all production processes are permanently optimized in order to aim at cost-effectiveness and sustainability at the same time. The IFFA 2019 was the perfect place for the world premiere of the new FCA 160 and FCA 120 automatic double clippers. No food waste due to maximum process reliability - that is what marks out this highly automated clipping machine. State-of-theart in every detail. ALL product parameters stored in the SAFETY TOUCH are monitored, as well as the stock of consumables and the machine functions. In case of deviations and malfunctions. the machine stops automatically.

The clipping machines FCA 160 / FCA 120 offer error prevention at the highest level. Punch and die are equipped with the RFID system so that it is detected if they do not match. The system prevents operator error and breakage of the clip closure tools at this point. The FCA features a double clip detection with automatic ma-chine stop; this works e.g. against machine overload. The burst detection ensures the lowest possible meat loss in high-speed applications, faster than an operator ever could stop the machine.



Valeska Haux

Vice President Corporate Marketing, MUI TIVAC



How would you evaluate IFFA 2019?

For us, IFFA is one of the most important platforms to present our innovations in products and solutions for the meat processing industry. We were very much impressed by the high level of internationality of the audience which proofs the global relevance of IFFA.

Q.Sustainability has become a major factor in the decision making process of consumers. What kind of solutions, technologies and products did you present at IFFA?

Indeed, the demand for recyclable packaging will increase significantly in the coming years. To meet this demand, MULTIVAC has developed a comprehensive range of packaging concepts, including mono-materials or paper fibre-based materials. These solutions can be run on thermoforming packaging machines as well as on traysealers.

Our MULTIVAC PaperBoard portfolio includes solutions for the production of MAP and vacuum skin packs from paper fibre-based materials. These materials, which were developed in cooperation with leading material manufacturers, can be run on standard machines. The packs can be designed

in such a way, that the end user is able to separate the cardboard backing from the plastic barrier laver - an additional contribution to the recyclabilty of those materials.

Q. What's your understanding of circular economy and sustainability? What do you offer in terms of plastic and packaging reduction?

Sustainability is an important part of our business culture. Thanks to our many years of experience in packaging technology, we are able to offer our customers added value by supporting them in developing sustainable packaging, which provides maximum product protection with the minimum pack footprint. Our innovative technologies help our customers to increase film yield, downgauge the thickness of the packaging material and last but not least reduce material waste when packing their products.

Q. What's your company's greatest achievement in terms of sustainability? What are your future sustainability goals and the challenges your company & the meat packaging industry are facing?

Our product range includes many sustainable packaging concepts, which make a major contribution to reducing material usage when producing packs. Other concepts are based on the use of renewable raw materials or fully recyclable films such as for example mono plastics, or alternatively paper fibre-based packaging materials.

However, the added value, which plastic packaging offers during its life cycle, such as for example extending the shelf life of food without preservatives, needs to be taken into consideration. All alternative packaging concepts have to be analyzed in a holistic way and it is a prerequisite that they provide the same level of product protection and product shelf life as the conventional packaging solutions. New packaging concepts would also need to be compatible with pack return systems, and new recyclable material would have to be easily recognizable as such.



Marcel Veenstra

Markketing & Comunication Manager, Sealpac International BV



Q. How would you evaluate IFFA 2019? What impressed you the most?

For SEALPAC, IFFA once again showed significant growth both in terms of number and quality of visitors. It is clear that meat manufacturers and retailers are looking for appropriate answers to the growing demand for more sustainable packaging solutions. At our stand, we were able to show them tangible concepts, both on our equipment, as well as in our supermarket.

Q. Sustainability has become a major factor in the decision making process of consumers. What kind of solutions, technologies and products did you present at IFFA? What sets you apart from your competitors.

Although SEALPAC primarily is a manufacturer of packaging equipment, we continuously develop innovative packaging solutions with our customers from around the world. At the moment, the entire industry is searching for concepts that save the environment, either by reducing the amount of plastics and/or by improving the recycling rate of those materials. Therefore, under our motto GO sustainable!, SEALPAC showed various resourcesaving packaging solutions. Our proven FlatSkin® system, only launched two years ago, can now be seen across the retail shelves in over ten different European countries. With FlatSkin®, we allow our customers to produce skin packaging with all the known benefits, but in a more sustainable way. To start, the system is based on a flat with cardboard carrier. As such, our customers can save up to 75% in plastics. But even more important, we allow consumers to separate the cardboard carrier and plastic components, which are the skin film and a thin plastic liner, so that they can be recycled.

At IFFA, we also launched a concept for modified atmosphere packaging called eTray®. It has a high-quality cardboard base, which can be fully printed on the inside and outside, and a plastic inner layer that purely provides the sealing and barrier function. The trick: easy separation of materials after use. Last but not least, we also demonstrated a paper-based thermoformer pack for cold cuts. In this application, the top and bottom film consist of coated paper.

Q. What's your understanding of circular economy and sustainability? What do you offer in terms of plastic and packaging reduction?

Our focus is on developing customer-specific packaging solutions that minimize the impact on the environment, yet still provide sufficient product protection and convenient handling. This



can be seen in our EasyLid® system that combines lidding and sealing in one single operation, hence permitting significant savings in materials and weight. Furthermore, all SEALPAC thermoformers are equipped with our unique Rapid Air Forming technology, which achieves an improved forming consistency, particularly in the corners of the pack. As a result, our customers are able to run up to 10% thinner film, whilst achieving higher outputs.

Q. What's your company's greatest achievement in terms of sustainability? What are your future sustainability goals and the challenges your company & the meat packaging industry are facing?

In line with the sustainability trend, we will keep on developing packaging systems that reduce packaging material and costs, but at the same time maintain product protection and enhance consumer convenience. Our motto with regard to plastic can only be: "As much as necessary, as little as possible!"



Dr Claudia Durmus Product Director. Frutarom Savory Solutions Austria Gmbh



Q. What's your overall experience from IFFA 2019? What kind of new solutions did you did you pre-sent? What attracted visitors attention at your booth?

We had a lot of international visitors and the atmosphere was great. We displayed a broad, innovative portfolio from the meat products and convenience sectors: new solutions regarding vegan sausage, marinades without palm oil and without hardened fats, phosphate replacement in sausages, salt reduced ham and sausages, meat chips rich in protein, and many more. Biggest attraction at our booth: syneray from the merger of FRUTAROM and IFF - combination of functional ingredients with great taste sensation.

Natural ingredients and clean label have become key drives for consumers. Would vou tell us some more about your natural formulations and solutions you offer?

The challenge is to achieve technological functions by natural ingredients in order to avoid E-numbers. To fulfill this, FRUTAROM has some highly innovative coloring foods for instance. There are also rosemary extracts with natural antioxidative properties available. We have done a lot of research in screening plant ingredients for shelf life prolonging

characteristics and have now new clean label shelf life extenders in our portfolio. Also bindina and yield can be achieved via natural ingredients such as fibers, proteins or starches.

Q. Meat- Free alternatives are an absolute trend. What kind of products do you offer to meet this trend? As the barbecue season is in full swing, what's new in your portfolio?

