WIPOTEC CUSTOMER MAGAZINE ISSUE 01 | 2018

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About mass production and assembly line production

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Quality assurance for natural products

/ IT'S ALL HAPPENING HERE!

Solutions for mail, CEP services and intralogistics





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/ DEAR CUSTOMERS,

30 years ago, Udo Wagner and I founded WIPOTEC as a spin-off of the University of Kaiserslautern. Perfecting the dynamic weighing technology in highspeed applications using EMFR weigh cells was and still is the cornerstone of the company. Driven mainly by innovative strength, customer proximity and longterm partnerships, we have developed within the last 30 years into a global player in industrial weighing and inspection solutions, employing more than 800 people.

In addition to the traditional quantitative aspects, such as sales and earnings, growth has above all a qualitative dimension, namely innovation and the people behind it. The increasing demand for our products and the trust you have placed in us present us with a wide range of requirements for growth. As a result, we have made far-reaching changes to organisation and processes in all areas to achieve more innovation, flexibility and customer satisfaction. As the founder and CEO, I bear the responsibility for the core values that have made WIPOTEC great, both internally and above all in customer relations, over the last 30 years. They will continue to remain the unshakeable foundation of our actions and growth management. Putting innovation, passion and you, the customer, first is what we demonstrate in the many interesting articles in the new "Weigh Up" magazine.

I hope you enjoy reading it.

Theo Düppre

/MORE PRESENCE AND CUSTOMER PROXIMITY

By Fred Köhler Managing Director Sales & Service and CSO

> Your satisfaction and the fulfilment of your needs are always our top priority and take precedence over everything else.

Fred Köhler

Managing Director Sales & Service and CSO

Dear Customer, dear Reader,

There are efforts aimed at the separation and independence of regions and ethnic groups in many countries. Last year WIPOTEC took the opposite approach, expressing it impressively and visibly for everyone by introducing the new corporate identity of the WIPOTEC Group at interpack 2017 in Düsseldorf. In the last 30 years, WIPOTEC has evolved from an idea into a large medium-sized company and has become a major player in its core areas.

WIPOTEC today

When you visit our company at the main production site in Kaiserslautern, your first impression is: modern, clean, structured. State-of-the-art building technology, no standard factory buildings and technical equipment that is second to none. Moreover your first impression will be further reinforced when you enter our production facilities – we know this from our customers and many other visitors. We set standards for industrial enterprises not only technically but also environmentally due to our energy-saving construction methods and renewable energy production. This, however, is only the outer appearance.

When you get in touch with us, our wide range of products will surprise you. I guarantee that your performance requirements will be covered. Our goal is then to work with you to find the best technical solution for your needs and to ensure that you are satisfied with it for a long time. If necessary and you ask us, we are also willing to chart new territory for you and with you to develop new products and solutions. Many customers have followed this path with us, culminating in their and our success.

We have gained a reputation as problem solvers due to our enthusiasm and dedication to our customers' tasks and their applications. With our industry standards, we provide you with solutions that are perfectly tailored to you and your requirements. Sometimes this also takes us to the limits of what is technically or physically feasible at present.

Our solutions for you

Solutions from WIPOTEC demonstrate a huge diversity of versions and options, expressing our flexibility and adaptability. Our customers therefore benefit from the continuous further development and innovative spirit, which permeates all areas of our company.

A few examples: The serialisation issue, which is currently very topical in the pharmaceutical sector due to changes in legislation, is attracting more and more attention from food producers. Do you produce baby food? Here too, its traceability back to you as the manufacturer can ensure the quality of the products and the continuity of the supply chain. Nevertheless, serialisation also effectively prevents counterfeiting and product piracy of highpriced foods and consumer goods, such as cosmetics.

Another issue among our development priorities is the increasing interest in improving and ensuring product quality. Nowadays, the overriding issues are not just ensuring the minimum weight or preventing overfilling. Recall campaigns can cost a fortune and permanently damage your image. The quality of your products is becoming increasingly important to consumers; in today's closely networked world, warnings in these areas regularly lead to feedback that is mutually reinforcing. Our offer: solutions from WIPOTEC offer you the possibility of monitoring your automated production processes even at high speeds, ideally with a 100% check.

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This is also a very interesting development that has featured in our growing product range for some time now and is based on increasing customer interest in systems for inline product inspection. Weight monitoring, combined with state-of-the-art camera technology, metal detection, foreign body searching, content and shape checking using X-ray scanners, label monitoring and other inspection options. Added to these are our highly efficient DWS systems – dimensioning, weighing, scanning in the CEP services and intralogistics sector. Here too, reading barcodes, detecting the dimensions of consignments and determining their weight are only the beginning of the possibilities offered by our systems for comprehensive product inspection.

More presence and customer proximity

There is a continuing evolution of more than just our appearance and product range going on at WIPOTEC. The company's positioning has changed from being a German company selling worldwide into a hidden champion operating globally. By setting up new agencies and partners, we can offer you even better and faster service and sales support. This also applies to our key accounts and all other customers with offices worldwide.

In the long term, however, we have been and still are only successful because our machines run safely and trouble-free in your facilities. Our service and after-sales section plays a decisive role in this. It is the second central pillar of sales and closely linked to it. For this reason, further development of the service network for even shorter response times, expansion of the after-sales portfolio focusing on preventive maintenance, a hotline with remote support and training courses for operators and in-house maintenance staff are top of our agenda.

Yet another step in the networking process is the intensive exchange of knowledge with our agencies, partners and naturally our customers. We will improve the knowledge base at all levels with a multi-level training and development concept, the qualification of our service partners and training courses for the operators and maintenance staff of our customers, to mention just a few points. Using new software and communication channels will promote an even more intensive exchange of knowledge.

For all of us at WIPOTEC, all these changes mean breaking new ground just as you do yourselves. We will not stop questioning existing solutions, continuously introducing improvements and always looking forward to ideas and suggestions from you regarding our solutions, your requirements and future tasks. There is always a welcome for you here.

Atten

Fred Köhler

/ OUR COMPANY PHILOSOPHY:

INNOVATION. PASSION. FIRST.

INNOVATION – The basis of our drive to develop new products and solutions for our customers' needs.

PASSION – Our passion and dedication. To put it in the words of Theo Düppre, our founder and CEO, "There's no such thing as impossible." We always work hard with the customer to find the best solution for each application, even if it is sometimes at the boundary of what is possible. Ultimately, however, we are known for pushing these boundaries again and again!

FIRST – Your satisfaction and the fulfilment of your needs are always our top priority and take precedence over everything else.



/ FRED KÖHLER Managing Director Sales & Service and CSO

/WIPOTEC GROUP

Everything in sync

About mass production and assembly line production. Page 8

interpack 2017

New brand architecture, new product presentations. **Page 12**

Electronics production at WIPOTEC

Contribution to vertical integration: 180,000 assemblies in 350 versions. **Page 14**



/ GERMAN SCHOLARSHIP: WIPOTEC SUPPORTS YOUNG TALENT

As in the previous year, WIPOTEC, together with the Technical University and the University of Applied Sciences in Kaiserslautern is supporting particularly gifted students with the German scholarship. In the current funding rounds of the scholarship programme for 2018, which is available throughout Germany, in addition to WIPOTEC, over 40 further sponsors from companies, foundations, associations and private individuals are taking part in the Kaiserslautern region.

The WIPOTEC scholarship holders – currently one at the Technical University and two at the University of Applied Sciences – come from the fields of mechanical and electrical engineering. The contact between scholarship holders and sponsors is strengthened both by joint events at the universities and by sponsors inviting the scholarship holders to take part in company tours and internships.

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WIPOTEC GROUP

10 paediatric nurses are pleased about baby scales donated to the children's hospital by WIPOTEC

/ WIPOTEC PRESENTS NEW SYSTEMS AT ACHEMA

Leading trade fair for the process industry takes place in Frankfurt from 11 to 15 June 2018: So far, along with WIPOTEC, more than 2,700 exhibitors from all over the world have booked a booth at the leading trade fair for the process industry on the exhibition site of Messe Frankfurt. They will present new products for the chemical, pharmaceutical and food industry in Frankfurt from 11 to 15 June 2018. They relate in particular to pharmaceutical technology and its automation, where demand already outstrips the existing space on offer. In hall 3, booth D95, WIPOTEC-OCS will be presenting new products and systems pertaining to the regulatory requirements for pharmaceuticals as well as for labelling and tracking. They include user-friendly inline serialisation solutions for folding boxes and bottles, combined with fully automated weight acquisition. Current X-ray inspection systems and checkweighers will also be on show.

WIPOTEC Weighing Technology will present current weighing modules and kits for OEM manufacturers.

/ PACK EXPO LAS VEGAS



The Pack Expo was held in the Las Vegas Convention Center in Nevada (USA) from 25 to 27 September. More than 2,000 exhibitors in total showcased their products. Many visitors were interested in our modular TQS Track & Trace solutions, which support open industry standards (OPEN-SCS). Other areas WIPOTEC focused on at the exhibition were OEM weighing technology, checkweighing and X-ray inspection. It also presented an NJM bottle-labelling machine with WIPOTEC-OCS TQS-CP serialisation station for flexibly aggregating bottles. A simulated production line based on the level 3 serialisation software suites of Advanco/TraceLink and Arvato was also shown. ▲

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Production at WIPOTEC

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EVERYTHING IN SYNC

About mass production using assembly line production

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In Kaiserslautern, the following still applies: you only have a hundred percent control of that which you produce yourself!

> Udo Wagner Head of Production

ass producer or special machine manufacturer? If we wanted to classify WIPOTEC today by production type only, classification would be easy. An order-driven company that supplies over 1,200 standardised weighing systems, like for a customer in the USA, is definitely a mass producer. But is classification really that easy? Udo Wagner, Head of Production at WIPOTEC, sheds some light on the problem. He knows the company from every angle, which isn't really that hard for him. After all, he was one of the founders almost 30 years ago.

