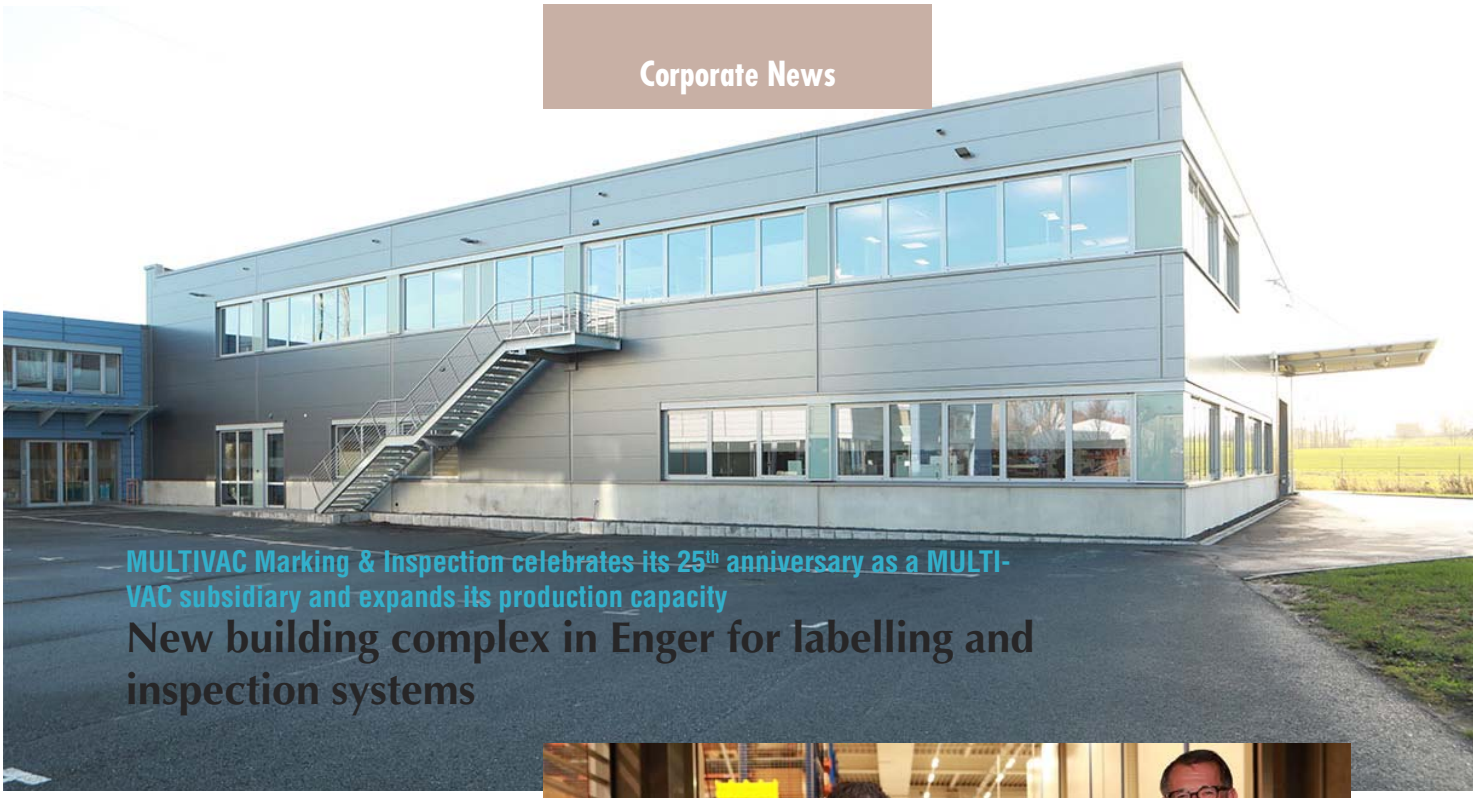


MULTIVAC Marking & Inspection celebrates its 25th anniversary as a MULTIVAC subsidiary and expands its production capacity