We have vegetarian as well as vegan solutions for all kind of substitutes like sausages, patés, spreads, fillings, burgers, schnitzel and so on.

Regarding barbecue we have extended our range of dried and oil-based marinades. WIBERG Grillfix Churrasco has a delightful full-bodied spicy flavor rounded off with a light smoky note. Gewürz-mühle Nesse's wild garlic marinade Bärlauch Würzmarinade OG has a fresh flavor of wild garlic and young onions.

For the meat preparation we have a new product called Meatstab A10. This newcomer is a natural flavoring product with no E numbers, for injection during meat processing. Meatstab A10 reduces cooking losses and guarantees a tender end product.

Q. What's your company's greatest achievement in terms of sustainability? What are your

future sus-tainability agals and the challenges your company &the meat are facina?

The Roundtable on Sustainable Palm Oil, or RSPO, is a WWF initiative promoting the sustainable cultivation of palm oil, thereby combating harmful forms of largescale cultivation. FRUTAROM Savory Solutions' customized marinades are available in line with the RSPO Segregated System and therefore contain only certified palm oil. Other versions are still available on request, which contain only rapeseed oil, i.e. without hardened fats or palm oil! Another plus for the environment!



Tim Simons Sales Director EMEA Archer Daniels. Midland Company



What's your overall experience from IFFA 2019? What kind of new solutions did you present? What attracted visitors attention at your booth?

IFFA demonstrated the extent to which the meat industry is currently shifting its approach. Processed meat manufacturers are increasingly turning to plant-



based alternatives to align their product ranges with current consumer trends. Our portfolio at IFFA was a first-class match. Our textured soy proteins, for example, are particularly well suited for protein fortification. When hydrated, they feature a fibrous meat-like texture with outstanding moisture retention and provide excellent mouthfeel, making them perfect for meat and vegetarian applications.

Thanks to well-prepared concepts, we were able to present inspiring, freshly prepared tasting plates at IFFA with the help of our chef. They demonstrated our expertise, both for individual ingredients and for complete applications rounded off by delicious sauces, dips and marinades.

Q. Natural ingredients and clean label have become key drives for consumers. Would you tell us some more about your natural formulations and solutions you offer?

The choice of food has never been as great as it is today. In spite of the many different developments, a common thread can be seen: demand is focusing to a greater extent on the criteria of a healthy and sustainable lifestyle. This ranges from natural ingredients to environmentally compatible production methods. ADM is at the forefront of plant based proteins. From our extensive portfolio of functional and textured Arcon® soya proteins, to an ever expanding portfolio of minimally processed, non GMO & Organic options. The Vegeful® range of cooked dehydrated beans and pulse-based ingredients, including customizable crisps compliments the clean label trend perfectly. We help manufacturers innovate and differentiate.

Q. Meat- Free alternatives are an absolute trend? What kind of products do you offer to meet this trend? As the barbecue season is in full swing, what's new in your portfolio?

ADM offers a wide range of textured, functional and clean label plant proteins. The applications cover vegetarian meat alternatives like meat free nuggets and pulled pork analogue for tasty burgers for example. As basic ingredients ADM's fibrous and functional soy

protein concentrates (e.g. Arcon ranges) deliver cost-effective solutions and are available both as a powder and as textured pieces. I believe meat free to be more than a trend, it's becomina a lifestyle choice. As mentioned before our extensive portfolio of plant based proteins are used extensively in meat alternative applications creating plant based burgers, sausages and pulled pork. When further processed, our Textura® Fibrous sova helps manufacturers to create unique fibrous meat like structures mimicing poultry or red meat. Offered with our sauces, dips and marinades they are quaranteed to satisfy the most ardent meat eater during BBQ season!

Florian Bark Product Manager Meat & Meat Alternatives. Stern-Wywiol Gruppe GmbH & Co. KG



Q. What's your overall experience from IFFA 2019? What kind of new solutions did you did you present? What attracted visitors' attention at your booth?

The IFFA 2019 was a great show for us. We had lot of areat visits and discussions with customers from all over the world. From Europe to Asia and Australia, the interest in new meat alternatives and meat hybrid products was amazina.

The portfolio of plant-based meat alternatives that we presented is a perfect fit for what the visitors were looking for. These products are all FREE-FROM aluten and sov proteins.

Our FREE-FROM products also include solutions for the traditional meat industry. We were able to interest those customers with solutions for sodium-reduced and phosphatefree meat products.

Q. Natural ingredients and clean label have become key drives for consumers. Would you tell us some more about your natural formulations and the solutions you offer?

Our solutions range from vegan cold cuts and salami to vegan burgers and marinated filet strips. What makes our all-in compounds different is the source of the proteins in the blends. Potato and pea proteins are used, as well as sustainable, regional proteins from sunflower seeds.

Q. Meat- free alternatives are an absolute trend. What kind of products do you offer to meet this trend? As the barbecue season is in full swing, what's new in your portfo-lio?

Our compound for vegan bratwurst based on potato and

pea protein is well suited for the barbecue season. By adjusting just the spice blend, our clients can produce a broad variety of different products with just one stabilizing system.

Q. What's your company's greatest achievement in terms of sustainability? What are your future sustainability goals and the challenges vour company & the meat indus-try are facing?

As the year unfolds, there are many salient trends in the food sector. Hybrid products are one of the driving trends in the food sector, which is creating new possibilities in the reformulation of plantand animal-based products. Consumers' choices are driven by health, environment and animal welfare concerns more than ever before. Those concerns are the key drivers of this major trend.

Our latest stabilising systems for hybrid products are the HydroTOP High Gel products. These systems are ideal for the most-sold convenience foods like burgers, nuggets and schnitzels. With them, it is possible to achieve greatly enhanced texture and characteristic meat bite without loss of flavor. Combined products with meat, vegetables and super foods like quinoa are easily produced with the HydroTOP High Gel range. They are universal binders that reunite coarse raw materials to create burger patties, nuggets or schnitzel. These new developments have similar textural properties to the standard product, which enhances the eating experience of hybrid products.



Paolo Mondini

Owner, G. Mondini Spa



Q. How would you evaluate IFFA 2019? What impressed you the most?

We had a tremendous flow of people and were very impressed by the quantity of customers visiting.

Q. Sustainability has become a major factor in the decision making process of consumers. What kind of solutions, technologies and products did you present at IFFA? What sets you apart from your competitors?

We present PAPERSEAL® - This new system expands the opportunities to replace MAP and VSP plastic trays with barrier lined cardboard. This process operates by fabricating a MAP tray from a pre-cut flat cardboard, which is formed, and a barrier liner is automatically applied in one simple process. The system is based on the same benefit stream as Thermosealer® technology where the fabricating of trays is conducted directly before the tray sealing process.

Through value engineering and clever pack design, we have constructed a cardboard tray system that is easily integrated into current packaging lines. Therefore allowing for safety, flexibility, full branding, reduced plastic, minimum size and maximum skills.

Q. What's your understanding of 'circular economy' and 'sustainability'? What do you offer in terms of plastic and packaging reduction?