Standard production machine or special machine

For a customer, this classification is important. It may even be crucial, depending on the type and scope of the order the customer intends to place. Does he insist on mass-produced products, which is a limited number of similar products, which are related qualitatively and at a high level to the company's other products? This may be an important criterion even if he only intends to order a single machine. It affects the product's availability. Will this system still be available for years down the line when expansion is pending or further lines are to be added? What about the supply of spare parts?

Or are the customer requirements so special that an "offthe-shelf solution" will not be enough? Even customers who are simply looking for the best solution for themselves and have no particular preferences do not always find it easy to distinguish between the two cases. Different customer requirements make it necessary to provide a rich and varied range of products that demand maximum flexibility of equipment and technologies (not to mention employees) in production. The answer to this is assembly line production. For Udo Wagner this is precisely the means by which production at WIPOTEC can quickly be adapted to changing order types and order volumes.

Efficient production runs thanks to assembly line production

Order changes and a wide range of equipment mean a larger proportion of non-productive time during order processing due to additional idle and set-up times. Production flows increasingly intersect, also due to the high number of versions. What is the best way to deal with a high number of versions? The answer is a modular system that allows a well-thought-out division into standard and engineering machines. The intelligent design of modular sub-components ensures that our standard machine configurations cover the majority of customer requirements. WIPOTEC-OCS installs different transport groups at the preassembly stage, consisting, for example, of top-bottom conveyors and lateral side grip conveyors, to take the pressure off the final assembly stage. Transport group assemblies represent the greatest variability of assembly variation including belt lengths, belt widths, and working heights. We incorporate these assembly variations across the broad array of our machine solutions. The modular unit system shows off all its advantages here. Final assembly remains lean and standardisable at the same time. The cycling runs through all production departments, starting with the checkweighers for the food sector through to X-ray inspection systems. Cycle lengths vary from one hour to one day, and here one can clearly see the differences from standard mass production where a uniform rhythm per processing station is possible due to the same or only marginally different >>



Line production in the production of TQS systems (Traceable Quality Systems)

processing times. As a result, at WIPOTEC-OCS highly standardised product lines have been created (and will be created repeatedly if necessary), which do not require any special infrastructure, can be set up quickly and can thus be adapted variably to the order volume.

Responding individually to customer requests

Sometimes a standard machine cannot meet a unique set of customer requirements. In those cases, we engineer specific machines that respond to highly individual customer's requests. Ultimately, one employee is responsible for the perfect assembly of the machine. Nevertheless, the modular system of standard components is available to the assembly specialist to use even if these customer-specific orders are taken out of the

/ ASSEMBLY LINE PRODUCTION:

In line production, the component to be produced "flows" along the assembly line. Each part and each assembly has a fixed transfer point in every cycle and the associated tools and resources are also only available at this point.

Assembly line production has become established worldwide as an efficient manufacturing structure for pressing and forming tools, even for mass producers such as car manufacturers. As in toolmaking with a comparably varied product range, assembly line production has also proven its worth at WIPOTEC. assembly line production to be built in a manufacturing cell. That way the assembly times do not deviate too much in individual steps from the standard specifications and thus from the cycle. Meanwhile, the assembly line production for standard machines continues smoothly and in parallel.

Weigh cell production

The "cycle" is also finding its way into different processes in weigh cell production. This is where the high individuality of the customer-specific weigh cells presents a huge challenge. One area of focus is expanding the automation of adjustment and measuring processes. Take the tests in the climate chambers for example. Here, fully automated calibration of the weigh cells takes a total of three days.

Vertical integration in production

Vertical integration is one of the most important characteristics in production. It is clear that today no mechanical engineering company with systems above a certain level of complexity can manage without external suppliers. The decisive factor is whether dependencies arise which might jeopardise the availability and ability to deliver the products in the short or longer term.

WIPOTEC-OCS has a clear opinion here. The aim is to maintain a high level of vertical integration, i.e. a high share in the value chain due to producing in-house. This share currently stands at 85%. By comparison: the vertical integration of German car manufacturers dropped from one third initially in the 1990s to 20%. In Kaiserslautern, the following still applies: you only have a hundred percent control of that which you produce yourself. Production Manager Udo Wagner is convinced that in addition to the dependence on suppliers, the disadvantages of a low level of vertical integration also include the loss of expertise and qualified employees.



/ THREE QUESTIONS TO:

UDO WAGNER Head of Production

Standard production machine or special machine manufacturer?

Definitely both. A company like WIPOTEC needs to be perfectly prepared for both eventualities if it is to perform successfully in our markets. We get special requests and this is where we have to come up with something. We are quite simply innovation-driven. It's what we're known for!

A few words about just-in-time...

Here too we are well-positioned. Our automated high bay warehouse, designed as a shuttle system, was taken into account in the planning phase of the company buildings – as can be seen from the more than 12-metre high towers on the company site. It supplies more than 90% of all components and modules that we need in production just-in-time.

What's next?

We are focusing on growth and by this I mean planned growth. Last year we therefore expanded the production area in the main manufacturing section by 5,000 square metres to almost 33,000 square metres. Now we're using every square metre. We're prepared, and not only in production.

/ Udo Wagner

is 53 years old and one of the founders of WIPOTEC, almost 30 years ago.

He enjoys spending time in the mountains: cycling in summer and skiing in winter.

As WIPOTEC-OCS not only produces prototypes and development parts but also the subsequent series of parts on the same machines, using the same tools. This approach ensures that there are no differences in the series. This is particularly important for technology parts as is the case with the monoblocks for the weigh cells, for example. These continue to be the company's "know-how carriers", and according to Udo Wagner, WIPOTEC's success would not have been possible without them. All monoblocks can be series-produced unattended and overnight in the company's own CNC machining centre. Across their entire range: starting with the filigree aluminium structures of the weigh cells, weighing in the milligram range and the size of a matchbox; which have to be used in pharmaceutical production and installed in clean rooms at a later stage, through to monoblocks of aluminium weighing several kilos which perform their function installed in heavy load checkweighers.

Where we go from here. The company's growth is ultimately reflected in key performance indicators, many of which are directly based in production. Need an example? In 2016 alone, WIPOTEC's production space in the main manufacturing section increased by 5,000 m² to almost 33,000 m². We are prepared, and not only in production.

WIPOTEC AND INTERPACK 2017

New corporate design, new booth: the new brand architecture, as presented by WIPOTEC at interpack, was greeted with warm approval by visitors and customers.



hen is a trade fair successful for a company? There are many definitions for this, one of them uses the number of visitors during the seven days of the trade fair, another the level of technical interest shown by customers. The former is relatively easy to answer. Many technical discussions with enthusiastic visitors on all seven days of the trade fair demonstrate the enormous amount of interest in products made by WIPOTEC. Many visitors showed interest in and enquired about new products – new developments and technologies which were being presented to the general public for the first time. With regard to quality – almost half the visitors were specifically looking for further information and technical expertise within the scope of current projects. WIPOTEC's booth at Interpack 2017 was our largest to date offering customers the opportunity to view 16 machines in the main booth alone. WIPOTEC machines were also on display in several other business partner booths located throughout the show. Added to this were the demo cubes, always suitable reference and starting point for many interesting conversations. The multimedia area with two large touchscreens in table form was also new. Many visitors took advantage of the interactive opportunity. Our first two-storey booth offered plenty of space on its tall façades to accommodate logos and other elements of the new corporate design, making them highly visible from all around. So, even from a distance WIPOTEC made a clear statement with the new brand core.



All grown up: the first two-storey booth provided space for 16 demo machines.

There were also many industry-related presentations of new products: in the pharmaceutical sector (Track & Trace), this was the TQS-HC-A, a machine for the serialisation of folding boxes, including integrated completeness check using weight detection. Single-sided machine operation was clearly viewed through the Plexiglas housing enclosure. With the TQS-LI-Bottle, WIPOTEC presented a machine which serialises bottles or vials by sticking on labels. Integrated optical inspection using several cameras ensures maximum process reliability.

Another new product in the booth and also new to the range was a checkweigher (HC-A-IS-WD) which has been specially developed for use in filling plants for applications in the wet and hygiene area. The model exhibited at the trade fair as a full stainless steel, wash-down machine also attracted a lot of interest because it meets all the cleaning criteria and strict hygiene requirements of the food industry. Areas of application in this case would be weight checking in filling lines of the food and beverage industry, trend control of filling machines and automatic random sampling checks. The rotary star wheel weighing system enables optimum handling for tall, slender containers, such as aerosol cans, plastic or glass bottles.

A new four-beam machine, the SC-S QuadView, was exhibited in the area of X-ray inspections for food. It enables complete bottle inspection consisting of a full inspection of the container base and simultaneous screening of the bottle content. The scanner uses four X-ray systems to generate four different views of the same object. By individually evaluating the images from different angles, it is possible to examine all areas of the volume inspected without exception at maximum resolution. The system is particularly suitable for inspecting viscous, paste-like or pourable food products, which place the highest demands on foreign body detection; this also explains why visitors showed great interest in this system.





Last but not least: there were also new products among the weigh cells. It would be worth mentioning here the compact weigh cell SL-E. Due to its simple and cost-efficient installation, this cell is particularly suitable for use in multi-lane 100% inline checking in production machines for tea and coffee capsules. A particularly narrow weigh cell was presented in the SX-M-FS. It can be used to realise a track centre-to-centre distance of only 25 millimetres in multi-lane applications, ideally suited to injection vials.



ELECTRONICS PRODUCTION AT WIPOTEC

Electronics production at WIPOTEC makes a significant contribution to the company's vertical integration. The annual in-house production of more than 180,000 assemblies in 350 different versions is proof of this.

ot only are the numbers impressive. The two printed circuit board assembly lines of different, but at any rate imposing length, are also impressive and not necessarily, what one would imagine of a series manufacturer for highly specialised electromechanical systems. The annual in-house production at WIPOTEC in Kaiserslautern amounts to more than 180,000 assemblies in 350 different versions - key figures representing a high level of electronics expenditure but also frequent retooling, particularly of the second line that is intended for smaller quantities.

