

WEIGH UP

Efficient Solutions for the Intralogistics Sector

Dynamic Scales in Focus

SCADA Connectivity

for Checkweighers
and X-ray Systems

2D Codes in the Retail Sector

Evolution in Full Swing





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2D Codes in the Retail Sector

/ Top-quality engineering hands-on

by Theo Düppre
Founder and CEO of Wipotec



*It goes dong-dong
and not deng-deng.
Because it is Made in
Germany.*

Theo Düppre
Founder and CEO of Wipotec

Dear customers, dear readers:

In our last issue, we took a look at sustainability: the material cycle, recycling, our machines' durability, smart use of energy and a mega-battery. Incidentally, the battery is now operating extremely smoothly.

Data matrix codes for the circular economy

This issue features several interviews. Among them, I would particularly like to recommend the interview with Thomas Krämer.

The remarkable project with Coca-Cola for the circular economy. Laser marking is nothing new, but laser marking on PET bottles?

This opened up a whole new world of possibilities for Coca-Cola and for us. So what comes next? Digital codes on glass bottles? Thomas and his team are already working on it.

New development: real innovations from Wipotec

There is something new in the world of heavy-duty weighers. Weighing endless rubber in the production process. A typical example of how clever thinking can result in a customer solution that sets new standards in the tire industry. Read the interview with Jens Alder. Planar Motor's transportation system is based on magnetism. Our Weigh Cells operate on the principle of electromagnetic force compensation.

Can the two magnets also work together? Yes, we have eliminated inference and can weigh accurately to the nearest milligram. A small piece of art. Read "The Future is Now" to discover what this is all about.

More than 60 trade shows on all continents

In 2024, we were again traveling the world. Our trade show calendar is so full that I sometimes lose track myself. In spring and fall, we frequently have several gigs at the same time. Sometimes we have our own stand, sometimes we exhibit together with one of our sales partners. And we always present our latest machines and solutions. In this issue, we present some of the highlights from the leading trade shows Achema and FachPack. We believe in live performances, because our machines have to be seen and touched. Only then do you discover the robustness and care with which we design and construct our machines. In 2025, our events team will once again be making appearances at numerous trade shows on all continents. Our website contains the details. Come and see for yourself why our machines make a "dong-dong" sound instead of "deng-deng" when you knock on them. Made in Germany.

Open day at Wipotec in Kaiserslautern

My personal highlight was the open day in April. I know that it is always a huge effort for the staff to organize and run this event on the side, so to speak. But believe me, the day was totally worth it for me and for all of us. It was inspiring to see how much passion was put into devising games for children, how machines and different principles were presented and how trainees and professionals responded to questions at the job speed dating session. Hands-on technology. That's how I see it.

Voluntary slant

The topic is not entirely new. But the photos of our scales, which perform weighing at a slant, are always impressive. It looks as if the machine has fallen over. And since we have just rebuilt it, I wanted to share it with you. Because if there is too little space in production, we can also carry out checkweighing on a slope.

QR codes in the retail sector

We should not miss an update on the development of 2D codes in the retail sector. Sales Director Volker Ditscher really is a global regular traveler gathering the moods and developments from customers all over the globe. He explains the future of QR codes. His colleague, Product Manager Daniel Anders, provides technical insights into printing technologies, optical inspection and modularity. Read their interviews at the end of this newsletter.

Good luck in your endeavors and stay healthy.

Sincerely,



Theo Düppre

Dear customers:

In this issue, you can read that we have established the Wipotec Foundation – Margit and Theo Düppre. Several years ago, it was already clear me that Wipotec was not for sale and I was thinking how I would ensure its continued existence. Now, a very personal experience has suddenly demonstrated the urgency of the task to me. As a hands-on kind of guy, I consulted with different committees to drive the implementation forward as quickly as possible. So this time it was a project for us and not for a customer. Or is that really so?

Recently, I was asked what has actually been my driving force all these years. Today, we are a company with a history going back over 35 years with more than 1,200 employees. We conduct basic research, are 85% energy self-sufficient. We are currently constructing buildings 14 to 16 and are in the best of health. We are a company in constant growth, which defies to the general economic trend. Money or wealth is not my motivation. At first it was the inventor urge, so to speak, the hobby inventor in me.

The fun of tackling a problem. And that is still the case today. What, no one has ever done that before? Then let's give it a try. There's no such thing as impossible.

Over time, the desire to create something also grew. Leaving something for posterity. This company is already my, indeed our life's work. In this case, a foundation is the instrument of choice. It also enabled me to realize my wish to get young people excited about science and the STEM subjects. Read more about the foundation's projects and our funding initiatives soon.

We hope you enjoy this edition.



Theo Düppre
Founder and CEO
Wipotec

News in brief



Georg Drakos, CSO

/ **New CSO** Georg Drakos

The shareholders are pleased to inform:

As of January 1, 2025, Mr. Georg Drakos is officially part of the WIPOTEC GmbH management team. Going forward, he will be responsible for the European, North African, and the Middle East sales regions. Most of us have come to know and appreciate Georg Drakos in his role leading the D-A-CH region. We are clearly in good hands.

Mr. Michael Schläger assumes responsibility for all other sales regions (including China and India). Effective immediately, his management areas include our business units and service. In turn, management has laid important groundwork for the sustainable growth of WIPOTEC GmbH.

We are ready to face the future. ▲

/ **New Managing Director in Mexico**

Michael Schwartz

Our team is growing. We are pleased to welcome Mr. Michael Schwartz as Managing Director at our Mexico facility, who took up office in September 2024. With several years of experience in technical sales, he has expertise in a wide range of sectors, including food, healthcare, logistics, and automotive. As Michael Schwartz explains: "I see my role as establishing stable processes and structures to create the basis for successful growth together with my team."

"The market here offers great potential, Wipotec Mexico and Central America will make a significant contribution to the group's overall performance." ▲



Michael Schwartz,
Managing Director Mexico

/ **Customer Survey:** Satisfaction at an All-time High

We wanted to hear your views! Once again, customers and partners from all over the world had the opportunity to take part in a comprehensive survey. We were especially interested in the overall satisfaction with our products and services.

With almost 4,000 votes cast, the final customer satisfaction score was an impressive 4.2 out of 5 – which represents a significant increase and about

10% more than that of the last survey. Wipotec emphasizes not only its service but also the high product quality, innovative capabilities, and skilled workforce of its employees.