New building complex in Enger for labelling and inspection systems

MULTIVAC Marking & In-spection inaugurated a new production and office building during a celebratory opening ceremony - and at the same time it celebrated 25 years as part of the MULTIVAC Group. The official speak-ers included Christian Traumann, Director and CFO of MULTIVAC, Volker Gerloff, CEO of MULTIVAC Marking & Inspection, and Thomas Meyer, Mayor of Enger. A large number of guests took part in the event, including Inge Nienhüser, Head of Town Plan-ning, Development and Marketing for Enger, architect Frank Ebeler from Kenterplan GmbH and Guido Spix, Director and CTO/COO at MULTIVAC, as well as employees and members of the press.

After the initial greeting ceremony and the symbolic opening of the new building with the cutting of the tape by the company management, the guests were led through the new building and shown the state-of-the-art assembly and logistics processes. The afternoon was spent celebrat-ing in a winter-themed marquee with a buffet and music.

"We are delighted to be able to officially open with you today the new building complex, which will house the new warehouse as well as manu-facturing and pre-assembly departments over an area of 1,600 square metres. Thanks to the completely renovated production hall areas, it will be possible to expand the production capacity, particularly in the sec-tors of conveyor belt labellers and inspection systems. The investment amounted to around three million euros," said Christian Traumann. "In addition to this, there is another reason to celebrate: it is now 25 years that MULTIVAC Marking & Inspection has been part of our Group. Our subsidiary is an extremely important part of the MULTIVAC Group, and it is a leading supplier of innovative labelling, marking and inspection solutions in the market."

"In the course of the building work we have also used this opportunity to further optimise our logistics and assembly processes," explained Volker Gerloff. "This involved reorganizing all the process sequences in Goods Inward and Stores, as well as in the Manufacturing, Assembly and Dispatch departments. We are also introducing a shopfloor man-agement system as the cornerstone of our lean management drive. The objective is to achieve more efficient planning and monitoring of oper-ating processes, as well as a higher level of transparency, shorter reac-tion times and improved handling of resources."

Thanks to the shopfloor management system and the associated visuali-sation, all the production and operating areas can be displayed, any on-going issues can be highlighted and a rapid response guaranteed. This enables quick and targeted communication to be achieved at all levels, so that measures for problem solving and improvement can be put in place.

There are currently around 200 staff in total employed at MULTIVAC Marking & Inspection in Enger. Following completion of the new build-ing, the overall operating area has increased to 7,400 square metres. Around 900 square metres are taken up by the new Assembly/Produc-tion and Logistics areas, while 300 square metres are dedicated to other manufacturing such as machining and welding. In addition to this, some 30 new office spaces were created on the top floor.◆

Sidel BoostPRIME opens the door to premiumisation and revenue generation for hot-filled beverages in PET

BoostPRIME™ is a unique PET packaging solution, offering a great alternative for hot-filled beverages in PET bottles. It expands the opportunities for product premiumisation and revenue generation with no compromise on packaging performance and consumer experience. This patented solution is addressing the single serve market of JNSDIT (juice, nectar, soft drink, isotonics, tea) filled in PET bottles of up to 1.2L at a temperature of 85-88°C.

The BoostPRIME packaging solution removes the need for restrictive vacuum panels or gas addition into PET bottles normally required for the containers to resist hot-filling temperatures. The final bottle shape is achieved with an active base inversion and relies on three key features with minor impact on the packaging manufacturing line layout:

- The packaging design requires specific base geometry and specifications.
- The Base OverStroke System (BOSS) allows the mechanical forming of the bottle base during the blowing process.
- The inverter contributes to the base inversion. This step takes place after filling and capping, tilting and cooling and before labelling. It balances the negative pressure induced by the beverage cooling in the bottle from 85°C to ambient temperature.