Vertical integration counts

With its own electronics production in-house, the overall vertical integration at WIPOTEC rises to more than 85%. The advantages are obvious: with in-house electronics production, the company is very much less dependent on external suppliers. In the field of rapidly superseded electronic modules, this is an advantage not to be underestimated. The development department can match the assemblies perfectly to the company's own requirements. Version production becomes easier, that is to say, the response to customer requests can be better and faster and even special requests can be implemented efficiently and in time. Crucially, the company has full control over the quality of all the electronic components it produces and the expertise remains in-house. The time periods from first prototype (and thereafter) to standard machine are also reduced. Last but not least, there is an overall increase in flexibility in production itself.

Extensive machining facilities and equipment are required

PCB assembly machines are simply not enough if you want to produce electronics in-house. The components have to be soldered; WIPOTEC has convection-based reflow ovens and a vapour phase soldering system available for this purpose. The latter uses the condensation heat of perfluoropolyether (PFPE) to evenly heat the printed circuit boards to soldering temperature. Oxidation is virtually ruled out in its inert gas atmosphere, and safe and particularly gentle soldering is performed, as the components cannot be overheated. Wired circuit boards are soldered in the flow-soldering bath. The machine pool also includes an automated laser-marking machine for unique numbering using a data matrix code. An automatic optical inspection system and another system based on X-rays are responsible for quality assurance. The

latter X-rays the printed circuit board and checks whether components are soldered on. Optical inspection can identify whether placement is complete or components are installed the wrong way round. Reading the barcodes here guarantees a perfect assignment.

Essential manual work ensures quality

SMT placement machines carry out automatic SMT placement on both lines. At WIPOTEC, printed circuit boards are also assembled manually sometimes if very small quantities are involved or for technical reasons. On the one hand, to provide printed circuit boards already populated on both sides with SMTs that are not intended to run through automatic placement machines, and on the other hand in the case of circuit board connectors and connector strips that are to be soldered on. Even error checking is not possible without manual intervention. If the test routines sound the alarm, the cause is investigated with subsequent manual inspections and tests. "This is how we constantly perfect our production technology and our electronic assemblies ourselves," says Stefan Pfeiffer, Head of Electronics Production and Product Manager OEM at WIPOTEC.



Assembly line for SMT components

100% quality control

In WIPOTEC's electronics production, we test every assembly as part of a 100% quality check. Advanced flying probe testing machines; for example, perform exhaustive tests on our more complex assemblies populated with microprocessors. These machines perform simultaneous in-circuit testing of the top and bottom of an assembly. Electrical test methods are also used to test the printed circuit boards that have been populated manually. Other assemblies undergo a further 100% functional test for which in-house test adapters are available. The end result is electronic components whose reliability and service life reserves permit them to be used in even challenging environments and tasks, such as those encountered in the case of WIPOTEC-OCS high-speed checkweighers in the food industry. The harsh environments in the mail and logistics sector, where WIPOTEC-OCS weighing systems are also used, pose huge challenges for the reliability of electronic components.

Spare parts availability – reduced threat

There's one last advantage of in-house electronics production which shouldn't be a secret; some people consider it one of the most important of all and that's the availability of spare parts. The threat of components that are no longer available is reduced and delivery reliability, or adherence to delivery dates, is considerably improved. This ability in particular plays a significant part in customer satisfaction.

WIPOTEC is very aware of this. The short lead times for preconfigured solutions for the serialisation and aggregation of pharmaceutical products are a main feature here. As a result, the customer can meet the legal requirements prescribed in the EU for the serialisation of prescription drugs in just six weeks from order acceptance. Combined with only a slightly longer lead time, the company offers a very wide range of different versions. Not just a finely graded selection with regard to the geometric design of the machines but also a wide choice in terms of performance, speed and required precision as well as many other options.

Impossible? What ultimately makes it possible is the in-house electronics production at WIPOTEC with its significant contribution to overall vertical integration.



/ STEFAN PFEIFFER

is 53 years old and has worked at WIPOTEC for 27 years.

He plays football, although more passively than actively these days. And he rides his custom bike when he's not actually working on it.

/WIPOTEC-OCS

TQS Fast Track

Fully automated serialisation within six weeks. Page 20

X-ray inspection of rice and grains

Quality assurance for natural products. **Page 22**

High-speed weighing technology

Wafers and bars: double scale for lightweights. **Page 36**

NEWSFLASHES

/ 100% SECURITY OF THE PROCESS ROUTE DUE TO FULL ENCLOSURE

The TQS-HC-A is a user-friendly serialisation solution for folding boxes, combined with fully automated weight acquisition for a subsequent high-speed completeness check. Additional expansion modules provide compactly integrated tamper-evident and country-specific vignette functionality. The TQS-HC-A has a full enclosure made of Plexiglas or optionally safety glass. This guarantees the security of the process route; no operator can intervene in the ongoing process while the machine is operating. Optionally, the replacement of consumables for printer, vignette or tamper-evident applicators, including all machine settings, can be carried out from one side only, which makes operation easier, especially when dealing with line integration. Thanks to ConfigureFast, all system components are operated via a common software interface and without program changes.



TQS-HC-A with full enclosure

Features

- Stable folding box transfer and reliable transport for best printing results
- High-tech weigh cell from WIPOTEC for high-precision weighing processes on folding boxes even at high speeds
- Security of the process route due to full enclosure
- Tool-free format change



/ ALL ABOUT CHEESE: CHEESE INNOVATION DAYS AT WEBER MASCHINENBAU

The collaboration between Weber Maschinenbau and WIPOTEC reads like a 30-year success story. It made a small contribution to establishing Weber slicers in the premium segments of the world markets, and to this day weighing technology and scanning systems from WIPOTEC-OCS from Kaiserslautern form the basis for weight-accurate portion slicing. The bond between the two companies was demonstrated last year at the first Cheese Innovation Days at Weber Maschinenbau in Breidenbach. On these three days last November, visitors learned from lectures and machine presentations how cheese – with and without holes – is now automatically cut, packed and quality assured in an efficient and intelligent manner. Exhibited on the WIPOTEC booth: current metal inspection systems, foreign body detection using high-performance X-ray scanners and optical checking systems for barcode inspection, label and sticker identification. ▲





/ 5th SERIALIZATION SYMPOSIUM BERLIN

The 5th Serialization Symposium was held in Berlin on 12 and 13 December 2017. As in the previous year, it was organised jointly by Arvato Systems and WIPOTEC. As a global IT specialist, Arvato Systems supports well-known companies with solutions for digital transformation. Many visitors used the 5th Serialization Symposium as an opportunity to exchange information among top-level international pharmaceutical experts. The agenda focused on the latest developments in the industry and best practices for successfully implementing the challenges. ▲

/ POST-EXPO GENEVA

From 26 to 28 September, WIPOTEC-OCS presented a wide range of integrated DWS solutions and catchweighers for courier, express, parcel and mail services at the POST-EXPO trade show in Geneva. The compact plug and play systems, developed in partnership with and for customers, perfectly take into account the growing diversity of parcels and rising freight volumes of supply markets and e-commerce. Visitors were also able to find out about the active vibration compensation technology AVC. It uses intelligent algorithms to ensure highly accurate weighing results even in environments that are subject to vibration. The experts from WIPOTEC-OCS were on hand to answer questions about the systems exhibited on all three days of the trade fair in Geneva. ▲



To date WIPOTEC-OCS has implemented more than 1,000 Track & Trace projects with pharmaceutical customers all over the world.



/ CFIA TRADE FAIR IN RENNES, FRANCE

The CFIA (Carrefour des Fournisseurs de l'Industrie Agroalimentaire) has been based in Rennes, at the very heart of Brittany, for more than 20 years. Here it is all about ingredients and intermediates, systems and processes as well as food packaging and conditioning. At this trade fair, WIPOTEC-OCS regularly exhibits the latest systems in the field of inspection systems and checkweighers for food. Last year, these were metal detectors and X-ray scanners in wash-down design. The next CFIA will be held this year at the Parc des Expositions in Rennes from 13 to 15 March. More than 1,500 exhibitors and 20,000 visitors are expected to attend. Employees of the French branch of WIPOTEC-OCS in Cergy-Pontoise near Paris will take care of the visitors to the booth.



The lead time of only six weeks is the crucial advantage of TQS Fast Track.

he decision by the American FDA (Food and Drug Administration) to suspend the prosecution and sanctioning of non-compliance with the legal requirements in connection with the supply chain of prescription-only drugs until November 2018, gives pharmaceutical companies one last opportunity to implement serialisation projects with impunity. A simpler and faster solution for complying with current and future legal requirements on time is TQS Fast Track from WIPOTEC-OCS.

Once serialisation and traceability were mandated by law, the approaching deadlines and implementation dates exerted increasing pressure on pharmaceutical and medical device companies to launch their Track & Trace projects promptly in order to remain successful in the market. In light of the situation that could arise for many customers, WIPOTEC-OCS has developed the TQS Fast Track range, which helps pharmaceutical companies to start serialisation as quickly as possible and to comply with US and EU regulations while at the same time minimising the complexity and costs of the whole serialisation project.

TQS (Traceable Quality System) Fast Track is an optimised range of serialisation solutions based on the best practice product line at WIPOTEC-OCS. The Fast Track range includes modular systems for the serialisation, aggregation and tamper-evident packaging of individual folding boxes to the entire pallet. Across the whole production process, open XML interfaces ensure flexibility when connecting to different Level 3 providers, thus enabling the seamless exchange of data between production, warehousing systems and the enterprise system. The most recently added functions include user authentication through Microsoft Active Directory and additional foreign languages.

The key benefits of Fast Track solutions for pharmaceutical companies include:

A lead time of only six weeks:

In view of the upcoming DSCSA deadline in the USA and the European Falsified Medicinal Products Directive, the lead time of six weeks (from order acceptance to the start of factory acceptance tests) is the crucial advantage of TQS Fast Track. Thus, the Fast Track solution helps serialisation stragglers to accelerate Track & Trace projects.