Thank you for your trust and valuable feedback; we are committed to addressing your suggestions for improvement to enhance your experience. ▲

/MI(N)TmachWelt for Young and Old Alike

It's all in the name. At the start of September, the Kaiserslautern Garden Show once again offered a chance to gain hands-on experience of STEM – science, technology, engineering and mathematics. The program is primarily focused on children and young people but has also successfully captured the interest of adults, highlighting its wide appeal. As a strong advocate and supporter of young talent in the region, Wipotec was once again represented at various events. Preliminary insights into special technical features, physics experiments, and chemical reactions encouraged active participation and ensured a fun learning experience over the entire weekend.



As always, it was a pleasure for us to encourage young and old alike to take the plunge. You can find the next MINT dates on the westpfalz.de website. ▲



/75th Birthday Theo Düppre

Wipotec celebrated Theo Düppre's 75th birthday with a surprise event where employees formed a human chain around the company to show their appreciation for his leadership, complemented by a personal video message that emphasized team gratitude and camaraderie, making it a memorable occasion. In November, we planted 1,000 trees in the Wipotec forest as a sustainable gift.

This special day, attended by numerous volunteers and their families, was a huge success. This gesture is our way of thanking Theo Düppre for his unwavering energy and pioneering spirit. We wish him many more years of good health and hope that the trees will stand tall forever. ▲

60th Birthday

Udo Wagner

A fundraiser was launched for the 60th birthday of Udo Wagner, managing director and co-founder of Wipotec, in which Wipotec contributed 50 cents for every kilometer cycled using the "Stadtradeln" app. Many employees took an active part in the campaign, which was launched by Udo Wagner himself – a great idea which we were happy to support.

We appreciate Udo Wagner not only for his leadership qualities, but also for his close ties to Wipotec and its employees. ▲

/Donation to BBS I

Wipotec Promotes Training

Wipotec provided the students at the BBS I Technik vocational college with ten modern small controllers to use in programming, automation, and robotics projects. One example is the impressive HMT 22 class robotic arm.

In the official journal, head teacher Frank Simbgen highlights Wipotec's commendable commitment to practice-oriented vocational training.

The new control systems will certainly not be the last donation. ▲

/ Wipotec Foundation

The “Wipotec Foundation – Margit and Theo Düppre” was officially registered as a foundation and an independent legal entity under civil law on October 7, 2024. With this, founder Theo Düppre primarily wishes to ensure the long-term survival of Wipotec and all associated jobs.

WIPOTEC 
Foundation



Theo Düppre, company boss and founder explains: “I am merely being true to what we believe in,” he explains. “At Wipotec, we always have our sights set firmly on the future.” That is why we wish to continue to be present for our customers for many years, providing the reliability quality and innovative strength they expect, while at the same time remaining a growth-oriented customer for suppliers as well as a stable employer for all our employees.”

The foundation will not affect the operational business of WIPOTEC GmbH in any way, and its establishment will not change the current management.

Rather, the foundation has two main tasks. It exercises a shareholder function at WIPOTEC GmbH and thus also owns shares (along with Udo Wagner and Theo Düppre). In addition, the foundation has a charitable objective and serves to promote science and research, particularly in the field of inspection and weighing technology. It focuses on investing in education to encourage children and young people to take an interest in all kinds of scientific topics.

To quote Theo Düppre: “The aim is to create calm waters for Wipotec in the long term. I am therefore already looking forward to working on the board of

directors and exchanging insights with the members of the board of trustees, whom I personally hold in high esteem.”

The board of directors of the Wipotec Foundation is composed as follows:

- Theo Düppre, CEO
- Claudia Rausch, Deputy Chair
- Jens Kühn, CTO Wipotec
- Dr. Werner Schmitz, CFO Wipotec
- Christian Carello, IT Wipotec

The board of trustees, in turn, supervises the actions of the board of directors and ensures that the founder's wishes continue to be implemented.

The members are:

- Willi A. Fallot-Burghardt (Chair)
- Prof. Dr.-Ing. Norbert Wehn (Deputy)
- Matthias Bächle
- Prof. Dr. Winfried Lieber
- Dr. Carsten Mayer

Here's to a successful collaboration! ▲

/ Awards 2024

Wipotec Once Again Honored with Top 100 Award

Wipotec, an industry pioneer, has won the renowned “Top 100 Award” for the third time in a row. This award recognizes German companies for their exceptional innovative achievements in the current market environment. With an innovation quotient of 253 points, Wipotec is well above the competition average and was even able to surpass its own records from previous years. We wish to thank all our employees, whose innovation and creativity in finding solutions are what makes such successes possible in the first place. Likewise, we wish to thank the management team, who have always nurtured a corporate culture that actively promotes innovation. We will continue to strive to expand our pioneering role in the future.

Laser Marking of PET as a GS1 Best Solution Partner Use Case

In close collaboration with the Coca-Cola Company, Wipotec recently achieved a breakthrough in the dynamic labeling of PET bottles: To digitize its circular economy, the beverage company can now use special laser technology to print 2D codes that include a GS1 Digital Link in addition to the GRAI and serial number. The print quality of our TQS modules is so high that the code lasts over the entire product lifecycle.

Consumers can easily read the data using commercial smartphones and thus participate in a completely new digital deposit system. Thanks to this achievement, Wipotec was named “Best Solution Partner Use Case 2024” at GS1’s Excellence Day.



Wipotec was represented by Axel Burger (left) and Thomas Krämer (center)



f. l. t. r.: Ingolf Latz, Ranga Yogeshwar and Julia Hammer

Training Ace 2024 – We are among the Top 10!

Wipotec has been nominated for the nationwide “Ausbildungs-Ass 2024” (Training Ace 2024) competition and is one of the top 10 training companies in Germany in 2024.

The Training Ace award is presented by Wirtschaftsjunioren Deutschland together with partners. The prize honors companies and initiatives that excel for their outstanding commitment to training, setting new standards, and groundbreaking work.

As part of the application process, Wipotec presented its own training concept where participants engage in hands-on activities to acquire skills and knowledge effectively. We use a rotation system to give our trainees a comprehensive insight into various departments – both national and international – and involve them in responsible projects from an early stage.

In addition, we place particular emphasis on promoting strategic thinking and intercultural skills to prepare our trainees in the best possible way for the global demands of the labor markets.

We expanded our training program in early 2022 by creating apprenticeships for industrial business management assistants, as well as, training courses for mechatronics engineers.

Three further apprenticeships were introduced in 2024 to offer even more young people a wide range of future-oriented career opportunities. This positive trend illustrates our clearly defined goal: We see it as our responsibility, not only as a company but also as a key player in our region, to support young people and give them the best possible start to their careers. ▲

/Trade shows: ACHEMA and FachPack

Again last year, attendees at large and small trade shows were able to experience our latest weighing and inspection solutions live and in color.

The main focus was on ACHEMA, FachPack Anuga FoodTec, and PackExpo, the leading trade shows for the industry. This is where world premieres are presented.