Premiumisation: increased packaging appeal to stand out on the shelf

The removal of the technical constraints of the bottle vacuum offers total freedom of shape in order to attain premium and distinctive PET bottles. It allows a uniform look and feel for hot and aseptically-filled bottles for consistent brand image. Any iconic bottle shape with panels can be easily adapted without impacting the consumer perception. Besides that, it enlarges the branding opportunities as the bottles labelling surface with no vacuum panel is smoother and contributes to a greater and more impactful look and feel. The labelling quality for both roll-fed labels and sleeve labels is highly improved due to an inner bottle pressure during label application.

Revenue generation: a very cost-effective solution with significant savings

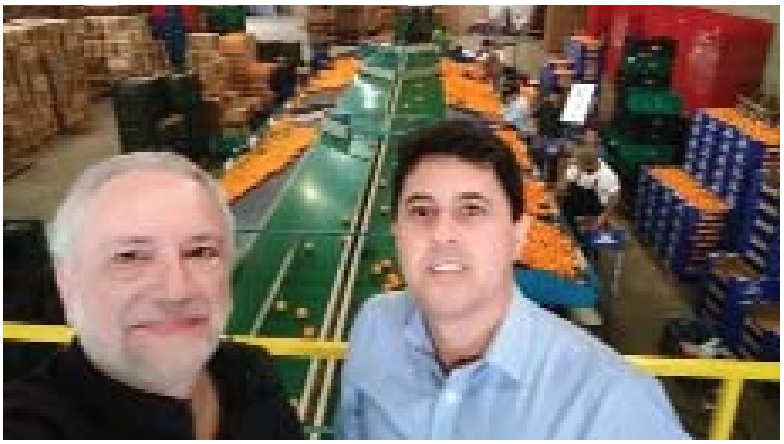
The BoostPRIME packaging solution significantly reduces consumption of PET resin: it can decrease the current heat resistant (HR) bottle weight by up to 30% compared to regular HR PET bottles. It also allows producers to save on label material by enabling to switch from a sleeve to a roll-fed label application. All the process parameters – air blowing pressure, air cooling – are optimised at maximum mechanical speed. When investing in the BoostPRIME solution for a new hot-fill PET line to produce a 1L hot-filled bottle, beverage producers can very quickly reach a one-year payback when considering the additional investment versus a traditional line configuration. By shifting from regular HR bottles with vacuum panels decorated with sleeve labels to lightweighted BoostPRIME bottles decorated with roll-fed labels, the bottle lightweighting potential is estimated to be between three and seven grams, complemented with a ten time reduction in label costs. ◆

Ozone, degreening and pressurization New technologies for the citrus sector

The latest technologies applied to production processes have hugely helped in the improvement of the value chain of agricultural products, offering solutions that increase their profitability. This time, we are presenting some industrial refrigeration methods and machinery, especially for post-harvest treatment and pre-cold handling, ripening, degreening in pressurized tunnels (controllable from a PC or smartphone), as well as for controlled and intermediate atmospheres.

These techniques and some others are being applied by the Argentinian company Orlando Refrigeration, which is dedicated to industrial refrigeration and was founded in 1932 by the grandfather of Engineer Alfredo Orlando. Since 1996, they have been working together with the Dutch VDH, but also with other companies in the Netherlands, Chile, Peru, etc., always trying to help producers obtain the best quality fruit during the export season.

For its part, VDH is a Dutch company that is dedicated to the manufacture of electronic controllers for many industries. It is also devoted to the design and enforcement of specific controls for refrigeration, ripening and fruit degreening. One of these controls is called PROBA 5, which allows to regulate the entire degreening and ripening process in their stores.



Some processes need to be kept under control

These processes are very meticulous and involve regulating temperatures cold and hot, gas concentration of ethylene and CO2, controlling these two gases is essential to achieve a good degreening or maturing , humidity, variable ventilation and pressure, gas extraction in accordance with the requirements of its customers. Eliminating green mold (Penicillium digitatum) and blue mold (Penicillium italicum) - Blue mold

One of the systems that is being used to ensure that citrus fruits are kept in perfect condition entails the application of ozone. Its microbicidal action acts on the citrus, improving the fruit's permeability and stopping infecting agents.