Sustainable paper board materials are central in our new range of VSP and MAP systems. They are vital in an attempt to improve acceptability, increase performance and enhance product security by means of perfect sealing technology. Our Sustainable Packaging Systems are: Slimfresh®, Slicefresh®, Paperseal®

We aim to improve tray sealing sustainable footprints by significantly reducing the unnecessary use of packaging material. We engineered and designed Tray Sealing solutions to eliminate skeleton waste.

Q. What's your company's greatest achievement in terms of sustainability?

THE THERMOSEALER®

[PLATFORMER®+Trave Platform® Technology] is key in the development of sustainable solutions, providing easily customised trays for the product with less than 2% waste.

By utilising renewable resources, such as fully printable recyclable paperboard and thinner materials, we have reduced the plastic content of the packaging by up to 80%. We equally deliver optimal design on product dimensions using the unique engineering technology of our PLATFORMER®, Darfresh® on Tray and Zero® MAP technology.

We feel it is our responsibility as market leaders in tray sealing packaging, to promote sustainable solutions on our Thermosealer® Technology. This approach covers all parts of the system from machine design and construction to the flow and efficiency. This allows us to always be open to develop and create new solutions.

G. Mondini SpA is committed and focused on developing technology that has sustainability at its heart by promoting reduced plastic consumption and creating sustainable packaging formats.

Fight food waste with shelf life

A chilled ready meal made with the Micvac system will last for weeks in the fridge – without preservatives! The result is less food waste all the way down the value chain!





Hendrik Jan Bartels

Director Global Sales & Marketing, Fabbri Group



Q. How would you evaluate IFFA 2019? What impressed you the most?

We registered a great affluence of high-quality international visitors.

The industry is moving, searching innovative solutions to many challenging factors such as productivity, sustainability, userfriendly cost-effective technologies, digital platforms to better handle the business.

 Sustainability has become a major factor in the decisionmaking process of consumers. What kind of solutions, technologies and products did you present at IFFA? What sets you apart from your competitors?

At IFFA we presented several sustainable packaging solutions:

* Automac 40: in double film reel version, it can work with 2 different packaging materials simultaneously such as PVC or Non-PVC

* Pexy: our non-PVC stretch film ideal for areasy food. Its high yield/weight and excellent stretch properties actively contribute to waste reduction

* BIOBASED STAR FILM: the first certified reducedenvironmental-impact wrapping film for automatic machines worldwide

- * Nature Fresh: our certified Home and Industrial compostable non-PVC Cling Film for stretch packaging applications. A world premiere that will have a great impact on fresh meat and Fruit and Vegetable packaging in the coming years.
- * XPEED tray-sealers with skinpad mould: to allow minimum use of plastics and the recycling/ compostability of the flat layer after use.

Q. What's your understanding of circular economy and sustainability? What do you offer in terms of plastic and packaging reduction?

We're very sensitive to these issues and actively bring them in discussion within all trade associations, such as VinylPlus, EPFMA and VFSE and the relative recycling industry.

We work to develop packaging machines with minimum energy consumption and sustainable films that are recyclable, biobased or compostable.

The stretch technology of our Elixa wrappers, for example, allows for the optimization of film consumption, including additional cost reductions.

Our two new sustainable films reduce environmental impact:

* BIOBASED STAR FILM is the first

plastic film with > 60% non-fossilbased compounds, while maintaining the same performance levels as standard PVC stretch films. It's OK-biobased conformity mark can be an additional marketina tool for retailers. Its specific widths and features can be chosen according to the client's application, allowing to further reduce packaging material usage. It can be used either manually or on automatic machines, also in printed version. Being a mono-material it is fully recyclable.

* NATURE FRESH can boast three certifications: OK COMPOST HOME, OK COMPOST INDUSTRIAL (by TÜV Austria), and SEEDLING (European Bioplastics) (by DIN CERTCO). Being a bioplastic, it shows very good properties of transparency, elasticity, breathability, mechanical strength. After use it is sent for organic recycling, avoiding the long and costly processes associated with the selection and recycling of post-consumption plastics as well as the waste-to-energy treatment of undifferentiated waste. Its recyclability within the production cycle is currently >99%.

Q. What's your company's greatest achievement in terms of sustainability? What are your future sustainability goals and the challenges your company & the meat packaging industry are facing?

Our new solutions have already met the interest of the market and Retailers worldwide: we will continue to develop in this direction and propose packaging solutions for our customers that require minimum investments in terms of equipment and low environmental impact of the materials.

WOULD YOU LIKE TO REDUCE YOUR PLASTICS USE?



alking the aisle of a grocery store, consumers may stop to view or pick up a package because the design or shape caught their eye. In this first moment of truth, the package's design and graphics may determine whether they purchase or not. With that in mind, it is crucial to know your customers preferences and market trends to adapt your packaging. And this especially prevails now more than ever before. when we have such a powerful movement towards sustainability.

To compete in today's markets, you must go beyond your competitors by offering something new and different. And with Bemis SkinNovaTM you can surely do that.

This innovative packaging concept not only offers exceptional product presentation and point of sales differentiation, it also decreases the use of plastics and reduces food waste through shelf life extension.

SkinNova[™] combines Bemis SkinTite[®] HB skin film with a flat cardboard base laminated to our high-barrier EZ Peel® S liner. Bemis SkinTite® is an advanced second skin packaging solution for unrivalled product presentation, increased shelf life and flavour enhancement.

Skin packs are an increasingly popular form of packaging for fresh food. The advantages of the skin packaging system are obvious: securely sealed under deep vacuum, food products have a significantly longer shelf-life and can be presented in a much more attractive way.

Bemis HB EZ Peel® S liner is specifically developed to allow for a smooth and consistent peel-ability, making the product easily accessible and enhancing consumers' experience. Bemis patented EZ Peel® technology improves product safety thanks to a hermetic fusion seal between the top web and the base material.

Compared to traditional packaging, SkinNova™ replaces the plastic tray with a cardboard base reducing the use of plastics

by over 70% and CO2 emission by 45%. Further to considerable reduction of plastic use, SkinNova™ is the perfect answer to the growing market demand for more sustainable products because it can be recycled. After use, the EZ Peel® S liner can be separated from the cardboard base. Each component can therefore be recycled in its own waste stream.

"Sustainability starts from reduction of use of scarce materials while maintaining the essential role of packaging in food waste reduction. Making structures thinner and lighter and replacing plastics with renewable materials like carton makes packaging more environmentally responsible. This is a clear expectation by today's consumers: According to Mintel, 78% of consumers agree brands should work to make packaging more environmentally friendly and 59% of millennial shoppers say environmental responsibility is an important factor in product choice" says Petteri Oksanen, business development manager responsible for SkinNova™.

SkinNova™ packaging can be printed on both sides. With this innovative system the product can be displayed vertically, which offers point of sale differentiation potentially leading to increased sales.

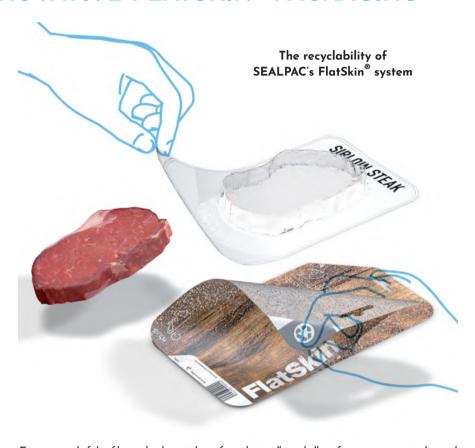
Finnish meat processor HK Scan is one of the first users of SkinNova[™] packaging concept for meat products, which it supplies to various retailers.