Innovative TQS technologies, double-sided X-ray systems and a magnetic levitation transport system weighs precisely thanks to Wipotec Weigh Cells: Our exhibition team presented these and many other highlights to an international audience of industry professionals, who were able to gain a first

impression and learn more about the technical details. The turnout was huge, so we would like to take this opportunity to thank everyone once again for the lively exchange. It is direct contact that makes exhibitions unique.

Does this make you curious to find out what our day-to-day work at a trade fair really looks like?

Discover a video tour of our products at Anuga FoodTec 2024:



Five Full Days at ACHEMA

Last June, the Frankfurt Exhibition Center once again opened its doors for ACHEMA, the world forum for the pharmaceutical process industry. More than 100,000 visitors from all over the world attended and had the opportunity to become familiar with the latest developments in modular weighing technology at our stand. TQS, our Traceable Quality System, which perfectly adapts to the requirements of the industry, performs the quality control at the end of the line.

To this end, we demonstrated printing on pharmaceutical products up close. For example, for the serialization of typical folding boxes, which at the same time receive a dynamic 2D code that will soon become the global standard.

Our magnetic levitation train also turned out to be a real showstopper. In close collaboration with Planar Motor, a weighing solution was developed that is accurate to the milligram without restricting flexible transport. This paves the way for the future.

The FachPack Packaging Trends

For three days in September, the Nuremberg Exhibition Center will be dominated by the packaging industry for the FachPack. Naturally, Wipotec cannot afford to miss this! Among other things, our SC-S 5020 for Dual View X-ray inspection of upright containers, which provides an extra level of security when filling canned food, received an extremely positive reception. The TQS-HC-A-XL with Piezo inkjet printing technology, on the other hand, offers a comprehensive, worry-free package for large-scale labeling of cardboard boxes. A system for printing and applying labels, including automatic testing and weighing control, followed by separate ejection – and each of these modules is fully integrated. Our experts also showed how to successfully handle products that topple easily. For example, the dual-lane HC-A-IS-D checkweigher promises exact weighing results at the highest speeds, while our TQS-LI bottle is specially designed for smaller bottles. Wipotec covers the entire spectrum. ▲



/ Open Day in Kaiserslautern

In April 2024, it was once again time for our open day. A full program awaited the more than 5,500 visitors, promising authentic insights into the world of weighing technology for all age groups. The company and the industry were presented at various stands, for example at job speed dating or the knowledge rally.



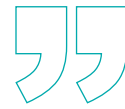
Around 270 employees welcomed visitors on a gloriously sunny day and invited them to take an informative tour of the company premises located in Adam-Hoffmann-Strasse, which left no questions unanswered.

What career opportunities does Wipotec offer as an employer? Can precise weighing still be achieved at maximum speed? Does X-ray inspection actually work on sealed tins of cat food?

Of course, because – as company founder Theo Düppre likes to say – nothing is impossible. With the right technology everything is possible.

Innovation meets Passion

Our core business is and remains the development of highly accurate weighing systems that are suitable for a wide range of applications. During the open house, the experts on site gave an impressive demonstration of how individual parts manufactured here in Kaiserslautern are turned into fully functional checkweighers that can easily weigh 60 items or more per minute. Especially the youngest visitors were encouraged to participate and had a hands-on experience of the process. For example, at the “Mail & Logistics” station, everyone was invited to guess the weight of parcels and compare their estimates with those of our latest catchweigher. Those participants who could also answer the quiz question of the knowledge rally were even able to win a small surprise at the end.



The open day had something for everyone. Our people also took the chance to take a look at completely different areas.

Oliver Holzwarth
Head of Marketing

Connected to the Region

A musical backdrop and a large selection of food and drink were also provided. While entry to the open day itself was free, food and drinks were available on the premises for a symbolic fee. This has become a tradition, as the proceeds from that are donated to charitable organizations in the region. This year, thanks to the generosity of all participants, we were able to donate a total of €6,390 to Arbeiter-Samariter-Bund (ASB), Lichtblick 2000 e.V., and the Kaiserslautern animal shelter (Tierschutzverein Kaiserslautern e.V.). We are both honored and grateful!

Because social commitment is always a particular concern for Wipotec. The “Wipo-Wichtel” company kindergarten, which has been in existence for 10 years, is also a testament to this.

Careers at Wipotec

But investing in the next generation is not just for the youngest. At the open house, our team provided detailed information about opportunities for kick-starting a career at Wipotec. Whether classic vocational training or dual study programs, we actively promote the professional development of our junior staff and are happy to pass on the experience we gain from it.

To help keep track of all these options, job speed dating was also featured on the program. In the form of short conversations, various activities were examined in more detail, along with their requirements and the prospects they offer.

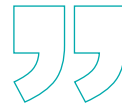
Other questions could then be clarified directly with the relevant experts. Participants and organizers alike were very pleased with the outcome. The open day 2024 was a great success again. ▲



/ Filling Milk Powder without Foreign Bodies

As a specialist for food processing and packaging, Tayseer Arar from the United Arab Emirates values quality above all. Particularly when filling milk powder, product safety is paramount in order to keep infants safe. That is why the manufacturer's bagging system is equipped with an X-ray inspection system from Wipotec.





*We never
compromise
on quality.*

Naumann Majeed

Production manager Tayseer Arar

For the production of milk powder, the company relies primarily on raw materials from New Zealand. These are then packaged for the end consumer in bags weighing up to 2.5 kg. Tayseer Arar supplies the entire Gulf region and even exports as far as the USA. The milk powder is either distributed under the company's own "Rino" brand or sold directly by international partners.

No Alternative to X-ray Inspection

Since milk powder bags are usually made of aluminized film, a metal detector alone can never detect all contaminants in the product.

The only way to detect even small but very harmful stainless steel particles, for example, is to deploy an X-ray scanner at the end of the line. For Naumann Majeed, production manager at Tayseer Arar, investing in the technology is worthwhile:

The safety of milk powder production has been optimized, thus providing additional protection for customers. The importance of X-ray inspection for foreign body control cannot be overstated, especially for food manufacturers and co-packers in the industry, when the products are intended for major international chains and brands, and above all for goods destined for the US market.

Because every producer must always comply with all applicable regulations in order to avoid complex legal consequences. >>



Tayseer Arar's production facility

Our customer

Tayseer Arar Food Industries LLC


Established: 1976

Location: Dubai Investment Park,
United Arab Emirates

Employees: 100+

Products: : Tomato paste, milk powder, olive oil and commodities (including pulses, seeds, spices)

More information:

 tayseerarar.com



Radiation protection is vital:
"Rino" milk powder at the discharge
spout of the SC-E 4000



USB interface on the X-ray
scanner: for backups, statistics
and many other applications

The Solution

Wipotec has long been a global reference for high-quality, modular systems, so Tayseer Arar quickly took note of the standardized SC-E series.