It also eliminates the ethylene gas C2H4 degrading, this gas is the cause of the deterioration of the fruit. Ozone is fast and effective in the elimination of bacteria, viruses, fungi and spores. It has a deodorizing action, tackling the cause of the problems without adding any other smells. Also, its oxygenating action contributes to improving the efficiency of the cells of organisms by stimulating several enzymes involved in these processes.

Alfredo Orlando has also explained what citrus degreening actually entails. It is "a process that is similar to that of ripening. The temperature is altered and gases are injected; in this way, we ensure that the color is always the right one for the product's sale, preventing any green traces. These traces are, in fact, chlorophyl, which transforms over time into other substances, such as carotenes, etc., and whose transformation is accelerated by the process of degreening. This makes it easier to obtain an even-colored fruit by the time it needs to be exported."

According to Orlando, "degreening in citrus fruits is done for merely aesthetic reasons, since the products' flavor and texture are already suitable for consumption, despite the appearance of those green traces. The degreening is done in the warehouse, just before the fruit's preparation for shipment to the markets, and is necessary only during the first months of the harvest, since the process is later carried out naturally by the plants."

Tate & Lyle's GSS team in Łódz has been shortlisted for ABSL Diamonds Awards 2018

Tate & Lyle PLC (Tate & Lyle), a leading global provider of food and beverage ingredients and solutions, is proud to announce that its Global Shared Services (GSS) team based in Łód , Poland, has been recognised for its commitment to community giving and employee wellbeing in the ABSL Diamonds Awards 2018.

The ABSL Diamonds Awards are national awards recognising excellence and innovation in Poland's business services sector. Tate & Lyle's GSS team in Łód , consisting of over 300 employees providing financial transactional activities and other services to Tate & Lyle's business across the world, has been shortlisted in two categories:

- The 'Corporate Social Responsibility' category in recognition of the team's strong commitment to local community involvement and giving. Activities include employees organising cooking workshops, picnics and fundraisers for children at a local orphanage, running craft workshops for local children (pictured), collecting feed and accessories for a local animal shelter, and donating gifts to a local hospital.
- The 'Vibrant Workplace' category in recognition of the team's efforts to create a dynamic work environment that supports health and wellness, personal development and team building. Initiatives in the 'I Love My Job' programme range from health and wellness lectures and training, to activities involving colleagues' families, such as family picnics and Open Days where children learn about their parents' jobs.

These two short listings follow recognition in a scheme initiated by the President of Łód , which saw Tate & Lyle named as one of the top employers in the city.

Milosz Aleksander, Vice President, Global Shared Services, Tate & Lyle, said:

"We are incredibly proud to be recognised for the projects we support in the local community, and for creating a positive working environment and culture. Everyone in the team in Łód plays a part in making the Tate & Lyle GSS Centre a great place to work, with strong support from our colleagues in Human Resources, our employee engagement champions, our and Wellness and Activity teams."

Laura Hagan, Chief Human Resources Officer, Tate & Lyle, said: "At Tate & Lyle, we are committed to creating a happy, healthy and supportive work environment for our employees, which we believe helps promote greater collaboration, creativity and productivity. We are very proud of our team in Łód who have done a fantastic job engaging colleagues in the workplace and helping to support the local community. They truly embody our company's purpose of Improving Lives for Generations."

Kenya's FreshBox pioneers solar-powered refrigeration East Africa

Kenyan start-up FreshBox is introducing sustainable refrigeration to East African produce markets with its solar-powered, walk-in cold rooms. FreshBox's flagship unit is a solar-powered, walk-in cold room that can hold over 2100 kg of fruits and vegetables, and can reach temperatures below freezing point.

Disrupt-africa.com quoted co-founder Thomas Schmedding as saying: "By increasing the longevity of a fruit or vegetable's selling period by up to 950 per cent, our cold storage system can provide more consistent revenues to the retailers in produce markets and provide more consistent availability of nutritious produce."