Tommi Lehikoinen, Packaging Development Manager at HK Scan, explains why they have chosen SkinNova™ to pack their products: "It's a premium packaging for premium products. High quality printing surface, excellent product presentation that allows for point-of-sale differentiation. Furthermore, longer shelf life minimizing food waste and the increased use of renewable raw materials in the packaging are two important sustainable advantages".

www.bemis-europe.com

LESS PLASTIC, HIGH-CLASS OPTICS, EXCELLENT QUALITY: OSI'S BEEF STEAKS IN INNOVATIVE FLATSKIN® PACKAGING

ow can meat products be packaged in a resourcesaving way, without having to compromise on product protection, hygiene and convenience? This is where the packaging industry, food manufacturers and retailers are searching for new solutions. for example for self-service meat products. Until today, it is impossible to do without plastic, but with FlatSkin® there now is an innovative packaging method available that proves to be more sustainable. OSI Europe, subsidiary of the globally active OSI Group that supplies meat products to leading brands in food service and retail, has opted for this novel packaging



Easy removal of skin film and polymeric layer from the cardboard allows for separate waste disposal.



Erik Schottl, Managing Director Foodworks at OSI Europe

Proud for implementing FlatSkin® so quickly and for bringing it to the market first.

system for its high-quality steaks. With more than 65 production sites and 20,000 employees in 17 countries, the company has become a pioneer in the introduction of FlatSkin® packaging.

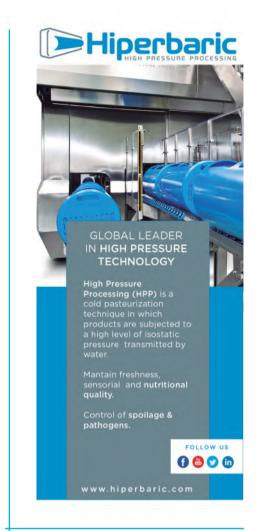
A major trigger for OSI to switch to this new packaging system have been the changing market conditions. As Erik Schottl, Managing Director Foodworks Europe at OSI, explains: "We recently see a trend towards high-quality products, such as our dry-aged steaks. These products need to be packaged accordingly. At the same time, sustainability has become a key factor in the decision process of the consumer. Therefore,

we started looking for a highend packaging solution for our premium beef steaks from around the world, which would not only combine maximum product safety and high-class optics, but also convenient handling, cost-efficiency and conservation of resources." The answer was FlatSkin®, a joint development of SEALPAC, supplier of hightech tray-sealing technology, VG Nicolaus GmbH, specialist in cardboard packaging and folding cartons, and Wentus Kunststoff GmbH, professional in the field of barrier films and laminates. By joining hands, these three companies were able to develop a skin pack that fulfils the demands expressed by OSI.

Marketable System with Many Savings

In the FlatSkin® process, a highly transparent barrier skin film fixates the product. for example a steak, directly onto the extremely flat cardboard carrier produced from bleached or unbleached fibre, which has been coated with a polymeric protective layer. This layer provides stability to the cardboard and forms a reliable barrier against arease, moisture and oxygen. The cardboard carrier can be printed on both sides. hence offering optimal space for product information whilst providina unique brandina opportunities. The FlatSkin® system combines all the benefits of skin packaging, such as extended shelf life and postmaturation, with a particularly attractive product presentation. At the same time, the system is extremely economical and sustainable, as it significantly reduces the amount of plastic used and improves recyclability.

Burkhard Mever, Sales Director at Wentus, explains: "With this packaging solution, compared to common plastic skin trays, a plastic reduction of up to 75% can be achieved. The top film, which fixates the product onto the laminated cardboard carrier, has a thickness of just 80 to 150 micron." Marcel Veenstra, Marketing & Communications Manager at SEALPAC, adds: "The trick to FlatSkin® : after taking out the product, the thin polymeric layer is easily removed from the cardboard by means of a peel tab to



allow for separate disposal of the cardboard carrier as paper waste, and both liner and skin film as plastic waste."

The three participating companies put a great deal of effort into the FlatSkin® project. Challenges included the climatic conditions prevailing in the meat industry, such as the high levels of humidity in production and logistics. "If fibrous materials, such as cardboard, absorb moisture, the fibres start to expand, which can cause the carrier to bend. This is why the carriers need to have excellent flatness. For this reason, we performed numerous tests under cold and humid circumstances in our own laboratory and in SEALPAC's Experience Centre in Oldenburg, Germany, to ensure a smooth packaging process and excellent optics at all times", explains



SEALPAC's FlatSkin® system at OSI Europe

Remarkable product presentation with excellent flatness of the cardboard carrier



Manfred Grupp, Sales Manager at VG Nicolaus. By using the optimal peel material, an excellent match of cardboard and skin film is guaranteed, as well as a reliable seal of the packaging. In addition, a large-sized peel tab allows for easy opening of the skin pack.

Positive Feedback from Retail

The result is convincing: FlatSkin® not only ensures savings in plastic. The excellent two-sided printability of the cardboard carrier, which offers sufficient place for branding and product information, makes the additional sleeve, often required for skin products, unnecessary. "With the new packaging system, the filling rate of the transport boxes is also higher, which in turn reduces the amount of trucks on the road. Furthermore, not only do we use less material for packaging, but by separating and disposing of the components separately, we support better recycling", says Markus Holler, Group Operations Director Europe at OSI. FlatSkin® is used for the premium products within OSI"s product portfolio. Robert Zeller, Sales Director Meat Solutions at OSI, emphasises: "Most



Markus Holler, Group Operations Director at OSI Europe

By allowing consumers to dispose of the components separately, we support better recycling.

important, our customers receive the highest quality. Meat products, such as our steaks, mature very well in the packaging. After opening, the meat keeps its appetizing colour and convinces with an extremely tender structure."

OSI Europe is proud for implementing this new packaging concept so quickly and forbringing it to the market first. Since the spring of 2018, the company has been successfully supplying all NETTO Marken-Discount stores in Germany with beef steaks packaged in FlatSkin®. The positive feedback from the retailers underline the success of FlatSkin®. The responsibles at OSI Europe are particularly pleased about the fact that, despite a completely new packaging process, they received no complaints after many thousands of delivered packs. The company can be regarded as a pioneer for bringing more sustainability to the self-service meat segment, hence creating a strong buzz in the market. Now the use of FlatSkin® is to be gradually extended to other countries.

Plastic Packaging Materials - as much as Necessary, as little as Possible

How will this development continue? All the partners

involved in the FlatSkin® project garee that efforts should be made towards an even more efficient use of resources. OSI will continue to focus on more sustainability through better recyclability and further reduction of consumables. "We are investigating the extent to which the thickness of our packaging can be reduced while maintaining the same level of protection for our products", says Markus Holler.