"This system is used for almost all pouch packs, no matter how diverse the content may be. We have been continuously developing our solution over the years to include a wide range of foods, from coffee beans to frozen vegetables, cereals and spices," reports Joachim Ott from Wipotec.

Tayseer Arar uses the SC-E X-ray scanner in the production line after a checkweigher, which in turn follows on directly from the bag packaging machine. The entire system is thus perfectly coordinated.

For example, the checkweigher improves the process performance by preventing empty bags from reaching the X-ray system in the first place due to the automatic quality checks, thereby minimizing the risk of a product bottleneck at the radiation protection curtains. ▲



"Rino" brand milk powder bags ready for shipment



/Precise Weighing on the Incline

In production plants where conveyor belts sometimes operate at extreme angles, quality assurance must be reliably ensured.

The right system can even check the weight of each item accurately at an angle and simultaneously detect foreign bodies.



Checkweigher HC-M-MDi



Weighing in the incline

Checkweighing can prove to be a real challenge on inclines. The Weigh Cell used must take the unusual angle into account and the handling of the products must always remain consistent – however much the belt drops or rises.

The solution promises to be a custom-made product from the HC-M series.

Usual High Measuring Accuracy

Whether the product is transported parallel to the floor or at an angle, the quality of the packaging and goods should always meet the desired standards at the end of the line.

In many industries, this includes compliance with specific regulations. That is why our scales are legal for trade and thus guarantee precise weight control even on an incline.

Everything under one roof

Thanks to Wipotec's typical system modularity, further features can easily be added. In addition to a metal detector at the same angle, the Weigh Cell is often followed by an rejection system consisting of pushers or blow nozzles.

What's the major advantage? All modules can be controlled centrally via a single touchscreen, so that user-friendliness is maintained even on the incline. ▲

/ Sensor Technologies:

The X-ray Detector makes all the Difference

High quality X-ray images form the basis for successful detection of foreign bodies. In the production process, many manufacturers therefore rely on X-ray inspection systems whose sensor technology is precisely tailored to the desired application. The choice is between diode detectors, TDI cameras, and dual-frequency X-ray.



Avoiding costly recall campaigns and major damage to brand image requires that food must not contain any foreign bodies. For this task, it is recommended to use X-ray scanners at the end of the line, combining a detector designed for the specific application with the ideal X-ray source and powerful image processing software. Wipotec helps to deliver the optimum solution.

Thanks to their modularity, our X-ray systems are economical in a targeted way – especially also in relation to the total cost of ownership.

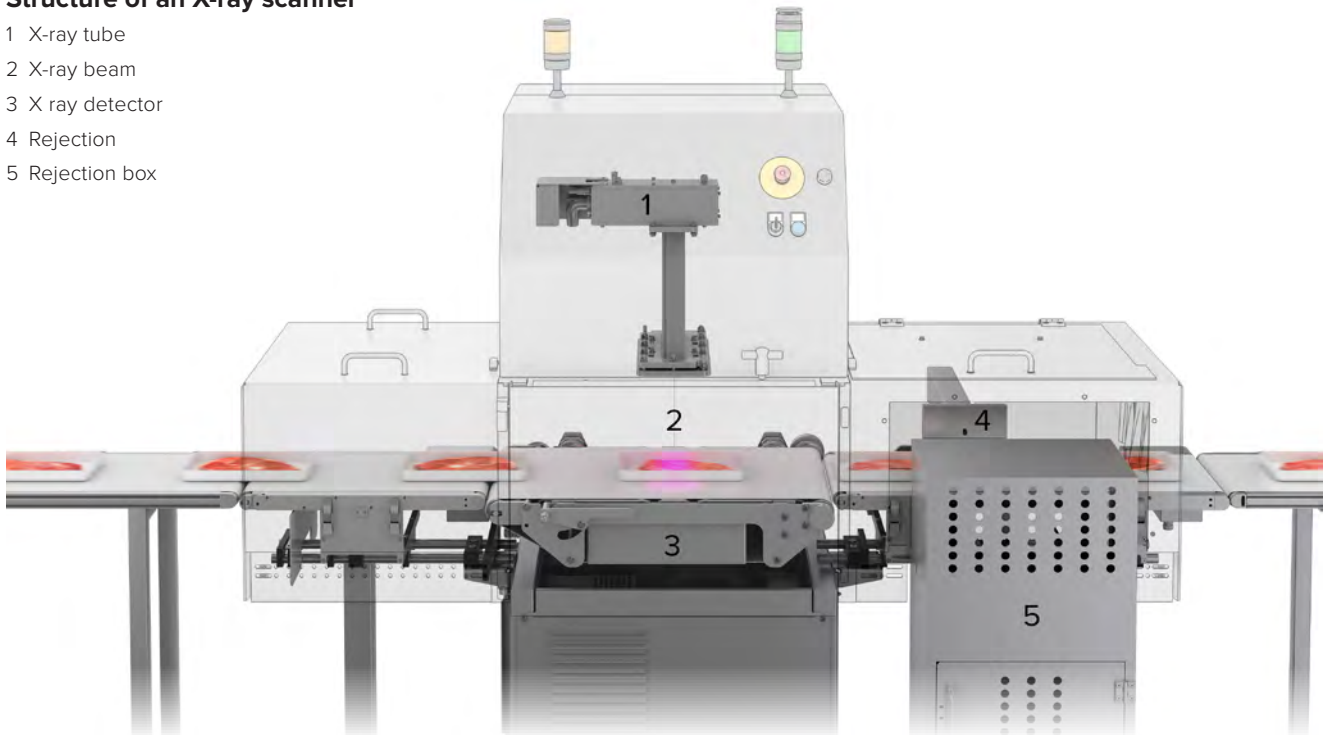
Diode Detector as Industry Standard

- Standard applications
- Entry-level sensor
- Impressive service life

Typically, the X-ray source points at an object and a detector located beneath the conveyor belt captures the images generated. Each product has its own absorption behavior. As a result, it is displayed in the X-ray image within a specific grayscale range that contrasts with the gray scale of the foreign body.

Structure of an X-ray scanner

- 1 X-ray tube
- 2 X-ray beam
- 3 X ray detector
- 4 Rejection
- 5 Rejection box



Many commercially available X-ray scanners work only with 8 bits and can thus only distinguish 256 shades of gray. At Wipotec, we rely on 16-bit technology for all our X-ray inspection systems, which differentiates between more than 60,000 gray values.