• Simplification of complex changeover procedures due to extensive best practice experience:

The lean plug and play solutions can be easily integrated in existing packaging lines. The machines are intuitive and easy to operate as with ConfigureFast they have a common, standard user interface for operating the subcomponents of transport unit, labeller, printer and cameras. The systems have all the properties necessary to meet the legal requirements in the USA and the EU.

• Price advantages due to a comprehensive approach to standardisation:

Fast Track is cheaper than any customised solution. A team of experts supports customers and helps them to find the right system for the specific requirements of their Track & Trace project. ▲



X-RAY INSPECTION OF RICE AND GRAINS

Rice and other grains; including lentils, bulgur, couscous and quinoa, it is impossible to exclude impurities due to foreign objects. Powerful X-ray scanners provide additional security.

t is never possible to reliably exclude impurities in the raw goods when dealing with natural products. This applies not only to rice but also to lentils, bulgur, couscous and quinoa. Danish company DANRICE A/S processes all these products in Ørbæk and for all of them relies on X-ray scanners to identify and separate out foreign bodies in good time during the incoming goods inspection. The systems used for this, supplied by WIPOTEC-OCS from Kaiserslautern, have such high detection sensitivity and good detection rate that they can detect even the smallest contaminants.

40 tons a day

An X-ray scanner's workload at DANRICE is enormous. Up to three tons of raw goods, that's more than 4.5 cubic metres of product, pass through the scanner on the motorised conveyor belt every hour. After the X-ray inspection, rice passes through the washing, boiling and flash freezing processes before being packed ready for transport and stored. After heating for just a few seconds in boiling water, the instant product processed in this way is ready to eat. Customers are mainly ready meal producers and large-scale catering kitchens.

DANRICE A/S supplies approx. 80% of all upstream products for producers of ready meals in the EU. Regardless of the downstream quality assurance of its customers, the company also checks finished products before delivery using X-ray scanners from WIPOTEC-OCS, in addition to using metal detectors as required by the regulations. And there are good reasons for this. "We buy our products from all over the world, to a large For us it's an additional level of security that we build in by examining all products for impurities with WIPOTEC-OCS X-ray scanners.

> Kim Kirkeby CEO of DANRICE A/S

extent from Asia. It is not possible to rule out impurities and the same applies to rice from Europe. We therefore have to monitor all products and check them for foreign bodies irrespective of where they come from," says Kim Kirkeby, CEO of DANRICE. "And for us it's an additional level of security that we build in by examining all products for impurities with WIPOTEC-OCS X-ray scanners to ensure that the goods we deliver are free from foreign bodies." After all, these are foods to which the highest quality assurance standards in the world apply. Anyone who attracts attention here is bound to make the headlines.



/ OUR CUSTOMER DANRICE

DANRICE was set up in Ørbæk in 1993 in connection with a patented continuous cooking and freezing process which covers many varieties of rice and grains.

DANRICE became a leading international B2B supplier of pre-cooked rice, grains and pasta with a particular focus on the ready-meals market. In 2004, DANRICE became part of the Ebro Foods Group and created a joint venture with Keck Spezialitäten in 2013.

Under the EBROFROST GmbH holding, DANRICE is now Europe's largest independent supplier of rice, pasta and grains for the food industry.

Location: Ørbæk, Denmark

Products: Rice, pasta, grains

MORE INFORMATION: www.danrice.dk

Henrik Rosenlund (left), factory manager and Kim Kirkeby, CEO of DANRICE A/S.

It all begins with tests

X-ray scanners must undergo extensive functional tests. These tests demonstrate that the X-ray scanners comply with the specifications, the customer's requirements and the detection rates required. How do you ensure, however, that X-ray scanners are properly adjusted and furthermore, how do you guarantee that they also work correctly? Both are achieved with test specimens, in this case with stainless steel balls and glass beads with diameters of 1.0 and 2.5 millimetres respectively. The former can barely be seen in the product due to their size and the same applies to the only slightly larger glass test specimens. Non-metallic foreign bodies, such as stone and glass, pass unhindered through every metal detector, even the magnetic detectors upstream of the X-ray scanners at DANRICE, which can detect magnetisable metals. Even mechanical precleaning using vibrating screens does not present any serious obstacle to them. A scanner that is working properly detects all test specimens and reliably separates them out.

The sensitivity of the WIPOTEC-OCS X-ray scanner is so high that it can detect even the smallest foreign bodies in the product. The systems are trained to detect foreign bodies, such as stone, glass, plastic or metal particles, which can pass through mechanical and other precleaning processes and must not get into the production process under any circumstances.

How separating out is performed

Differences in density of the foreign bodies in rice, lentils, bulgur, couscous and quinoa show up on the X-ray as different greyscale values. High-performance image processing software scans the X-ray images to reliably detect impurities such as stone, glass, plastic and metal particles. The scanning speed of the high-speed X-ray scanners from WIPOTEC-OCS is so high that the actual maximum speed as the product passes through Product flow with system open. Due to the various planes inside the X-ray scanner, radiation cannot escape via the transport openings and the unit is safe during operation.



is limited not by the scanner but by the downstream production processes which require a certain time.

What is much more interesting is the question as to what quantity of good products the detection process separates out involuntarily, so to speak, along with the foreign bodies and is thus lost completely to the production process. To work as effectively as possible and conserve resources, the system divides the product flow on the conveyor belt into several virtual, parallel paths that are examined for foreign bodies simultaneously. If a foreign body is detected, the product flow is interrupted only briefly on the appropriate path by the opening of a flap and the foreign body together with its surrounding product is diverted downwards. As the remainder of the product flow on all the other paths can pass unhindered, this design saves over 80% of the good product, which would otherwise be separated out with the foreign bodies.

Perfection is never good enough

Even this saving, however, was not yet high enough for those in charge at DANRICE: a modification of the discharge system agreed with the manufacturer further increased the savings potential. An X-ray scanner equipped with just such a system has already been supplied to DANRICE. In future, a further system will be used at Ebrofrost in the USA. The USA is one of the biggest rice exporters in the world. Henrik Rosenlund, factory manager at DANRICE, organised the two-day training of the technical operation team from the United States in Ørbæk, "Our American colleagues were particularly impressed by the reliability of foreign body detection and the sophisticated discharge system. With the current technology, they can limit their loss of good product to a very low value in the parts per thousand range – and that goes for rice from every region."



Ease of use: control of the system via a graphical user interface. The X-ray images are also displayed here.

QUALITY ASSURANCE OF FRUIT YOGHURTS

At Bergmilch Südtirol, X-ray scanners not only detect foreign bodies but also identify under- and overfilling. The affected products are safely ejected together with the tray. 55

ergmilch Südtirol (better known under the name Mila) has consistently dedicated itself to consumers and their requirements for more than 30 years. The gratifying consequence of this philosophy is the economic success of the Bolzano-based company, which employs almost 400 staff and has annual sales of approximately 200 million euros. The milk products are based on the raw milk obtained from 35,000 properly raised cows, which live in the barns and on the pastures of 2,700 farming families all over South Tyrol. Mila relies on a rich and varied product range and the most comprehensive quality assurance for all its products.

Quality assurance enjoys the highest priority

Dipl.-Ing. Rudi Mair at Tinkhof is Divisional Manager Production and Technology at Mila. His credo: both customers and end users have to be convinced that a company always does its utmost to ensure the safety of its products. At Bergmilch Südtirol, this is achieved both by being completely transparent when dealing with customers and by carefully selecting the technical equipment. Against this background, the X-ray scanners from WIPOTEC-OCS are firmly established in the production lines of the South Tyrolean dairy company. They are integrated in the company's production process at those points where the products leave the filling and packaging machines. For example, fruit yoghurts in trays with 20 single-chamber pots arrive at one of the WIPOTEC-OCS scanners for X-raying. The yoghurts are reliably examined for the correct filling level and foreign bodies at a belt speed of 35 m/min. If one or more pots in a tray are over- or underfilled, the entire tray is safely ejected.

The same also applies to foreign body detection. If the X-ray scanner detects contamination due to pipfruit, glass, aluminium, ceramics or wire during the

We at Mila are glad that the decision we made at the time was in favour of WIPOTEC-OCS. The quality of this high-tech specialist has convinced every one of our decision-makers in the long term.

Rudi Mair Divisional Manager Production and Technology at Mila

> inspection, which takes only a fraction of a second, then the whole tray is also removed from the product flow. In this case, the affected pot inside the tray is marked on the X-ray scanner's display in real time.

"WIPOTEC-OCS provides first-class service"

The SC 5000 X-ray scanners with TDI camera detectors at Bergmilch Südtirol stand for implementation of the highest demands on state-of-the-art quality assurance. The TDI (Time Delay Integration) technology uses surface sensors with a higher basic resolution than the usual diode lines, which have a limited service life. In this case, thanks to its high-resolution and sharp X-ray images, the TDI >>





Christian Molling, Production Manager, at the X-ray scanner's display

/ OUR CUSTOMER MILA

The Bergmilch Südtirol dairy cooperative, also known as Mila, is the largest dairy cooperative in the state with 2,600 members, equating to roughly half the dairy farmers in South Tyrol.

The Mila farmers have very small farms with an average of only 12 cows in the barn. The farmers are both suppliers and owners of the cooperative. Each year they supply around 200 million kilos of raw milk which is processed within 24 hours. Mila is also one of the world's most important producers of mascarpone cheese.

Production sites: Bolzano, Brunico (South Tyrol)

Products: Milk, yoghurt, cheese, butter and cream

MORE INFORMATION: www.mila.it

camera detector represents the ideal basis for the image processing software developed in-house at WIPOTEC-OCS. The scanner is equipped with a highquality metal-ceramic tube and has an integrated water cooling system. Where necessary, the extensive software takes other inspection criteria, such as the completeness check, into account.

Production Manager Christian Molling is very satisfied with the use of the X-ray scanners from WIPOTEC-OCS. He and Armin Frei, an employee in the quality management section, praise not only the reliability but also the simple operation of the devices. Rewrite this sentence as follows: According to them, integrating the machines into the existing production lines was done easily and above all quickly, and the machines have impressed them with their excellent quality. Training, commissioning and maintenance have all been exemplary. Christian Molling says, "WIPOTEC-OCS put together a first-class service package for us."