FreshBox came about after its current CEO John Mbindyo noticed that market vendors were forced to restock their supply regularly due to excess produce spoiling after two or three days. By expanding upon proven cold storage technology, he designed a way to provide cold storage for retailers in markets at an affordable rate.

"We put our idea to the test with a pilot project in a Nairobi fruits and vegetables market. To assess the demand for a large-scale cooling unit in similar markets across Kenya, we first purchased a used household refrigerator. After we installed the refrigerator in the market, the unit was fully booked within a day. Over the course of the next three months, the pilot refrigerator achieved a 100 per cent utilisation rate," Schmedding said.

Manufacturing site in Kunshan.

Sensor technology leader TOMRA strengthens set-ups in China

TOMRA, a global leader in sensor-based sorting technology, is absolutely committed to its long-term development in China and has further strengthened its set-up in this fast-growing market.

Since establishing the first subsidiary in China in 2010, TOMRA has been actively increasing its investment and business activities in this dynamic market. Currently TOMRA has three businesses operating in China: Food Sorting and Grading, Recycling Sorting and Beverage Container Collection. TOMRA's business activity in China ranges from business development, product management, R&D, assembly, sales, service and application validation in the local test centers. After expanding TOMRA's fresh fruit and vegetable grading state-of-the-art manufacturing site in Kunshan, TOMRA further reinforced its engineering team in China and expanded its technology center in Xiamen.

Sustainable development a national focus in China

China's remarkably rapid development over the past 30 years has impressed the world. This fast progress has, however, also posed some challenges to the long-term welfare of the population, such as excessive exploitation of

Jacob Rognhaug, General Manager at TOMRA China.

natural resources, environmental pollution and challenges with food safety.

With the "Made in China 2025" strategy, blueprinted by the nation's top decision makers, there has been a national consensus that China should make a transition to sustainable development. In the coming years, priority will be given to innovation, manufacturing quality, environmental protection and structural change in the economy. TOMRA's vision of building a circular economy and a sustainable future with the aid of cutting-edge technology resonates with China's top-level strategy.

As a driving force in technology innovation in the recycling and food processing industries, TOMRA is discovering that its leading technology and industry expertise are becoming increasingly popular and important in the local market. To prepare for the new opportunities created by China's transformation, TOMRA has been strengthening its organizational base in this vibrant country.

Envisioning TOMRA's contribution in China's shift to sustainable development, Jacob Rognhaug, general manager at TOMRA China, says, "During China's transformative development, more innovative technologies are needed to address the challenges of efficient use of resources, environmental protection and the provision of high-quality food. At TOMRA, we are dedicated to optimizing resource productivity with sensor-based technology, and our solutions can answer some of the main challenges that China is facing today. That's why we have been increasing our financial investment in China while also investing a considerable amount of time in achieving a better understanding of the local market. I'm confident our technology can contribute significantly to China's goal of sustainable development."