Using our multi-resolution algorithms, it is possible to examine the X-ray image at different resolution levels – either 0.4 mm or 0.8 mm, depending on the application. In this way, even minor foreign body contamination is detected during the process. One “small” difference that can make a “big” difference.

Boosting Productivity with VioX TDI Cameras

- High-speed applications
- Maximum reliability for reduced costs
- Seven-year warranty, regardless of operating hours or service contracts

While conventional diode detectors only detect each pixel once, the VioX TDI technology developed and used by Wipotec detects each pixel 128 times. Based on the subsequent integration of all 128 individual images, the final gray value of each pixel is determined precisely, enabling resolutions of up to 0.1 mm depending on the specific application.

In addition, our camera-based X-ray inspection systems can perform “binning”, a process in which

several pixels are combined. Resolution remains just one of the parameters that can be selected via the touchscreen or a remote connection. This also eliminates the need for regular technology upgrades. In addition, the sensitive electronics of conventional detectors are subject to much higher wear and tear as they are located directly in the X-ray beam. This is not the case with modern VioX TDI cameras, which is why they have a much longer service life.

Twice as Safe with Dual-Frequency X-Ray

- Complex applications
- Against low-density contamination
- Excellent detection performance

For some products and types of contamination, the information gathered from a single image is not sufficient to guarantee accurate results. This is where Dual Frequency X-ray (DFXr) is a good solution, as it takes two X-ray images at different energy levels for each article.

This makes it possible, for example, to correctly check fat content or to detect low-absorbing foreign bodies in overlapping and inhomogeneous products, such as bone fragments in meat products. The increased detection and reduced false rejection rates thus significantly improve production quality. ▲

/ Meeting Serialization Requirements – a Case Study with Bionorica

With sales in the hundred million dollar range, Bionorica is one of the largest global producers of scientifically based herbal medicines.



More than 1,800 employees go about their daily business here, combining innovation and tradition. A significant proportion of them are employed at the German sites. The company, which is still family-run, supplies doctors and pharmacists in more than 40 countries around the world.

Bionorica focuses especially on the Eurasian states, where the company has established itself as the market leader for phytopharmaceuticals.

To comply with the different regional requirements for packaging marking, Bionorica relies on advice, systems and service from Wipotec.

Strong Partners Reunited

Bionorica has long relied on systems from Wipotec at the company headquarters in Germany. In the solid dosage form (solids), thousands of tablets and coated tablets coming from the production line are prepared for dispatch here every day.

Liquids in the form of syrup or drops are also popular. Both are available in the typical folding boxes. Brands such as the combinations Sinupret, and Bronchipret reach countless patients at home and abroad in this way.

The certainty of always offering reliable pharmaceuticals can only be guaranteed by observing all regional regulations. Ultimately, pharmaceutical industry serialization is always in the interest of health. >>



Serialization and aggregation in the Bionorica packaging line

Our customer **Bionorica SE**

The German pharmaceutical company's products have always combined the tried and tested healing power of plants with the latest scientific findings.


This approach, known as phytoneering, is particularly useful for treating respiratory and urinary tract diseases, liver problems and gynecological issues.

Established: 1933

Location: Neumarkt in der Oberpfalz
(Headquarters)

Products: Phytopharmaceuticals and homeopathic medicines

More information:

 [bionorica.com](https://www.bionorica.com)





Always at its customers' service: Martin Philipp, Area Sales Manager of Wipotec



If someone were to ask me today: Do you have experience with Wipotec? My only answer to that is: Yes. Very, very good experience.

Mike Hofmann

Head of Packaging at Bionorica SE

Global Challenges

Bionorica is aware of its social responsibility as an employer and pharmaceutical producer. Thanks to a comprehensive compliance culture, the medium-sized company is committed to following internal and external rules at all times.

The fact that these regulations differ from country to country and are constantly evolving makes this task no easy matter. Depending on the market, Bionorica has to label its products differently and needs systems which offer this flexibility. And even if regulations evolve, Bionorica must be able to react.

Serialization with a System

In the course of these developments, Wipotec's track and trace solutions were upgraded to enable country-specific coding. These TQS systems are designed so that even those machines that have already been installed can be easily upgraded to new standards. If countries, for example, introduce the serialization of over-the-counter medicines, Bionorica is well prepared for this due to its partnership with Wipotec.

During the implementation of the checkweighers and their initial selection, Bionorica quickly saw the benefits of Wipotec's expertise, which was confirmed by adding the TQS solutions. In collaboration with Wipotec technicians, Bionorica has always been able to find a solution to every problem – even at times when consultation has been especially intensive. “Personally, I was particularly impressed by the reliable support at every stage,” says Mike Hofmann (department manager at Bionorica). “If one of the inevitable malfunctions occurred in the early days, I simply contacted the responsible technician directly.

We have always been able to rely on Wipotec, especially when things have been tight. I've been in situations that have been very different.” Even complex issues were resolved promptly by remote intervention. Meanwhile, Bionorica has the processes firmly under control.



Particularly, the excellent user interface is what sets Wipotec systems apart: it is easy to use, colorful, and yet clearly designed.

Uwe Raschel

Key User Computer Systems at Bionorica SE

Wipotec's Versatility

The employees at the company's head office in Neumarkt currently have access to four lines with Wipotec equipment. Among the highlights is the TQS-C-A-TE marking system, which works at a speed of 400 units per minute. This system allows folding boxes of different sizes to be labeled and serialized on the fly, and the printed information is verified directly downstream.

The TE unit for protection against manipulation is currently still waiting to be used at Bionorica, although various test runs have been successful. In addition to the free packaging machines in the TQS series, the case packers and palletizers have additional integrated modules (OEM), which enable fully automated aggregation, among others. These space-saving elements can be installed and put into operation in just a few weeks. While the TQS-HC-A-TE system is used to package solids, Bionorica also uses the TQS-SP-TE serialization solution for liquids.

Liquid medicines are marked with the corresponding serialization code in their folding boxes without a significant delay, and boxes occupy a minimal amount of floor space. Inside, high-resolution cameras immediately check the print quality in accordance with ISO 15415. In Bionorica's experience, however, the machinery processes differ only slightly. The main difference is that the liquid lines are equipped with two discharge chutes, whereas the solid lines have just one.

Problems only arise when far-reaching changes are required – as was the case with the first attempts at serialization. Apart from the hardware and software, the operators also have to adapt.



Crypto codes contain twice as much data as DataMatrix codes.

Selection and Application

At Bionorica, an internal project team did the bulk of the preparatory work, including implementing the new systems. The topic of serialization, for example, requires a precise understanding of the legal texts and subsequent regulations so that the language barrier is not an issue.