OPEN-SCS WORKING GROUP

Visit to the founding member: OPEN-SCS Working Group meets in Kaiserslautern

ast year, the OPEN-SCS (Open Serialisation Communication Standard) Working Group met at the headquarters of WIPOTEC-OCS in Kaiserslautern from 21 to 23 June. The event was organised by WIPOTEC-OCS and focused on key OPEN-SCS initiatives. WIPOTEC-OCS is a founding member of the OPEN-SCS Working Group and part of its steering committee.

With its growing number of member companies, the OPEN-SCS group directly addresses the wave of regulations currently hitting product serialisation. The OPEN-SCS Working Group (OPEN-SCS) maintains a partnership with the OPC Foundation to develop an interface standard as part of the Packaging Serialisation Global Name Registry. The open interface standard and the work products concentrate on standardising data exchange in the serialisation and aggregation of pharmaceutical product packaging. These include the interfaces at production equipment level (lines and machines) and packaging serialisation activities in the supply chain (distribution centres and warehouses).

More than 40 experts presented and discussed the strategic and technical targets for the upcoming introduction of v1.0 OPEN-SCS in different working groups. Three working groups for the areas of technical documentation, technical implementation and the steering committee itself covered the key issues. The group also made great progress on the Voting Draft Release issue and additionally defined the go-to-market strategy. The team, including four guest participants from global pharmaceutical companies as potential new members, set clear deadlines and decision lists regarding the official release date in September.

"The philosophy of the open standard interfaces and interoperability are key values for all members of the working group such as WIPOTEC-OCS. It was therefore a pleasure for us to host this event and to finally see the positive results of our activities," added Volker Ditscher, Steering Committee Member OPEN-SCS and Business Manager Track & Trace at WIPOTEC-OCS. ▲



/ OPEN-SCS WORKING GROUP

OPEN-SCS is an initiative by leading suppliers of serialisation solutions and pharmaceutical companies with the aim of developing standards which permit interoperability of the continuous exchange of information in the serialisation ecosystem – across equipment, production systems at plant and company level and the supply chain.

By doing so, OPEN-SCS aims to tackle the upcoming wave of serialisation regulations in the healthcare sector in the decade ahead. Solution providers represented in the group include Advanco, Antares Vision, Arvato, WIPOTEC-OCS, Omron, Optel Vision, SAP, Systech, TraceLink, TradeTicity and Werum IT Solutions. The global pharmaceutical companies include such as Abbott, Johnson & Johnson, Pfizer and Teva.

MORE INFORMATION: www.opcfoundation.org/open-scs-working-group

IT'S ALL HAPPENING HERE!

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Solutions for mail, CEP services and the intralogistics sector

/30



he crucial advantage of a WIPOTEC weigh cell with electro-magnetic force restoration (EMFR) is its extremely short settling time. Compared to the weighing principle with strain gauges, it provides very precise weights significantly faster, giving it huge advantages particularly in the field of dynamic applications. It also has no wear parts and so operates absolutely maintenance- and wear-free. The EMFR-based solutions from WIPOTEC-OCS offer decisive benefits especially in the mail, CEP and intralogistics sectors. Here in particular, the weighing technology installed must be so robust, reliable and fast that on the one hand, it can keep up with the high system speeds, and on the other hand, it has sufficient stability to enable it to cope in the shipping and logistics environment. Breakdowns outside scheduled plant shutdowns usually involve significant secondary problems - this is where reliability is a top priority.

The WIPOTEC-OCS product range in the mail & logistics environment now consists of high-speed catchweighers, extremely compact DWS systems (dimensioning, weighing, scanning) and letter scales. All machine solutions are developed and manufactured at the company's headquarters in Kaiserslautern. The product range offers genuine solutions for almost any customer application. All catchweighers operate exclusively with precision weigh cells manufactured in-house. Outside Europe, the company has subsidiaries and branch offices in Asia and the USA and as a result can always supply the global mail, CEP and intralogistics service providers with appropriate specialists for local support. References include well-known players, such as DHL, FedEx, USPS and UPS; WIPOTEC-OCS can therefore demonstrate installations of impressive size, including in international freight centres.

AVC: Better by a calibration value

Skill and expertise in all key sectors have made the company into a sought-after producer of weigh cells and weighing kits. This also includes the AVC (active vibration compensation) technology developed for the weigh cells, which enables the most accurate measuring results in difficult environments without compromising on speed. It is precisely in the mail and logistics sector that these difficult environments are often found. Here, systems are frequently installed on platforms that are susceptible to vibrations during operation and the result may be interference when weighing. Building vibrations have a >>



HC-FL double scale: If a consignment is larger than each of the individual scales, the two scales interconnect automatically.



Double scales deliver 60% higher throughput than single-interval scales at the same speed.

similar effect. Only AVC can promise a remedy here. This technology filters environment-induced interference out of the measuring results without any loss of speed and enables the weighing technology to be used even in sorting systems or freight centres where scales have to be set up on vibrating floors.

Aim: Revenue recovery

The DWS Compact solutions from WIPOTEC-OCS for courier, express and parcel services use volume measurement, auto-identification and weighing functionality to detect every package parameter necessary for billing all the transport services in full (revenue recovery). 360° data acquisition ensures safe planning and the calculation of capacity utilisation or capacity planning. In permitted operation, the DWS Compact achieves transport speeds of up to 2.9 metres per second - a peak value. All individual DWS components are easily accessible and from a maintenance point of view are not obstructed by add-on parts; all system components are grouped separately to facilitate a structured maintenance concept. The intelligent system structure means that it is possible to change a belt without dismantling system components, which results in higher availability. In this case, modularity of the systems makes it possible to integrate seamlessly the auto-identification systems and volume measurement technology of leading manufacturers and provides the maximum flexibility needed to satisfy customer requests.

The DWS Irreg from WIPOTEC-OCS also provides a solution for parcels that previously required special treatment. Irregs, because of their size, shape or weight, cannot be sorted with the normal parcels. Both irregs and small parcels are responsible for the impressive increase in freight volume experienced in the e-commerce sector. Here WIPOTEC-OCS offers both semi- and fully-automated system versions in the mail and logistics environment.

The fastest letter scales in the world and chaotic product sequences

From heavyweights to lightweights: premier league players all the way, even when handling lightweight mail. In Kaiserslautern WIPOTEC-OCS builds the world's fastest MID-approved letter scales. A patented transport system in which the letters are not jammed but stand freely on their longitudinal side enables correct weight determination in the shortest weighing times.

Chaotic product sequences with large and varying parcel lengths, which can pose problems for standard catchweighers, are another issue. The consequences are larger product gaps and a reduction in throughput. The intelligent solution provided by the HC-FL catchweigher from WIPOTEC-OCS deals neatly with this problem. This double scale is a combination of two single-interval scales in line. Both scales can operate independently of each other or in combination at the same time. This means that as soon as a parcel exceeds a certain length, both single-interval scales work together as a virtual third set of scales. The machine is ideal for applications where high belt

Final acceptance and testing of a heavy load checkweigher



speeds and top throughputs are required for products individually weighing up to 60 kg - which particularly applies to CEP environments. The construction principle delivers 60% higher throughput at the same speed compared to single-interval scales. A further advantage: using two single-interval scales enables the shortest possible product gaps.

WIPOTEC-OCS: Solution provider and partner at the same time

WIPOTEC, market leader in the field of EMFR weighing technology, has a wide range of basic development within the Research & Development department. This department also carries out consulting projects, for example on natural frequency analysis, and makes recommendations derived from them. On the sales side too, many subsequent business deals have their origins in such supporting projects, since the WIPOTEC-OCS expertise in weighing and inspection technology for the CEP and intralogistics sector is in great demand worldwide. Due to the high proportion of in-house production, it is possible to maintain a complete supply of spare parts over a very long period, equating to a long lifetime for the systems supplied. Even customer systems that have been running for many years have not yet been and will not be discontinued as long as they are in use and the customer wants to keep them that way. Finally, because of this high share in the overall value chain due to producing the weighing and inspection systems in-house, the company is able to implement even customised solutions at short notice.



The world's fastest letter scales

QUO VADIS, M&L?

Dr. Kurt Arnold, Head of Mail & Logistics on future solutions for the mail and CEP industry.

Dr. Arnold, over the past 18 years you've built up the Mail & Logistics (M&L) division at WIPOTEC and developed it into a globally successful solution provider for the mail and CEP industry. What is the key to this success?

The following key terms immediately spring to mind: innovative strength, partnerships, reliability and team spirit. WIPOTEC is known in the market as an extremely innovative company. Innovation not as a buzzword but as a strict alignment towards creating new solutions, which are aimed at the growing needs of our customers. This ability also forms the basis for a balanced and modular product range, which we have developed for our main segments mail, CEP and intralogistics since the M&L business unit came into existence. Our objective is to establish

/ CEP INDUSTRY

CEP services (courier, express and parcel) mainly transport consignments with a relatively low weight (up to approx. 30 kg) and volume, such as letters, documents, parcels and small individually packaged goods. These restrictions on dimensions and weight enable a higher level of standardisation during processing, making it easy to automate handling and sorting of the goods.

Companies in particular take advantage of these services because, thanks to this level of standardisation, they can produce in a more modern and efficient way. The rise in e-commerce (Internet trade) is also contributing to the strong growth in CEP services.

Systems from WIPOTEC-OCS make their worldwide contribution in the mail and CEP sector by detecting package parameters necessary for billing all the transport services in full (revenue recovery). long-term and value-adding partnerships with our mostly globally positioned customers. We also consider proximity and collaborative working relationships with our partner companies as equally important. As a founder-led company, we stand for enduring relationships and see ourselves as a consultant and solution provider for our customers. Dependability, loyalty and reliability are values we practice and they are reflected very positively by our customers in the large number of projects implemented. Thanks to our many years of expertise, we know the markets and can anticipate future requirements, which we incorporate in developments that are often closely meshed with the customer. Behind every successful customer project is a team whose interaction and passion for the best solution makes the crucial difference. In development, project planning, production, service and sales - flexible and agile processes enable us to create high-performance solutions that can stand up to any comparison in terms of throughput and accuracy.