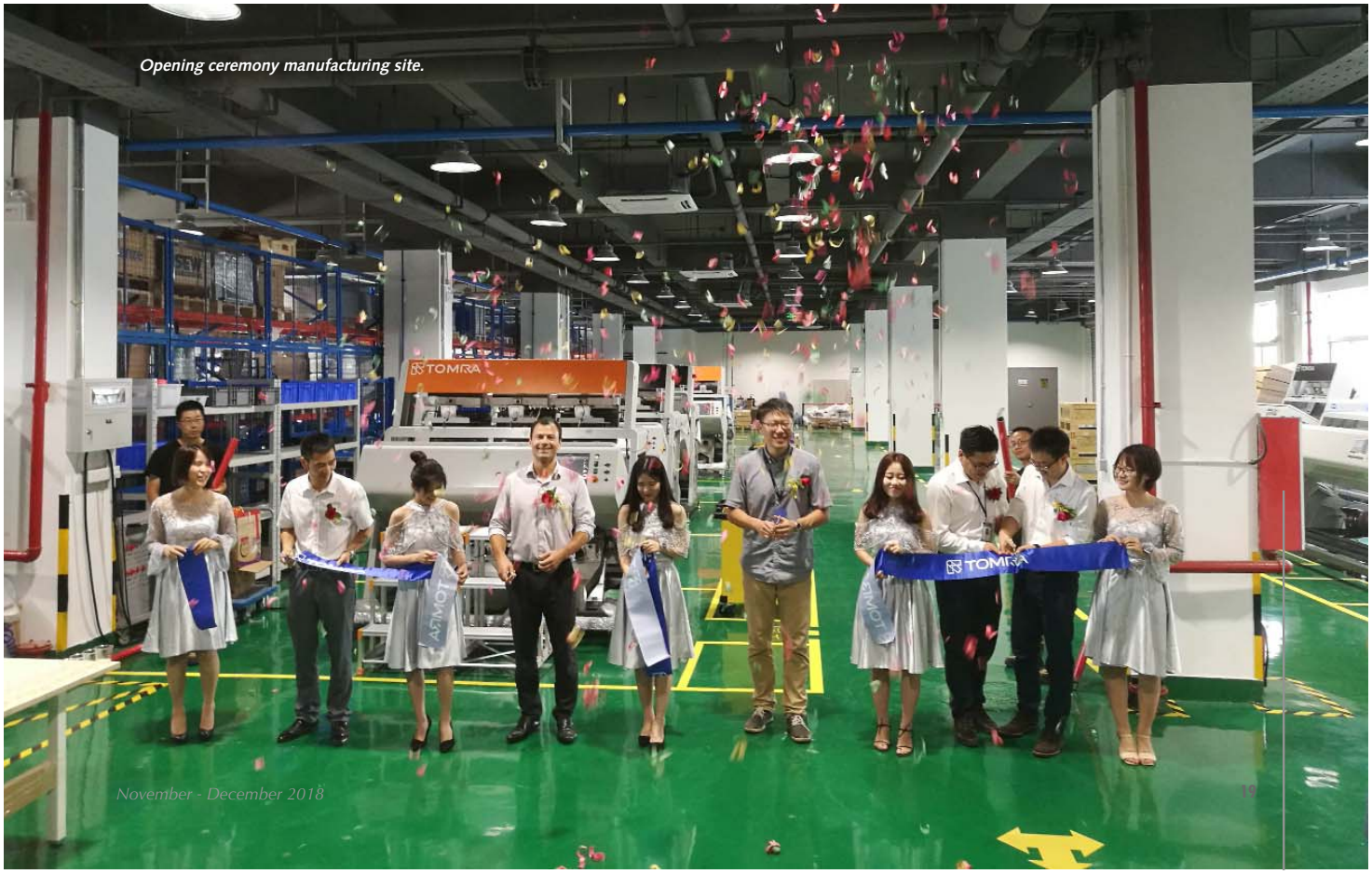
Committed to grow with China

TOMRA developed a comprehensive China strategy in 2015, and it includes establishing a local R&D team, setting up a local service network and strengthening local production.

In 2017, TOMRA invested in expanding its manufacturing site in Kunshan to over 11,000 sqm, strengthening the supply chain, and providing enhanced support for the local market. This resulted in better integration of the resources in its global operations.

In addition, TOMRA enhanced its engineering capability in China by extending its technology center in Xiamen to support product and application development. Today, the technology center in Xiamen covers 5000 sqm, hosting about 150 employees, tripling the number of staff that were employed in 2015.

"Since we first established a branch in Xiamen in 2010, TOMRA has made great progress in China," adds Rognhaug. "I see a bright future in which TOMRA grows together with China. The TOMRA brand is increasingly recognized in the local market, and TOMRA's technical advantages in achieving the goal of sustainable development are welcomed as a valuable contribution. The TOMRA China team is willing to work with the local community in developing solutions that meet the needs of the local market and assist China's economic transformation. With a spirit of innovation and a strong commitment to China, we look forward to a future that is win-win." ◆



Opening ceremony manufacturing site.