Another project team then devoted itself to implementing the technical aspects. Wipotec was quickly chosen here due to the smooth collaboration involving dynamic weighing solutions. >>



Wipotec also takes an integrated approach to the integration kits in cartoners



The downtimes of our systems are minimal. I can wholeheartedly recommend Wipotec.

Manuel Ritter

Leader Packaging Technology
at Bionorica SE

Uwe Raschel, the shift supervisor of a production team, reports: “There is no issue with the functionality of the machines. The technology works as it should and when bugs occur, an update is provided without delay.” This user-friendliness is what sets Wipotec apart. Operations can be easily controlled from the central HMI, eliminating the need to operate and adjust each component individually during a format change. Bionorica employees can now complete the setup process in just a few minutes.

Since the folding boxes are generally quite similar in size, only the camera and printer of the system need to be moved into position.

At the beginning, Wipotec’s support team helped to create suitable article formats so that only a few variable data are missing at a time. The relevant options were presented to the project management and operators during a demonstration in the Track & Track showroom in Kaiserslautern.

According to the company, the extensive simulations with the virtual machine were also extremely helpful in developing an understanding of the new environment. At first, there was a typical reluctance among the workforce to accept any kind of change, but there were no real reservations. Being familiar with an identical user interface in the checkweighers was the key to this.

Routine Processes at Bionorica

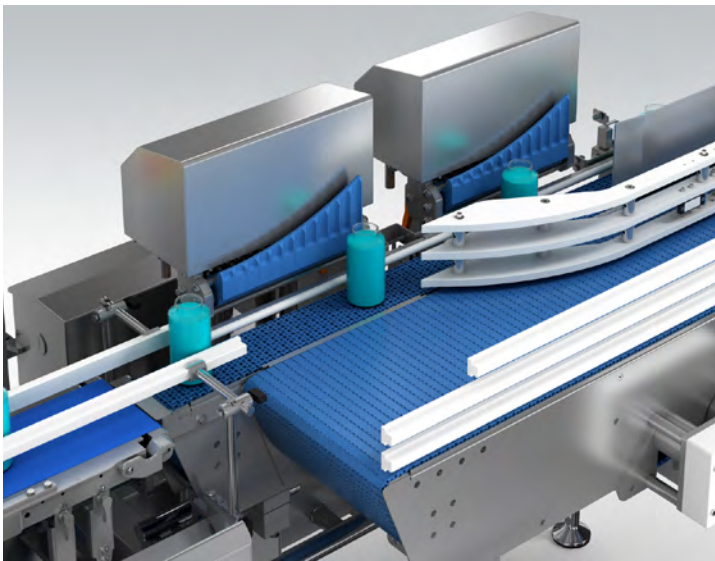
Now, it is rarely necessary to contact Wipotec service staff. While serialization was still a new concept at the time of commissioning, the operators are gradually becoming experts.

“We’re now on the right track,” says Manuel Ritter, team leader for assembly technology. “The figures in our production data acquisition system tell us that everyone involved is getting better at handling the changeover.” It was a great advantage that Bionorica involved its entire team in the crucial processes right from the start, and at all locations.

This means that the pharmaceutical company is exceptionally well prepared for the future. Wipotec is happy to provide support for any further projects and is pleased with this successful collaboration. ▲

/ Safe Discharging with Sensitivity

Even delicate products in standing or open containers must be checked and, if necessary, gently sorted out without any speed loss. Wipotec has now introduced a multi-segmented rejection curve for precisely this purpose.



Multi-segmented rejection curve

Ideal for upright containers, as it is absolutely accurate even with unstable containers

- Flexible to use thanks to easy realignment with product height
- Reliably high throughput rates of up to 400 pieces per minute
- Hygienic design – completely waterproof up to protection class IP69k

When manufacturing delicate or unstable products, such as glass bottles or aerosols in narrow cans, particular care is needed when handling the packs.

This applies to the transportation and handling of the items as well as to the ejection of any detected defects. A multi-segmented rejection curve now handles this reliably, even at maximum throughput.

Up to 400 pieces per minute!

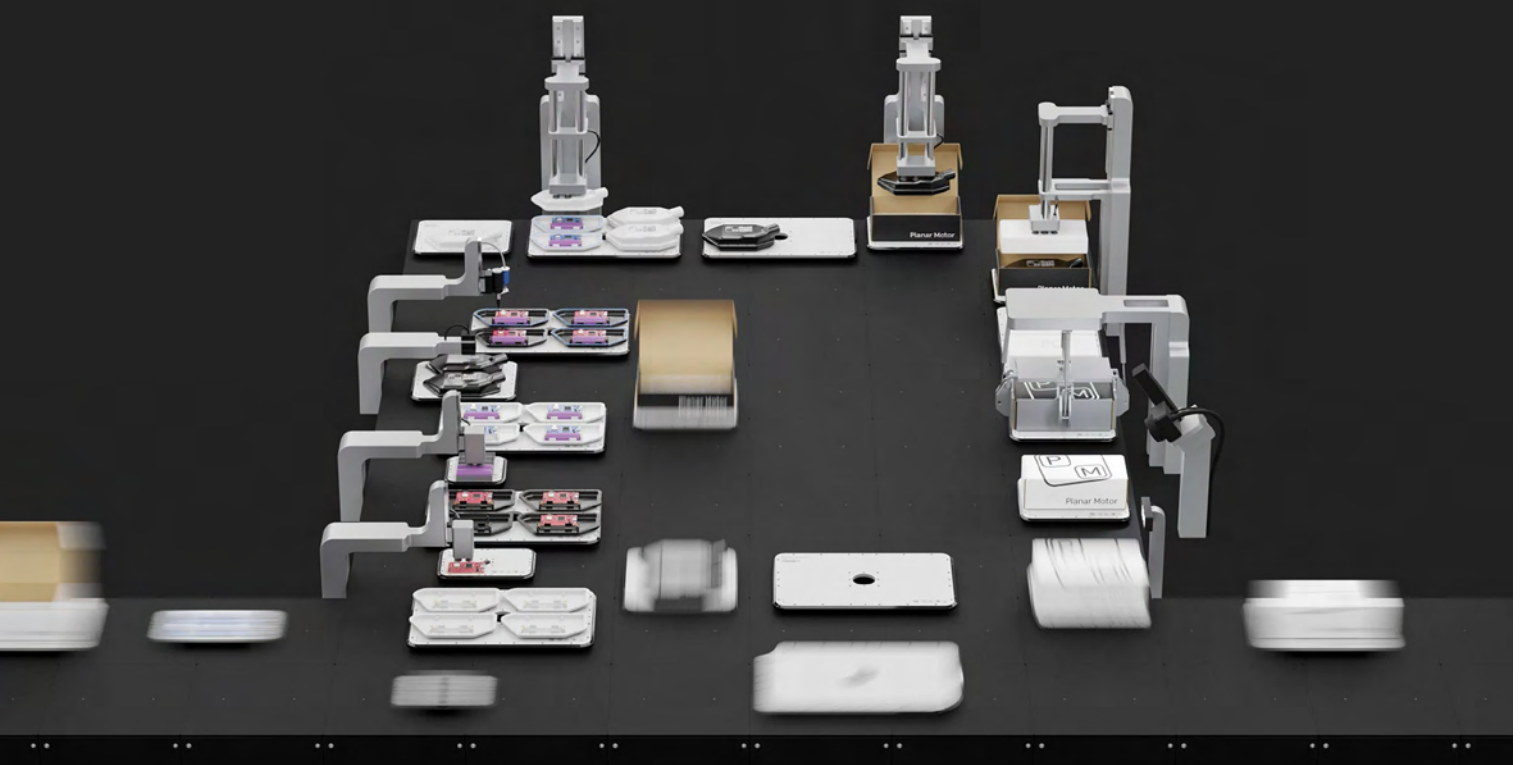
Without slowing down the product flow, the individual finger segments unfold automatically as soon as the ejector is required. The packaged goods are gently guided onto a separate conveyor belt, for example, where they are available for reinspection. If additional modules are integrated in addition to the central weighing unit, such as a metal detector to identify foreign bodies, several diverters can eject the goods.