Which markets do you consider to be strategically important and how will further growth be implemented in them?

I see two sources here that have a significant influence on our strategy in respect of market development.

Firstly, the majority of our customers are globally positioned. For us, this means that our worldwide sales and service network matches the customer footprint due to our own subsidiaries and certified partner companies. DHL, FedEx, UPS, USPS and other major customers already rely on our catchweighers and letter scales as well as our DWS systems. In line with customers' wishes, I think it is important to tighten up our sales and service network so that we are even better positioned with regard to expansions, retrofits and general service packages. Incidentally, this also applies to our global business with integrators in the CEP and intralogistics sector. Secondly, parcel shipment is growing at a double-digit rate per year due to e-commerce. For CEP and intralogistics companies, this requires corresponding expansion of their capacities.

For us, this means strong country-based expansion in Europe, North America and Asia. We already have our own subsidiaries in the USA and China with central support from headquarters in Kaiserslautern. In addition, we will open up further growth markets and expand our customer portfolio in all segments.

Dependability, loyalty and reliability are values we practice and they are also reflected very positively by our customers in the large number of projects implemented.

How do you see your further technological development, in relation of course to the industry's requirements?

If you look at our markets today, we are noticing profound changes that we also have to take into account technologically. Take, for example, the increase in batch sizes and freight volumes due to e-commerce. As a result, the demands placed on our weighing machines with regard to throughput, i.e. in terms of higher conveying speeds with smaller product gaps at the same time, are also increasing. For example, higher throughputs are generally necessary in weighing and production inspection even if our DWS (Dimensioning Weighing Scanning) solutions already enable throughputs of over 10,000 items per hour with small product gaps and speeds of up to 2.9 m per second. Moreover, with the clear customer benefit of 360° data acquisition and associated revenue recovery. The subject of data brings me to the next point. We are working on products that significantly improve the smartness of our solutions. The aim here is to identify additional machine and product data and to incorporate all the measured parameters in a big data model, which then makes data available to the higher-level systems of our customers either directly or via an analysis tool. The advantage of this is a more holistic representation of the product flows with detailed information and clear recommended actions.

On the machine side, in catchweighers we are currently introducing AVC (Active Vibration Compensation) which is used specifically in difficult, high-vibration environments. Vibrationrelated disruptive factors are eliminated from the measured result via intelligent algorithms so that here too the weighing accuracy desired by the customer is achieved.

Dr. Arnold, you are retiring soon. What are your plans and what "projects" are you taking on?

First of all, let me say that I am placing my business dealings and duties in experienced hands and I see the M&L division at WIPOTEC as very well positioned and set for the future. However, if there's ever any need for advice: just give me a call.

On a personal level, I'm going to dedicate myself to topics that have been somewhat neglected in the past. First and foremost, my family, of course, which is about to grow again; I'm going to be a grandfather! In addition to my new domestic duties, I'm sure there will be enough time for other things. One that's already firmly planned is crossing the Alps on foot. Beyond this, I'll be involved in the social sector because there's more than enough to do there. ▲



/ DR. KURT ARNOLD Head of Mail & Logistics

is 65 years old and has worked at WIPOTEC for 18 years.

He is about to retire and is looking forward to spending time with his family.

HIGH-SPEED WEIGHING TECHNOLOGY

From mini bars to giant wafers, from 3 to 40 centimetres in length: a double scale weighs lightweights at top speed with the shortest possible product gaps.

In Miltach approximately ten kilometres of wafers are produced every day.





Ultrasonically cut wafer bases, still moving at walking pace here. Later, in single lane operation, at more than ten times the speed.

to Beier Waffelfabrik GmbH in Miltach is one of Europe's largest and most prestigious manufacturers of the finest wafers. With a tradition reaching back more than 80 years, the company is a leading producer of wafers, and more recently cereal bar specialities, for trade and industry. In the last few years specifically, the company has achieved impressive development with apparently boundless dynamism. As in the previous year, another topping out ceremony took place in 2017, adding a further 1,600 m² for a raw materials warehouse and additional premises for product development.

Expansion is also proceeding with regard to inspection technology for the company's own products. Six certified scales from WIPOTEC-OCS are now integrated in various production lines. The most recent addition to the quality assurance section is an HC-A-FL double scale from the same manufacturer. After a series of investigations, it turned out to be the only one that could weigh reliably and safely in calibrated mode in this speed range and weight class.

Goodbye to random samples. Every single product is weighed.

In cereal bar production, speed comes next to quality in terms of importance. This should come as no surprise when there are 50 million bars a year at stake. Fruit bars, which have now become the second mainstay after wafers, have only been produced in Miltach since 2008.

The cut wafer bases leave the cutting unit at a leisurely pace, with twelve wafers to a row across the conveyor belt. In very short order the production pace picks up speed. Eventually, the production line is moving at a rate of 500 readypackaged products per minute. At this point, the products are moving down the high-speed track one after another and they must all be weighed. At these speeds, air resistance and therefore product handling during weighing play a significant role, especially when the products to be weighed are sometimes as light as 12.5 grams. They spend only fractions of a second above the weigh cell in each case and during this time, after the shortest possible settling phase, the weigh cell must have come to a complete rest so that it can weigh reliably and accurately. If weighing such lightweight products at high speeds in the wafer factory were to be unsuccessful, it would be necessary to take random samples, and there would still be no certainty that the products would actually be within the company's own specifications or those of the prepackage directive. To be on the safe side, it would be necessary to increase the average product weight, which would mean cutting the bars longer or increasing the carpet height (the yet uncut continuous mass of filling). Both measures would reduce the efficiency of production. >>

Fruit bars: Over the double scale one after another at maximum speed. Its technology enables minimum product gaps.

Maintenance-free weigh cells without wear parts

Weigh cells based on electro-magnetic force restoration (EMFR) are used in all checkweighers from WIPOTEC-OCS. The crucial advantage of an EMFR weigh cell is its extremely short settling time. Compared to the weighing principle with strain gauges, this type of weigh cell provides very precise weights significantly faster, giving it huge advantages particularly in the field of dynamic weighing applications. The weigh cell also has no wear parts and so operates absolutely maintenance- and wear-free.

With its EMFR weigh cells, the HC-A-FL, a double scale from WIPOTEC-OCS, is able to weigh very light products with calibrated certainty even at high speeds and can safely eject underweight products with the aid of blow nozzles. This takes place at the end of each of six production lines, which can be up to 40 metres long and with a further 15 metres of packaging line added. The double scale, however, owes its actual advantage to its construction principle. By combining two scales with different weighing belt lengths one behind the other in one machine, the double scale is able to weigh products at maximum speed while at the same time achieving the shortest possible product gap. The range of product lengths at the Otto Beier wafer factory is extensive, starting with three centimetre long mini bars up to 40 centimetre long products. Only a double scale with two different weighing belt lengths in the design described can offer this flexibility regarding the product range.

Co-managing director Markus Beier, responsible for purchasing and sales, explains that the company's own brands now make up the bulk of sales. The company has its own product development and its own foil design centre. Declaration testing is also carried out in-house. The factory produces approximately 10 km of wafers every day and processes between 1,600 and 1,700 tons of fruit a year. It supplies to over 40 countries worldwide.

What he particularly appreciates about WIPOTEC-OCS is the calibration support for all the machines installed in Miltach, which is provided within the scope of the manufacturer's service. One of the company's service technicians accompanies the specialist from the Weights and Measures Office, makes adjustments and clarifies any questions as required. The decision to acquire the double scale was made at the end of a selection process. Markus Beier says, "No other scale was capable of weighing our products in this speed range with the required accuracy. Others were too slow and we would have had to take random samples."

Future prospects

What plans are there for the future? Cereal bars in particular are on trend – now they are available sugar-free and caloriereduced, organic, gluten-free and kosher. The company currently produces 100 different bars. In addition, it needs to be flexible: more than 800 samples are produced annually in Miltach. They give rise to more than 50 new products a year. Firstly, this means that the Otto Beier wafer factory is planning a new production line with double the capacity of the existing line and with a throughput rate of 1,000 products a minute. Secondly, due to the bundling of production processes, there are also plans to weigh the products once they are

Otto Beier Waffelfabrik GmbH in Miltach (Bavaria)

No other scale was capable of weighing our products at this speed and with the required accuracy.

Markus Beier Co-Managing Director, Otto Beier Waffelfabrik

packed in cardboard boxes ready for shipping. This means that these units would also be checked for completeness using the weight of the cardboard boxes before being delivered on pallets. Both projects offer a range of new, challenging applications for high-speed weighing technology.

The production of cereal bars is less energy-intensive than that of wafers but nevertheless the company is placing greater focus on alternative energies; the waste heat of the company's own combined heat and power plant is used to heat all the buildings. An adsorption chiller converts excess heat into cold, which is then used to air condition the production halls. Moreover, photovoltaic systems have been installed to generate additional energy.

Therefore, at the Otto Beier wafer factory in Miltach, which has been family-owned for generations, the sun could actually shine every day because it's always high season – seasonal fluctuations in production simply don't exist. ▲

/ OUR CUSTOMER, THE OTTO BEIER WAFFELFABRIK GMBH

Founded in 1933 by gingerbread baker and confectioner Otto Beier with the claim of producing the finest wafers and gingerbread, today's Otto Beier Waffelfabrik GmbH in Miltach is one of Europe's largest wafer producers.

Various industries are served with wafer products, wafer blanks and flours are further processed industrially into wafer products. In addition, edible portion cups and edible wafer dishes find their way to customers and consumers via catering wholesalers. Bars have also been produced in Miltach since 2008.