Film manufacturer Wentus is also working on further reduction of film thicknesses. as well as on recyclable mono materials, such as PP-based film. "This singlematerial packaging must be as powerful as common solutions, for example have a high barrier to survive on the market", emphasizes Burkhard Meyer. "For fresh food products, due to the required water vapour barrier, oxygen barrier and hermetic seal. there is no real alternative to plastic. That is why we are all challenged to think about sustainability in different ways", says Marcel Veenstra. Manfred Grupp from VG Nicolaus concludes: "With FlatSkin®, we have impressively shown that it is indeed possible to replace parts of the plastic packaging with other materials, such as fibre." www.sealpacinternational.com

SUSTAINABLE PACKAGING THAT SELLS

he demand for sustainable packaging is continuing to grow, and is now a priority for consumers and producers alike. In this context, meat packaging represents a particular challenge, with its dual requirements of food safety and shelf appeal.

Leading plastics manufacturer Klöckner Pentaplast (kp) has helped to lead the way on sustainability for more than ten years by providing options that use 100% postconsumer recycled PET (rPET). Dr. Helene Roberts, MD for UK and Australia, said that a circular economy is the goal: "Closing the loop for PET packaging - turning food grade PET back into new food grade rPET - has been a top priority for us since 2009, and our UK site in Featherstone offers solutions that are not only recycling friendly themselves but which also use PET from postconsumer sources."

Kp has developed technology capable of cleaning post-consumer kerb-side waste and turning it into rPET that complies with all food contact regulations. This has made the firm the biggest consumer of recycled plastic in the UK packaging industry – and the user across the globe of more than 140,000 tonnes of post-consumer recycled plastic (PCR) in 2018.

Supporting Business Growth

Helene Roberts: "An obvious gain from this technology is that we keep plastic waste away from the oceans, but there are also major gains for producers and brand owners. Companies are increasingly being judged on their environmental impacts, and we actively work with packaging users, local sorters and recyclers to make sure that effective recycling becomes commonplace. We also have a number of EU-funded projects in progress that will improve recycling still further."

With 32 production plants and 61 locations worldwide, kp has a division that specialises in food design flexibility needed to attract consumers' attention and sell off the shelf. Of course it also delivers in terms of protecting, preserving and extending shelf life."

Creating a Positive Circular Economy

Post-consumer waste is an extremely complex mixture of materials, making recycling inherently challenging. Maurizio Carano said that one



packaging, representing half of its €1.9 billion turnover and serving 4,000 customers. Marketing Director EMEA, Maurizio Carano, said that a strong focus on sustainability has supported growth: "Food is a huge and complex market, with many subcategories, and anything that delivers a competitive edge is welcome. rPET is an especially good choice for meat producers and retailers, because it meets sustainability goals while at the same time offering all of the

way in which kp helps to address the issue is by offering a monomaterial solution: "Packaging that contains a single material makes the task of recycling far easier, compared with containers using several different polymers. Our goal is to develop ways to ensure easy recycling which fit in with current production techniques - especially delivering the same levels of functionality. This is not something that any company can achieve on its own. Part of our

work involves collaboration across the entire value chain. By creating genuine benefits for everyone. we can drive progress towards a positive, circular economy for plastics.

"The value chain also needs to extend the conversation to its own stakeholders and consumers. We support sustainability in the widest sense by helping to define requirements and harmonise approaches - broadening the opportunities so that everyone involved sees gains. There is no doubt that the work is gathering pace. Since introducing our first 100% PCR rPET portfolio 15 years ago, we have seen strong growth year-on-year. It now represents a substantial part of our packaging business, not least because it looks like a virgin material."

Innovation, Activation, **Acceleration** and Education

The firm's commitment to sustainability is underlined by a Positive Plastics Pledge, designed to make products compatible with established recycling streams, cut resource consumption and reduce food waste. The pledge has four pillars: Innovation, Activation, Acceleration and Education.

"The pledge includes explicit commitments and targets for optimising resources at our plants," said Helene Roberts. "Research into new technology is ongoing, seeking more effective and smarter ways to facilitate real-world postconsumer recycling, along with new ways to use recycled content as raw materials. Education is also an essential element. When people know that packaging has been created with sustainability in mind. a whole series of benefits follow.

Brand owners see an uptick in brand perception, and consumers are encouraged and reminded to take care with their own packaging. The best result for us is seeing our own packaging coming back to us via the recycler so that we can use it all over again - it's by far the best source of raw materials."

kp has two innovation centres. the newest opening in Barcelona in 2017. They collaborate with customers to create new solutions. and work to show customers new market trends. Maurizio Carano

The Future of Business

Helene Roberts said that sustainability has now reached the point where it is becoming a critical factor in future business success: "All of us in the food industry are now operating in a highly charged and emotional climate, where the public perception of plastics is very negative. What we need to make clear is that we have made, by collaborating with each other, enormous strides towards improving the amount of recycled materials we use -



said that the Barcelona facility was an important step forward for kp's food packaging division: "A world class resource like this allows us to bring together in one place all of the things that contribute to a successful packaging idea: design, innovation and development. We can now prototype ideas immediately, helped by a 3D printer, and the lab allows us to run tests with operational equipment. That means fast development of end-to-end solutions."

and those improvements are continuing to build. Our own focus at kp in the years ahead is to help make sure that everyone in our value chain is properly aligned, with the technology and the processes needed to make a circular economy a reality. By doing so, we can continue to enjoy the very real benefits of PET packaging, and comply with all of the emerging regulations around plastics."

www.kpfilms.com

NEMO® PROGRESSING CAVITY PUMPS FOR MEAT PROCESSING

Clean-In-Place and Full-Service-In-Place Requirements Dictated by the Standards for Meat Products.

By David Kirk, Netzsch North America

he meat preparation industry requires a wide range of equipment for processing, transporting and packaging on a mass scale. This industry has to comply with extremely high sanitary and hygienic standards and regulations.

Using Progressing Cavity Pumps in an Array of Meat Processing Applications

Viewed in technical terms, the mechanized meat processes encounter numerous variations even within a single meat product such as shape, density, size, texture, friction factors and presence of bones. Meat is susceptible to contamination by bacteria and spoilage due to temperature. Another major segmentation is based on usage: the meat for human

consumption, by products used in other industries, and waste product requiring appropriate disposal.

NETZSCH NEMO® Progressing Cavity Pumps are routinely used for pumping meat products. with or without bones. This pump type primarily consists of a single helix metallic rotor turning inside a double helix elastomeric stator. The rotating and stationary parts are designed to create cavities that transport the product smoothly from the suction side to the discharge side. The low shear characteristics of this pump type preserves the product integrity, and does not alter its physical attributes.

These pumps are easy to maintain, and have additional features to enable ease of assembly and disassembly to facilitate Clean-In-Place and Full ServiceIn-Place requirements dictated by the Standards for meat products. Following are two application examples: one in Chapeco, Brazil and one in Eastern Pennsylvania in the US.