Flexible Use

If products are changed frequently, the height of the “fingers” can be adjusted in just a few simple steps. Thanks to its durable and robust design, the multi-segmented rejection curve is also suitable for challenging environments where hygienic wet cleaning is part of the daily routine, for example. As part of the integrated checkweigher, the rejection system is thus the perfect solution for food manufacturers. ▲

/ **The Future is Now** – Innovative Magnet Transport Technology plus Precise Weighing

Today, magnetic transport systems are already optimizing the production lines of tomorrow. The movers glide effortlessly above the production line, carrying a diverse range of products. Wipotec developed a special weighing solution for this that weighs accurately to the nearest milligram.



New technologies and functions are constantly being introduced into production lines to make them more modern and compact. An intelligent transport system with a modular design that combines a variety of functions in a small space has proven to be a great advantage here.

Precisely in the Balance

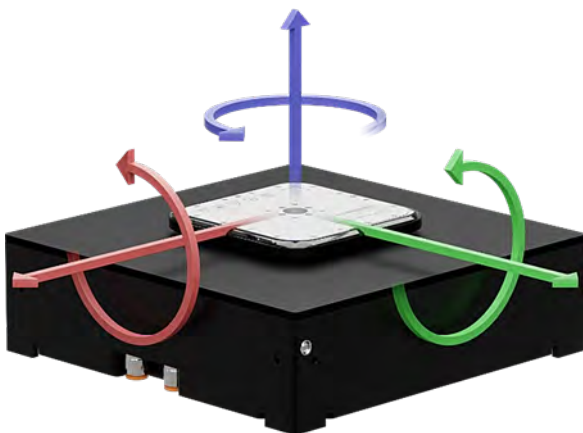
A magnet transport system basically consists of two elements. The innovative technology is based on a surface made up of identical plates, on which individual movers move, transporting products from A to B.

Strong magnetic fields ensure that a mover never comes into contact with the ground during operation, but instead floats directly to its destination, so to speak. This helps to prevent wear and tear on the transport system. There are no toothed belts or drive rollers. The maintenance effort for a system remains relatively minimal and the risk of sudden failure is significantly reduced.

In combination with advanced hygiene concepts, the transport system is thus suitable for demanding production environments where precision is still required, as is the case in the pharmaceutical and cosmetics industries, for example, or in food production.

Maximum Mobility

But the real highlight is the freedom of movement that every mover has. Instead of being restricted to moving in the direction of a fixed conveyor belt, it can be maneuvered in six possible ways across the magnetic plates: forward, backward and diagonally, at different heights, tilted sideways or turning on its own axis. A corresponding controller automatically ensures that the process is carried out correctly. This controller can take charge of the navigation of several hundred units – collision protection included. This freedom of movement in all directions allows for completely new production concepts and machine arrangements. >>



6 degrees of freedom: precise movement for every situation

Our partner


Planar Motor Incorporated

Established: 2016

Location: Head office in Vancouver, Canada

Products: Magnetic conveyor systems

More information:

 planarmotor.com

Shaping the Future Together

The only thing missing from such a system was an integrated weighing solution that could accurately determine the weight of delicate products such as vials or syringes in pharmaceutical production, or creams or perfumes in the cosmetics industry, as well as chemicals or foodstuffs. Wipotec's tried and tested SL-M-FS Weigh Cell is used for this.

It is installed upside down above the transport system so that the movers can approach the Weigh Cell from below. To do this, the mover lifts up, moves the product into the collar attached to the weighing platform and then lowers itself, thereby suspending the product in the load pick-up.

Thanks to the latest weighing technology, the results reliably reach the milligram range. The mover then takes the weighed product by rising again and lifting the product out of the pick-up. Depending on the desired application, a variety of items can be easily weighed using a single Weigh Cell.

Since the operating principle is based on electromagnetic force compensation, the challenge in developing this solution was rather to exclude interactions with the permanent magnets of the transportation system. This feat was clearly a success. ▲



Positioning of the product on the weigh cell

/Efficient Solutions for Intralogistics: Dynamic Scales in Focus

Modern intralogistics requires precise and efficient processes. In this context, catchweighers play a central role. In an interview with Dietmar Donskoj, Key Account Manager in the Mail & Logistics division, we examine the trends and future of intralogistics, the possible applications of our scales and the challenges entailed by this environment.



Dietmar Donskoj
Key Account Manager

has been working at Wipotec since 2016. Until 2023, he worked as a project manager in the mail and logistics department, developing solutions for our customers' requirements in close contact with our customers.

He has been applying the broad experience and in-depth technical knowledge he gained in his work as a key account manager, advising our customers on the best way to use our products. His focus is Asia, which is of both professional and personal interest to him. On his regular trips, he enjoys meeting new people and old acquaintances from other cultures.



What are the typical applications for dynamic scales in warehousing and the intralogistics sector?

Our scales are used in a wide range of applications, often for example in the feed-in zone before a sorting system. Here they measure the weight of parcels before they enter the logistics or sorting line. This protects the downstream technology and ensures smooth operation.

They are also used in postal weight determination to determine or verify franking – that means revenue protection. Another important area of application is quality control in production plants or warehouses. This is where the scales determine the weight of parcels and make the data available to the higher-level system for comparison. This ensures that everything is complete and meets the requirements. So we often come on board in the course of automation.