Employees: approx. 140

Location: Miltach, Bavaria

Products: Cream-filled wafers, marshmallow wafers, bars

MORE INFORMATION: www.beier-waffeln.de

MAXIMUM SECURITY

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WIPOTEC Remote Services in accordance with the highest possible security standards

SCANNING

CE

ROPE

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The customer always has control over the scope and time of the remote access.

s is already the case with consumer goods, machines in pharmaceutical production environments are also subject to the trend towards digitisation and now allow connections to corporate networks and the Internet. This development of-

fers opportunities but of course also carries risks. Thus, the Internet is far from being virus-free and IT managers are therefore still very cautious when it comes to connecting production machines to relatively open networks. For manufacturing pharmaceutical companies, WIPOTEC-OCS provides a secure remote service using the latest IT security standards to perform real-time services remotely.

To do this, WIPOTEC-OCS equips all TQS machines with an innovative and firewall-based VPN remote service tool. VPN stands for virtual private network and provides the option of establishing an encrypted connection via the Internet and at the same time guaranteeing data security.

Use of the WIPOTEC-OCS remote service tool increases the efficiency of maintenance and also has the advantage of enabling secure remote connection of the TQS machines. The WIPOTEC-OCS remote service tool integrates seamlessly in existing business IT on the system side.

The WIPOTEC-OCS remote service tool is designed to protect the customer and ensure overall data integrity. This service model is based on the principle that the software and the IT infrastructure required for it is operated on WIPOTEC premises and customers use them as a service. Using them requires an Internet connection.

Other benefits for the customer are:

- Fewer downtimes of the production line due to faster fault diagnosis and rectification of faults
- Real-time support during commissioning, function tests and system diagnoses
- Lower costs (no transfer costs or waiting times)
- Secure access via firewall

WIPOTEC-OCS supports its customers when using the remote service tool by means of a secure smartcard login procedure. The connection is made via a web portal. To switch on the remote service, only the customer can enable access to the TQS machine via a hardware switch in the control cabinet. In this way, he always has control over the scope and time of the remote access.

A sophisticated security concept ensures that WIPOTEC-OCS can offer its customers remote services in accordance with the highest security standards: for WIPOTEC-OCS, security and data integrity are key services and this is especially true for the serialisation environment in the pharmaceutical industry.

WIPOTEC WEIGHING TECHNOLOGY

Multi-lane applications

Weighing in the machine cycle. Page 44

Bella Italia

What the Italians really like: FIAT 500, Ferrari, WIPOTEC. Page 48

/ WIPOTEC WEIGHING TECHNOLOGY NEWSFLASHES

/ NEW MULTI-LANE WEIGHING SOLUTIONS FOR STICK PACKS AND VIALS

The new EMFR weigh cells from WIPOTEC Weighing Technology used in multi-lane weighing solutions stand for high cycle rates and guarantee maximum output. They are particularly suitable for small packaging formats, e.g. stick packs (longitudinally welded small tubular bags) or pharmaceutical products such as vials.

The slim load cell units, for which WIPOTEC has developed a number of especially narrow and compact sensors, can be loaded with push-over technology, a pick and place system or walking beam. The smallest possible track distances and greatest possible accuracy can be achieved with the new weigh cells. ▲

/ NEW COMPACT SENSOR FOR MULTI-LANE APPLICATIONS

Their measuring range goes up to 70 grams; with their compact design, the new WIPOTEC weigh cell SL-E is particularly suitable for installation in multi-lane applications from 29 mm track centre-to-centre distance. This installation situation is found, for example, in production machines for coffee and tea capsules. The SL-E can be raised in time with the machine cycle to ensure that the capsules are discharged as necessary from the transport plate for weighing. System-induced active self-damping enables the shortest possible measuring times while maintaining high resolution. All the necessary functional elements are integrated in a compact housing. The weigh cell is connected using customary standard cables. ▲

/ VIALS WELCOME

Ideally suited to vials: the SX-M-FS, a particularly narrow weigh cell, was presented at interpack in Düsseldorf. In multi-lane applications, it allows a track centre-to-centre distance of only 25 millimetres. This weigh cell can also be equipped with the exclusive AVC technology, which effectively helps to compensate environment-related vibrations. ▲ OEM weighing technology

MULTI-LANE APPLICATIONS

18 Ianes in one direction? Inconceivable in road traffic, possible with the Multitrack Controller (MTC) from WIPOTEC. Today, multi-lane weighing systems can be assembled by the customer.

odular multi-lane systems from WIPOTEC Weighing Technology are the prime example of how important it is to know exactly what the customers' ideas and expectations are. The EMFR weigh cells specially developed for multi-lane applications, together with their scalable integration modules, precisely meet the requirements that machine manufacturers place on high-performance weighing technology. However, it is not just the weighing technology and its intelligent assistance systems, which are convincing more and more machine manufacturers worldwide to use weigh cells from WIPOTEC. Even in the preliminary stages, during design and construction, the specialists from Kaiserslautern assist customers - on site as required - to select and use OEM weighing technology. With enormous success. WIPOTEC Weighing Technology is now the global market leader in the integration of EMFR weigh cells and weighing kits.

Weighing in time with the machine

What at first glance seems to be more leisurely, almost dreamy, has plenty of tricks up its sleeve on closer inspection. Dynamic weighing in industrial environments is one of the biggest technical weighing challenges and the differences between this and precision weighing under laboratory conditions could not be greater. WIPOTEC Weighing Technology relied on EMFRbased weighing technology right from the start, and almost 30 years ago helped weigh cells equipped with this superior technology to become accepted in a range of industrial tasks. The basic principle is comparable to a simple balance scale. If one side of the beam is loaded with a weight, the coil attached to the other side of the balance beam attempts to move out of the magnetic field. However, this reaction to the weight is prevented by means of a feedback current applied to the coil by the weigh cell's electrical control circuit. The net result is that the balance beam practically remains in its neutral position. The resulting deflection is only a few nanometres, in complete contrast to path-dependent measurement methods, e.g. using strain gauges.

Added to this was the development of a monolithic block of aluminium as the base of every WIPOTEC weigh cell. Only this construction principle combined with EMFR-based weighing technology allows and enables an extremely short settling time and thus short measuring times. Compared to the weighing principle with strain gauges, EMFR weigh cells provide very There is very clearly a trend towards lightweight products which have to be weighed precisely at the highest cycle speeds.

> Michael Kirsch Global Sales Director

precise weights significantly faster, giving them huge advantages particularly in the field of dynamic applications. EMFR weigh cells also have no wear parts and so operate absolutely maintenance- and wear-free.

AVC: The most precise measured results even in non-vibration-free environments

In the past, it was necessary in many cases to separate weighing technology from the production machine (often filling and packaging machines in this case) structurally and in terms of mass - the weighing system required its own balance foot, detached and decoupled from the surrounding machine technology. The influences exerted by the producing machine due to vibrations and shocks were too great. The large number of filling and handling systems moving in time with the machine, which generate vibrations due to their moving masses, influences the weighing measurements during the production of injections and vials. Added to and aggravating the vibrations, is the fact that the individual rest phases between the measurements are very short or the cycle speeds are very high. The situation changed radically when WIPOTEC introduced AVC, the Active Vibration Compensation technology developed exclusively for its own EMFR weigh cells. This allows the most precise measured results, without compromising on speed, throughput and accuracy, even in non-vibration-free environments. >>

Right: The monoblock, the heart of all WIPOTEC weigh cells

Below: Quality control under cleanroom conditions

The innovative compensation system – still the unique feature of WIPOTEC Weighing Technology – enables machine manufacturers to dispense with a separate balance foot, thus simplifying the design and considerably reducing costs. The manufacturer only has to ensure that the AVC module is mounted structurally close and on the same machine plate as the weigh cells whose machine-related vibrations are to be compensated. With today's high cycle speeds and product throughputs, AVC is essential and, if a separate balance foot is to be omitted, it is crucial for all machine manufacturers. In questions such as these and all others, the customer is not alone when making his decisions and selecting technical options: WIPOTEC has teams available globally to provide manufacturers with local support and advice when it's a question of selecting, using and integrating OEM weighing technology in production machines.

Multi-track and multi-lane: The best of both worlds

Customised or modularised – WIPOTEC Weighing Technology now offers machine manufacturers the best solution in each case, distilled from both approaches. Machine manufacturers have always been able to order their Multitrack Controller (MTC), that is a tailored balance block with several sensors in a special housing, from WIPOTEC: the customer specified the number of tracks, the track centre-to-centre distance and the weighing range, and received his customised weighing system, optionally with or without AVC. In this way, up to 18-track MTC weigh cells were created for all customers who relied on the superior EMFR technology. Now there is an alternative to MTC: more and more machine manufacturers are integrating a new OEM weighing system from WIPOTEC, known as the Modular Multilane System, in their machines. This is a family of AVC-compatible weigh cells, which permit track centre-to-centre distances down to 30 millimetres (SL-M series) or 25 millimetres (SX-M series). In contrast to the customised MTC systems, MMS is an off-the-shelf solution, consisting of mass-produced and multi-lane-capable EMFR weigh cells, which the customer orders in the quantity he desires in order to assemble his multi-lane weighing system himself. An MMS solution including optimised AVC system can be used in those environments where without AVC vibrations would limit the weighing results or product throughputs achieved. Modular means in particular that the customer can configure the number of lanes and the track centre-to-centre distance himself. One huge advantage is also that the customer can replace specific individual weigh cells and sensors without having to replace the entire weighing technology to do so. The multi-track weigh cell MTC is still the system of choice when it comes to special solutions or customised systems with very small track centre-tocentre distances below 25 millimetres.

Ahead of the trend

There are clearly identifiable trends if we look at today's main areas of use and their production landscapes in the weighing technology for multi-lane applications. More and more contract bottlers are coming onto the scene whose claim is the ability to execute an increasing number of production orders quickly. The keyword here is flexibility even for small batches – one of

the proven strengths of the WIPOTEC product portfolio. The variety of products on the customer side continues to increase. In the pharmaceutical sector, it is injections and vials, for example, which have to be manufactured in ever-increasing numbers of cycles and must be weighed extremely accurately. The same applies to stick packs, tear-open packages for drugs in powder form. Incidentally, WIPOTEC-OCS, another subsidiary within the WIPOTEC Group and well known for process- and customeroriented weighing and inspection solutions, also uses the basic solutions developed at WIPOTEC Weighing Technology. WIPOTEC-OCS has a very successful pharmaceutical checkweigher with a push-over system for stick packs in its range. Tea and coffee capsule machines are another area of use for the high-performance weighing technology from Kaiserslautern. The performance requirements are similar. Again, these are lightweight products, which have to be weighed precisely at the highest cycle speeds. This type of coffee or tea consumption, originally conceived for single people, has now become established worldwide. As has the weighing technology from Kaiserslautern.