A Netzsch Pump at a Processing and Packaging Plant in Brazil

BRF is a global company based in Brazil with locations on six continents. A turkey slaughterhouse is located in Chapeco, Santa Catarina and the slaughtered turkeys are brought to the BRF processing and packaging plant. The cleaned turkeys are first cut into four different sections. Some parts have bone and others do not. The size of these pieces vary.

The large chunks of meat, approximately 9 inches by 5 inches in size, are fed into an MSM (Mechanically Separated Meat) machine that reduces the meat to much smaller pieces that are roughly 1.5 inches by 3 inches in size. These pieces are pumped through a NEMO® progressing cavity pump that includes an open hopper and auger arrangement to push them into the suction casing of the pump.

In a subsequent operation, another MSM reduces these smaller meat pieces into ground meat. A NEMO® pump is used at this point to push the ground meat in a continuous compressed stream for the packaging process.

More than fifty (50) NETZSCH pumps installed since 2014, are operating trouble free in several locations in Brazil for this application.

NEMO® stainless

While poultry and turkey products are processed mainly at ambient or moderate temperatures, processina pork products, for example, is significantly different. It is customary practice to process pork products at colder temperatures - slightly below freezing.

To retain the quality of the meat, pig carcasses are rapidly chilled for 24 to 48 hours before they are cut into smaller pieces. The very cold operating conditions, and a wide range of temperatures between pumping the product and flushing the pumps at high temperatures for cleaning imposes special challenges when selecting materials for pumps.

Netzsch Progressing Cavity Pump for Temperature Variation in Pennsylvania

In a meat processing plant in Eastern Pennsylvania, a company was pumping internal pig organs to a Protein Processing System. The organs were of varying size and there was some fluid in the form of blood present to provide lubricity. However, the real challenge was that the product was pumped cold at 40 degrees F (4° C), but during the Clean-In-Place process the cleaning fluid circulated through the pump was hot, at 150 degrees F (65.5° C).

Initially, this customer was using a progressing cavity pump manufactured by a competitor but their stators were failing in a very short time due to the significant difference in temperature between operating conditions and Clean-In-Place conditions. The Mean Time Between Failure (MTBF) was unreasonably short and required very expensive spare parts.

NETZSCH engineers suggested a more suitable elastomer with properties that could handle the temperature variation for the stator thereby creating a much longer MTBF. The NETZSCH pump has been operating in this application since 2012. The customer is satisfied with the service life of the stator.



Pumps that Meet Strict Government Standards

NETZSCH uses FDA compliant materials for the construction of pumps used in the Food industry. In other countries similar Regulatory Agency rules may apply. In addition to the materials, the design of the pumps used for food applications also has to comply with specifications to prevent the product from lodging in areas where bacteria may form.



Pig livers in the hopper of a NEMO stainless steel pump as they proceed to a Protein Processing System.

The metallic parts of the NEMO® food grade pumps are primarily Stainless Steel 304 or 316 with polished surfaces (432 Ra), but the real challenge requires a suitable elastomeric material for the stator. The NETZSCH engineering team has developed several superior FDA compliant elastomers with excellent mechanical and rheological properties. These elastomers are wear resistant and also efficient in handling solid pieces of meat with variable lubricity.

NETZSCH progressing cavity pumps used in both the processes discussed here handles the meat of different shape, size and consistency with equal ease and provides the desired result. BRF and similar meat processing and packaging companies are using NETZSCH pumps for its reliability, efficiency and low maintenance.

www.mcneilgrayandrice.com

CABINPLANT - 50 YEARS OF CONTINUOUS INNOVATION

The Company Has Been Contributing to the International Food Industry for Five Decades

Cabinplant, an innovative supplier of processing equipment for the food industry, celebrated its 50th anniversary on 1 June. Groundbreaking solutions for blanching vegetables, robot solutions for the fishing industry and advanced weighing and packing systems for the meat industry are among the installations that Cabinplant has supplied around the world.

50 years ago Cabinplant was founded in Haarby, Denmark, where the company still has its headquarters. Today Cabinplant has grown into one of the world's leading suppliers within processing lines and weighing/packing systems for the food industry, with more than 5,000 installations worldwide. The company employs 300 people, and has production facilities in Denmark and Poland, its own sales companies in Germany, Spain and the United States, and agents in more than 40 countries.

Innovation In the Food Industry

Two enterprising entrepreneurs, Vagn Hansen and Hans Clausen, founded Cabinplant in June 1969, and the name comes from a short-lived flirtation with the production of spray booths. A breakthrough came with the development of equipment for the fishing industry, including processing equipment for the world's largest mackerel factory. Since then, further innovations have included the famous blanching equipment, which still



Ralf Astrup is the CEO and Jan Helskov Hansen is the CFO. They are co-owners of the company, together with CTB Inc., a Warren Buffett company.

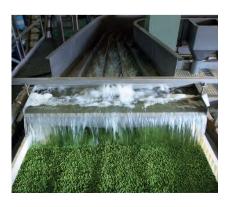
sets the standard for processing vegetables.

In the 1990s, Cabinplant invested considerable resources in the development of automatic packaging and weighing systems. This has resulted in the fact that today they are among the world leaders in precise weighing of fish, chicken and meat products, and packing using almost every type of packaging for retail sales.

They are also experts in postmarinating meat products, and have revolutionised automatic weighing of chicken meat. Germany's largest producers of fresh chicken for the retail trade, Emsland Frischgeflügel and Celler Land Frischgeflügel, have 21 Cabinplant installations. In the near future, we will be installing the company's highend equipment in Norsk Kylling's new sustainable factory for the production of chicken products in Orkanger, Norway.

With regards to processing equipment for vegetables, the company will be delivering a large plant to Egypt, to make Egyptian vegetables competitive in the European and American markets.

Ralf Astrup, CEO of Cabinplant A/S, says: "We have always



Processing line for IQF shrimp in brine



The company is a leader in weighing and packing equipment for convenience products for the retail sector, and where raw material waste is minimised.

been sustained by a dream of developing solutions that can provide better food on a sustainable basis."

A Clear Generational Change

Today, Cabinplant is managed by Ralf Astrup and Jan Helskov Hansen. They took over ownership and control from the two founders, Hans



Processing line for IQF shrimp in brine

Clausen and Vagn Hansen, as part of a generational change in 2006. Today, Ralf Astrup is the CEO and Jan Helskov Hansen is the CFO.

Since 2016, Cabinplant has been 80% owned by CTB Inc., a Warren Buffett company, while the management owns the rest. The new and expanded ownership has contributed to strengthening Cabinplant's international presence and manoeuvrability. This is thanks to new collaboration opportunities, also with the Dutch Meyn Group, which comes under the same group umbrella.

Another crucial partnership is the global cooperation with the German company Multivac, the world's largest within packing equipment for the food industry.

Open House on Saturday 25 May

The anniversary was celebrated with a reception for all business associates on 24 May, and on Saturday 25 May there was an open house where everyone was welcomed to visit the company and to take a closer look at the production area and the facilities. Both events took place at the company's premises in Haarby on Funen.

The festivities were rounded off with a big party, where all our employees from all over the world participated.

Celebrating the Anniversary with a New Building

The company celebrating its 50th anniversary is in top form. In the spring, Cabinplant turned the first sod to start a 50% expansion of the production facilities in Denmark. With an ambitious strategic plan, the company has launched plans for new markets, including the establishment of a subsidiary in the USA to boost the North and South American markets.