/ THREE QUESTIONS TO:

MICHAEL KIRSCH Global Sales Director at WIPOTEC Weighing Technology

Where are you heading?

Take, as one example among several trends, contract bottlers. We are increasingly gearing ourselves to their demands for high-performance weighing technology when we're developing new weigh cells.

What is the significance of AVC for machine manufacturers?

AVC (Active Vibration Compensation) filters environment-induced interference due to vibrations or oscillations out of the measuring results without any loss of speed. This technology significantly reduces design efforts of machine manufacturers. AVC is a unique feature of WIPOTEC!

How exactly do EMFR weigh cells from WIPOTEC work?

Basically like a simple beam balance. The coil attached to the other side of the balance beam attempts to move out of the magnetic field of a magnet but is unable to do so because so much current is sent through the coil via an electrical control circuit that the beam practically remains in its neutral position. The resulting deflection is only a few nanometres, therefore the measuring time is extremely short.

/ MICHAEL KIRSCH

is 55 years old and has been at WIPOTEC since 1999.

He enjoys hiking with his wife when he's not out and about on his Harley.

BELLA ITALIA

When the Italians want something, it has to be compact or fast. Fiat 500 or Ferrari. Or from WIPOTEC.

ood news from Italy: At the WIPOTEC Italia S.r.I branch in Pero, near Milan, there has very recently been cause for excitement about various Italian markets where respectable growth has been recorded. Among them machine manufacturers for pharmaceutical production and the field of weighing and inspection technology for foods – segments which are also among the core areas of WIPOTEC.

Many observers of the Italian markets believe that price aspects play a crucial role in Italy and that the technology offered always comes second. Even if a technology-driven decision is what is expected and aimed for, there's always a chance that a better price/performance ratio will ultimately result in preference being given to a conventional solution - an obvious disadvantage for technology-driven companies like WIPOTEC. The markets are price-sensitive to this, and in many sectors, prices in Italy are cheaper than in Germany. It's also fair to say that the expectations of Italians regarding flexibility of prices, customerspecific solutions and delivery periods are also higher than elsewhere. One of the daily challenges for WIPOTEC Italia is to meet these demands, and success is in the cards here. The Italian colleagues win tenders and come out top in bidding procedures. This is because in a direct comparison with competitors, WIPOTEC solutions are more efficient and more reliable. In those tender procedures they show that using and operating our systems from Kaiserslautern results in savings and cost advantages, and even with higher acquisition prices they deliver a demonstrably better price/performance ratio if not only the purchase price but also the future service life of the machines are taken into account. Evidence for this from the past is easy to find in the WIPOTEC customer base. Customers in Italy are convinced that they can produce faster and cheaper in better quality with solutions from WIPOTEC.

WIPOTEC - known and highly appreciated in Italy

As far as the integration of WIPOTEC weigh cells in production machines for the pharmaceutical sector is concerned, all machine manufacturers know the German weighing technology specialists, and there is barely any competition on a par with them. The successes of our Italian colleagues in the growing market for capsule machines for coffee are quite remarkable. Solutions from WIPOTEC are always under discussion, especially when it comes to applications in the field of high-speed, multi-lane or rotary star wheel weighing systems.

In addition to the range offered by WIPOTEC for pharmaceutical production, WIPOTEC is also known for systems suitable for fresh and oven-ready products in the food sector. Beyond this, checkweighers from WIPOTEC-OCS are also in

It's also fair to say that the expectations here regarding flexibility of prices, customer-specific solutions and delivery periods are also higher than elsewhere.

demand for upright spray cans of tinplate or aluminium, known within the industry as aerosol cans. In this case, the technology systems from WIPOTEC-OCS are known for transporting and weighing the wobbly upright cans efficiently and safely. The spray cans produced are used in a variety of areas from cosmetics and household cleaning products to medicines and foods.

It is also known in the Italian branch that visitors to Kaiserslautern from Italy are impressed by the state-of-the-art, spotlessly clean production area, the efficiency of the machines in the factory acceptance tests and the company's innovative spirit, i.e. the ability to tackle innovations.

How Italian customers find their solutions

In many cases, there is no need to search at all. In the field of X-ray inspection systems and checkweighers in particular, there is so much competition in Italy that it's the other way round, and suppliers look for and find customers, then simply knock on their doors. Accompanying print media advertising or web ads are not the be-all and end-all. A multi-purpose, powerful and competent web presence is also important. And in Italian, of course. This is one thing that customers really appreciate. It has to be possible for customers to find out everything they need to know about WIPOTEC products and their applications on our website. Very good, mainly local references and positive customer feedback are equally promising. Direct visits on site are difficult to arrange in the run-up and in the initial stages so that leaves the national trade fairs for making personal contact with customers and prospective buyers. The three most important trade fairs for WIPOTEC Italia are IPACK-IMA for solutions in the packaging industry, Pharmintech - needs no further explanation - and CIBUS-TEC. The latter is all about machines and technology in the food industry. >>

Bella figura: The WIPOTEC Italia S.r.l. team

/ WIPOTEC EMFR WEIGH CELLS

These pioneering weigh cells based on the principle of electro-magnetic force restoration (EMFR) paved the way in weighing technology. Imagine a locked beam balance. One arm of the balance wants to move due to the weight on the other side but is almost completely prevented from doing so electrodynamically. Its minimal deflections are optically recorded, enabling the most precise weight measurements in fractions of a second.

In the picture above: Super-slim weigh cells, ideally suited for use in multi-lane applications. Today, they can be found in virtually every high-speed application, mainly in the mass production of food, pharmaceuticals, cosmetics and industrial goods.

Competition in the markets

Italy stands for a large number of top-notch machine manufacturing companies, starting with family-run businesses to the large multinational corporation IMA. They all have a location advantage, due not least to local production. Contrast this with the unique features of WIPOTEC-OCS, which start with the basic technology. Only WIPOTEC EMFR weigh cells are used in all machines produced in-house and they have two distinct advantages. Based on electro-magnetic force restoration, they deliver results that are more precise in less time than competitor systems that work with strain gauges, which primarily appear to be more cost-effective. This makes WIPOTEC solutions increasingly efficient. Furthermore, the weigh cells with AVC (Active Vibration Compensation) have active, extremely efficient vibration compensation. Environmental interference cannot affect the weigh cells equipped with this system; they deliver consistently high performance, regardless of any external influences.

In addition: interactive consulting services on the web, in Italian, are particularly important for customers during the comparison and selection phase. More than merely a search tool, the product finder on the WIPOTEC website is an interactive recommendation system, which uses complex filter technologies to suggest a solution that matches the customer's requirements.

Prospects for the future

The weigh cells business in Italy will continue to grow. There is also huge potential for X-ray inspection systems and checkweighers in Italy. In addition to providing X-ray systems, metal inspection systems and checkweighers, WIPOTEC-OCS brings these mutually complementary inspection technologies together in a single compact system, without needing additional space or sacrificing speed. This is especially important for those of our customers where production space is at a premium or where space in the line is limited or for those who are looking for particularly quick solutions. Nationwide, this applies especially to the food and pharmaceutical sectors, just as it does everywhere else in the world.

What is it they say? When the Italians want something, it has to be compact or fast. Fiat 500 or Ferrari. Solutions from WIPOTEC offer both at the same time. \blacktriangle

INNOVATION. PASSION. FIRST.

WIPOTEC

IPOTEC STECHNIK

THE COURSE IS SET

New global brand architecture and corporate identity

t the interpack trade fair in May 2017, WIPOTEC introduced a new brand architecture and corporate identity. They both reflect the Group's core values and 30-year history as well as its future strategic alignment.

WIPOTEC GROUP – Diversification and international expansion

Two global sales and service companies operate under the umbrella of the WIPOTEC Group. OCS Checkweighers, which serves the retail business in the area of weighing and inspection solutions, has been rebranded as WIPOTEC-OCS. The reasons for this are successful diversification of the former OCS Checkweighers product lines which, with further development of the strategic fields of product inspection (X-ray scanners and optical inspection), Track & Trace (TQS – Traceable Quality System) and Mail & Logistics, extend well beyond the long-established core business of checkweighers.

Theo Düppre, CEO and founder of WIPOTEC, has this to say, "We are seeing broad, strong growth in all product areas of WIPOTEC-OCS. This applies both to increasing market shares within our core markets and to new business due to international expansion. WIPOTEC-OCS benefits from synergies with the parent WIPOTEC Group in terms of strategy and technology; the wider implication for the business in terms of branding being harmonisation with the core brand."

The OEM business will remain within WIPOTEC Weighing Technology. The global market leader is continuing its growth in the integration of ultra-fast, high-precision EMFR weigh cells in packaging and filling machines, driven primarily by product innovation and comprehensive technical advice and service.

Innovation. Passion. First.

The new claim of the WIPOTEC Group is "Innovation. Passion. First." and it embodies our philosophy and brand core perfectly. An out-and-out drive for innovation in the pursuit of valueadded solutions and technologies, a passion for achieving results for the best customer solution and putting our customers first will also remain firm guidelines in the future.

In addition to the WIPOTEC word mark, the triangle as a central CI element has also been modernised and made more dynamic. Like our solutions, the newly introduced corporate identity stands for dynamism, speediness, precision, reliability and premium quality. As a result, we will continue to position ourselves in the global roll-out as a uniformly global brand and lay the foundations for further growth. ▲

/LEGAL INFORMATION

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1988 – 2018 THREE DECADES OF INNOVATION / PASSION FOR TECHNOLOGY

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