"There will be more and more mouths to feed, and although there is actually plenty of food, it is not being utilised effectively enough. We are able and will help to solve this, because we have the technology and facilities to utilise raw materials and preserve food in a far better way," says Ralf Astrup.

READY FOR INDUSTRY 4.0: NEW ROTARY VANE VACUUM PUMP WITH PRESSURE CONTROL

With the new R 5 PLUS, Busch introduces a pioneering vacuum pump for food packaging onto the market. It can run with pressure control or at a constant speed, making it exceptionally energy-efficient. Acting either as the sole vacuum pump in a packaging machine or as a vacuum module in a central vacuum supply, the R 5 PLUS makes sure a specified pumping speed is maintained. It can also accurately sustain the required vacuum level, regardless of how the packaging volume changes. Thanks to its variable speed drive, the vacuum pump covers a pumping speed range from 440 to 760 cubic meters per hour and reaches an ultimate pressure of 0.1 millibar. All operating data is recorded and saved on a permanent basis. This data can be accessed directly on the built-in display or transferred via a Modbus TCP/IP client/server protocol. A remote control of the vacuum pump via a computer is possible. Busch's new vacuum pump is thus ready for Industry 4.0.

The R 5 PLUS can be operated in two modes. Following an intuitive menu structure on the display, users can choose between the constant speed mode or pressure control mode. The most suitable operating mode depends on the type of packaging. If you are packaging smaller units at high cycle times with just a few seconds between evacuation cycles, it makes sense to leave the vacuum pump running. Adjusting the speed directly on the display allows it to be adapted to current demand without having a negative

impact on packaging quality or cycle times. This means that the pumping speed can be kept at a constant level somewhere between 440 and 760 cubic meters per hour.

When working with longer packaging cycles or when the vacuum pump is operated in a central vacuum supply, speed control is the more suitable option. In this case, the vacuum pump maintains the pre-selected vacuum level, regardless of how the pumping speed changes. Once the required vacuum level is in place, the R 5 PLUS continues to run at a minimum speed of 35 hertz, enabling it to respond to a sudden need for increased pumping speed by increasing the rotational speed. In the event of extended breaks, the vacuum pump can also switch on and off automatically thanks to ECO mode.

The R 5 PLUS vacuum pump is based on Busch's proven rotary vane vacuum technology. Thanks to its stable volume flow curve, this vacuum pump can still reach 70 percent of its pumping speed at atmospheric pressure, even at a vacuum level of just 5 millibar.

One of the fundamental benefits of rotary vane vacuum pumps is that power consumption drops as the pressure starts to fall. The rotary vane vacuum pump consumes the most power between the moment it is restarted and when it reaches a level of around 300 millibar. Within the working range between 10 millibar and the

Photo: Busch Dienste GmbH



The new R 5 PLUS rotary vane vacuum pump from Busch is exceptionally energyefficient, while its connectivity features make it ready for Industry 4.0

ultimate pressure of 0.1 millibar, the vacuum pump consumes a mere 40 to 60 percent of the specified rated power.

This feature alone makes the R 5 PLUS the most powerful and effective vacuum pump in its performance class. And the R 5 PLUS can save even more energy thanks to the two freely selectable operating modes and demand-driven power adjustment.

A standard built-in PLC records and stores all operating data on a permanent basis. This enables not only complete, uninterrupted data recording, but also warning and alarm functions, among others. Using the self-explanatory menu structure on the display, operators can decide when these warnings and alarms are displayed and/or trigger an action. All data recorded by the PLC can be transferred to other PLCs, computers or SMS control units in either analog or digital form, meaning that the R 5 PLUS rotary vane vacuum pump has full connectivity.

www.buschvacuum.com

NEW PREMIUMFORMER CREATES BURGERS OF VARIOUS **TEXTURES AND SHAPES**



With the new PremiumFormer, Marel unlocks new profitable opportunities for fresh burger production.

PremiumFormer is a unique solution for forming fresh burgers that ensures quality, flexibility and product consistency. With the PremiumFormer, Marel unlocks new profitable opportunities when producing fresh burgers. The system offers a variety of texture and shape possibilities while preserving product quality after cooking. Due to its compact footprint, the PremiumFormer will fit seamlessly into practically any production facility.

Fiber Orientation

Any burger can have a variety of fiber orientations, which you can clearly see when you break it up. Each burger type will give the consumer a specific eating experience and taste. There's the standard burger, which is typically pressed and without a clear fiber orientation. Then you have the home-style and tender fresh burger, where the fibers are oriented vertically. In a butcher

burger, fibers are interlaced. which creates angel hair burgers. perfect for a smashed-style burger. PremiumFormer now makes it possible to create all these burger types in one small, flexible machine.

Changing between different textures can be done quick and easy. Additionally, PremiumFormer's molds are interchangeable, making it possible to produce burgers of different shapes.

Superior Product Quality and Consistency

PremiumFormer produces highly consistent burgers that always have the desired shape and weight. During the forming process, the PremiumFormer respects the texture of the meat and minimizes damage to the meat. Thanks to this, end consumers will see a beautiful. high quality burger. Furthermore, the product quality is preserved after cooking and shrinkage is kept to a minimum.

www.marel.com

REX TECHNOLOGIE -VACUUM FILLER & **PORTIONING SYSTEMS**



UFM 300

The various models of the UFM 300 series are the ideal forming machines for all fresh meat and convenience food products.

Optional UV sterilisation for the FB 300 conveyor belt quarantees the highest possible level of bacterial eradication thus enhancing hygiene standards, giving machine suitability in high risk environments.

The water spraying unit prevents the product sticking to the blade or conveyor belts.

UFM 300-1 - A singlerow dumpling shaper for perfect forming

The uncomplicated and automated way to shape dumplings. The form cutter mounted directly to the conveyor belt guarantees exact portioning and the form roller beneath creates the ideal shape. The rounded dumplings are then placed onto the conveyor belt. The form rollers are available in various diameters for a range of dumpling sizes. Beautifully round dumplings can be created from meat, potato and various other food products.

UFM 300-2 / 300-3 / 300-4 - The industrial dumpling forming solution

These provide an uncomplicated and automated way to shape dumplings. The filling flow divider separates the portions into several rows. The form cutter mounted directly to the conveyor belt guarantees exact portioning and the form rollers beneath create the ideal shape. The rounded dumplings are then placed onto the conveyor belt. The form rollers are available in various diameters for all sizes of dumpling.

UFM 300-5 - The perfect "home-made" burger

The new UFM 300-5 hamburger shaper directly linked to the REX filling machine cuts the portions, which are placed on the conveyor belt. The portions are then pressed into perfect "home-made" burgers via the form belt with optimal dimensional stability.

UFM 300-6 - The universal shaping wizard

The UFM 300-6 is the universal solution for hamburger and dumpling production in combination with the REX filling machine.

The UFM 300-6 is the optimal machine-based solution for producing hamburgers using the low-pressure process. The pneumatic form cutter cuts the portions. The portions are then pressed into perfect "home-made" burgers via the form belt with optimal dimensional stability.

By converting the form cutter for dumpling production, the form roller is able to shape single rows of round dumplings. The form rollers are available in various diameters for a range of dumpling sizes.

www.rex-technologie.com

A STRONG SOFTWARE DUO FOR EFFICIENT MEAT PROCESSING

©K+G Wetter



Smart duo: CutVision and CutControl share the fact that they do not require a long training period and thus immediately provide for better processes. Craft and computers - can they work together? Absolutely, as K+G Wetter can successfully prove with the software duo CutControl and CutVision. While the experts for robust meat processing machines were already carrying out truly pioneering work years ago, PCsupported processes have now become indispensable in the modern butcher's trade. Efficient processes, reproducible quality, or the reliable documentation of all production steps - these are all added values which, in addition to the industry, craft butchers can no longer and no longer want to do without. K+G Wetter therefore optionally equips its bowl cutters and vacuum bowl cutters with effective software that combines high functionality with ease of operation.

CutControl: Once Tasty, Always Tasty

As an automatic program control with digital recipe management, CutControl guides you step by step through the entire production process. Knife shaft speed, bowl speed, temperature, number of cycles: All these values can be easily defined in advance, adapted to the respective recipe. The information is supplemented by corresponding work instructions, e.g. loading of the bowl cutter, the addition of ice, or of spice, etc. Once created, the programs and recipes are reproducible at any time and can be called up again and again for precise product manufacture.

The individual production steps are clearly indicated on a display on the bowl cutter and ensure error-free work. Depending on the switch-off value set, the bowl cutter then stops after each working step and the bowl cutter master is informed about

the next necessary working step. This avoids errors and allows employees to not have to keep an eye on the process during the bowl cutter process. The automatic quantity conversion also saves a lot of time: If the batch size of a recipe changes, CutControl adjusts the required quantities within seconds.

CutVision: Complete Documentation

The CutVision software reliably and seamlessly documents all qualityrelevant data that is generated during the production of sausage products or other products - and this fully automatically with the start of the bowl cutter. Whether sausage meat temperature, knife and bowl speed, or motor rating: These and other measured values are recorded immediately. The data can be read out and stored in a wide variety of forms and formats as required. All data can be reliably assigned to the respective batch. This makes CutVision the ideal solution for fulfilling increasing quality demands, responsibility towards customers and, last but not least, legislation.

Intuitive Touch Panel

What both pieces of software have in common is that they do not require extensive training and thus have a direct positive effect on the process flow. The touch panel is also characterised by easy operability. It is integrated as standard into all K+G Wetter bowl cutters. With the clear and easy to grasp structure of the operation via the touch panel, familiarisation is easily implemented and practically self-explanatory.

www.kawetter.de

CREATING HIGH-QUALITY COATED PRODUCTS, BOTH HOME STYLE AND FLATBED COATED MAREL POULTRY'S NEW CONVENIENCE FOOD LINE

Marel's brand new Convenience Food Line is designed to create attractive, high-value end products, while respecting today's strict food safety standards. Poultry processors can now find out how the latest technologies in further processing can create a wide variety of tasty products and add huge value to their production process.

Marel Poultry's entirely new 700 mm Convenience Food Line consists of the RevoPortioner and a selection of wet and dry coating equipment.

Flexible Change-Overs

Such a convenience line can create a wide variety of delicious added value meat products. A major asset is its high flexibility, as the line configuration isn't fixed. Innova Food Processing Software guides the operator during set-up and changeovers, which ensures easy line setup and an easily reproducible process. It's easy to have a particular set-up for e.g. home-style chicken wing coating (with RevoBreader's drum option) and change the configuration after one or more production days, giving the RevoBreader another role and another position, e.g. flatbed coating for chicken schnitzels.

RevoPortioner with Helix

The production of convenience products all starts with the RevoPortioner, featuring the new Helix Drum. RevoPortioner performs an automated task that can hardly be done by human labor. It produces perfectly portioned products at low pressure while retaining the texture and structure of the raw material. Processors can create the widest possible range of natural looking, 3D convenience products, always with the same shape, weight and size and of uniform quality, exactly according



RevoPortioner with Helix Drum putting out chicken tenders

to customers' wishes. The patented Helix Drum will ensure low pressure forming with continuous filling. The pressure of the meat pump is more consistent, resulting in a constant flow of meat.

Laying the Foundation

Marel's Active Flour Applicator, Active Batter Applicator and Active Tempura Applicator are the ideal foundation for a flawless layer of crumb. Flouring is a common first dry coating step. The fine layer of flour that is applied to the mass serves as a binder to allow other coatings to adhere better. Subsequently, a layer of batter will ensure that breading adheres appropriately to the product. Marel's Active Batter Applicator and Active Tempura provide an excellent distribution of batter, remove and reuse excess batter, and are suitable for a wide range of capacities. Both wet coating

solutions have the option to create an active bottom bed. assuring that the product is directly placed in the batter when entering the machine. This results in a perfectly even coverage of both the top and the bottom of the poultry products.

Revocrumb the Art of Coating

The RevoCrumb produces perfectly coated products



Wet coating applied to chicken patties by Marel's Active Batter **Applicator**

with optimum crumb distribution over all surfaces of the product. Thanks to an innovative crumb-management system, it's possible to control the flow of coarse and fine crumbs to the top or bottom bed. The crumb-management system ensures optimum coverage that always meets the customers' requirements.

The crumb structure remains intact during processing, as the RevoCrumb doesn't grind or crush crumbs, which makes it particularly suitable for very vulnerable crumbs.

Dual Mode Revobreader

An alternative to the RevoCrumb is the RevoBreader, a flexible machine that offers a flatbed and drum mode, all

Chicken pieces with a home-style crumb coming out of the RevoBreader

in one enclosure. This dualmode configurability is the ultimate solution for applying high-quality coating, both to home-style and flatbed coated products. Switching from one position to another is easy; it doesn't require the removal of any machine parts and it takes less than 2 minutes.

In flatbed position, the RevoBreader guides products through a bottom bed of crumb, while covering the top layer of "The creation of a wide variety of tasty products adds enormous value to the production process"

Production Insight

For a centralized process control solution, the Marel's new convenience line is backed by Innova Food Processing Software. By controlling and



the product with a gently falling layer of crumb. This results in high quality, uniformly coated products. In drum position, a high pickup of crumb and optimum home-style coverage of the product is guaranteed with high retention of crumb to the product during the subsequent frying and baking process. This is ideal for coating of bone-in products. In a QSR home-style production run, the drum of the RevoBreader completes the coating process. The result is a home-style crumb with a handmade look, a breading with a highly attractive appearance, perfectly suited for sale in QSR restaurants.

monitoring the recipes and production, Innova ensures that the end product aligns with the customers' orders. The supplied real-time data for performance monitoring ensures better food quality and food safety.

Innova's full traceability program provides an overview of the raw materials' journey through the processing plant. As a part of this, the traceability engine records every process step in the convenience line. Together with the Recipe Manager tool, it's easy to track systematically what has been made, when, where and by whom.

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SUPPLIERS GUIDE



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