Which scales do your customers use and what makes them stand out for this application?

Our portfolio includes dynamic scales that are specially designed to meet the requirements of intralogistics sector. One example of this is the HC warehouse scale, which we developed in close collaboration with customers. We have talked to some of the most well-known department store operators, as well as their service providers and OEMs, to understand exactly what requirements they place on their scales.

In doing so, we realized that the speeds in intralogistics are significantly lower than those we faced in traditional parcel service applications. In most cases, smaller units are also processed here.

The performance of our high-end scales was therefore not necessary for this application. Above all, cost-effective solutions are needed here.

These scales combine the best technologies from our high-end solutions with the requirements for a more cost-efficient variant. This means that we also implement our proven transport technology, precision and quality in the more affordable models, such as the HC-Warehouse. The durability of our systems is also a major advantage. High-quality workmanship ensures maximum operational readiness and low service requirements, which in turn minimizes life cycle costs. So customers also get the familiar Wipotec quality in this segment.

We now have more than 350 warehouse scales in use at 40 customers in over 20 countries. If higher speeds were required in exceptional circumstances, we used our HC-SL, which was specially developed for fast processes.



HC-A Warehouse

What challenges arise when implementing these systems and how do we address them?

One common challenge is cost efficiency. When manufacturers cut corners on the product, it is not uncommon for service costs to exceed acquisition costs after commissioning. We therefore prepare the commissioning of our scales internally as far as possible. Our goal is to make the systems as close to plug-and-play as possible.

In practice, all that remains to be done is to remove the transport lock, adjust the height, zero the scales, and test communication.

A trained employee can have the scale up and running in half a day. We also made sure that the interface is user-friendly and streamlined, so that it remains easy to use.

What advantages do our dynamic scales offer customers who already use other systems from us?

For existing customers, our scales offer a clear advantage: Everything from a single source. Customers who already use our systems, whether in production, packaging or logistics, benefit from our combined service, shared maintenance, and rapid repairs.

This holistic approach is very attractive for large customers, as they can rely on a single point of contact. Incidentally, this applies particularly to customers who use our checkweighers, marking systems or X-ray scanners, for example.

What trends are we seeing in warehousing and intralogistics, and how are our scales contributing to them?

A major trend is the demographic change that is becoming apparent in the major industrialized nations. There is a shrinking labor force, which greatly increases the need for automation. At the same time, digitalization is leading to more and more small shipments being sent – which in turn is increasing the demand for efficient systems like our scales.

I am always surprised at how many processes in highly industrialized countries such as Japan and South Korea are still done manually. Development is simply progressing so quickly that the demand must somehow be met first, after which the level of automation is added. This potential is currently enormous.

By using modern communication systems such as ProfiNet and Ethernet IP, we ensure that all process data is reliably detected and transmitted.

Our Predictive Maintenance, which determines the optimal time for servicing to avoid breakdowns and maximize the lifetime of the scales, is also completely up to date.

What does the future hold for our heavy-duty scales in the intralogistics sector?

We continuously develop our solutions and stay close to our customers. It is important to keep a close eye on new developments in order to always be able to offer the best solutions. Our focus is always on the efficiency, precision and cost effectiveness of our products – everything our customers need in the fast-paced world of intralogistics.

In addition, we already use other technologies for marking, labeling, optical inspection and X-ray inspection in other industries. I can well imagine that these will soon also be of interest to our customers in the intralogistics sector. ▲

/ Inspection of Seawater-Based Nasal Sprays

The French Laboratoire de la Mer is one of the market leaders in the field of seawater nasal sprays. The innovative medical products from Saint-Malo require a special quality assurance system consisting of dynamic checkweighers and X-ray scanners.



Since 1988, Laboratoire de la Mer has been producing natural nasal sprays with 100% seawater that are entirely free of preservatives. The company uses two types of bottles: PET sprays and aluminum sprays, some with their own patents. The production facility in Saint-Malo is thus unique worldwide and requires customized solutions.

For effective quality assurance, Laboratoire de la Mer relies on X-ray scanners, checkweighers, and Wipotec's web-based Comscale4 software on the production lines. Only by means of reliable product inspection can the manufacturer protect the reputation built up over many decades and maintain the trust of consumers.

Smooth Transportation at High Speed

In particular, the larger bottles have a high center of gravity due to their liquid contents in combination with the shape necessary for the application, and are unstable as a result.

This property requires the products to be stable during transportation on the production lines and inspection systems to ensure that results are accurate at all times. Wipotec checkweighers with rotary star wheels are precisely designed for these unstable, cylindrical products.

In combination with an X-ray scanner, the systems reliably inspect the laboratory's plastic and aluminum bottles after filling at a throughput of 140 bottles per minute, ejecting non-compliant items – separated according to incorrect weight or quality defects. >>



The inspection based on the X-ray images obtained by HD-TDI cameras is carried out with the highest reliability and at such a speed that the cycle speed of the production lines is in no way limited.

Luc Snyders

Head of Application Technology
at Laboratoire de la Mer



Our customer

Laboratoire de la Mer


The world-famous brand's unique manufacturing methods preserve the richness of natural seawater, taken directly from the Bay of Saint-Malo.

Established: 1988

Location: Saint-Malo, Brittany

Products: Nasal sprays

More information:

 laboratoiredelamer.com



Customized inspection system
built to exact specifications

Flexible Inspection with a Star

Wipotec control systems can be integrated at any point in existing production lines, so Laboratoire de la Mer's lines did not need to be curtailed or modified. A dual-track rotary star wheel then ensures reliable transfer of the goods from the production flow to the scales. The bottles are separated, individually weighed and then returned to the production line.

The two-part rotary star wheel can be changed in a few minutes without the need for tools. Such a quick exchange of individual components makes weighing in production with a wide variety of formats much easier, since downtimes remain minimal.

The menu-driven operation via a 15" color display with touchscreen also contributes to this.

Three different scanning areas

The high standards of hygiene and product quality that this achieves remain crucial factors for Laboratoire de la Mer. In order to ensure that the nasal sprays supplied are properly filled and function safely, a full X-ray inspection of the filled, sealed, and ready-to-sell bottles is performed. The complex internal structure of the sprays ensures sterile delivery of the seawater solution, but also requires an inspection that is divided into three areas. The SC-S X-ray scanners check for the presence and correct positioning of the cap or atomizer in the upper area, the integrity of the pocket and rubber sleeve, and their position in the central and lower segments.

If the system detects any errors in one of the three areas of examination, the solution in the PET pouch cannot be properly atomized. To ensure customer satisfaction, the defective cylinder is thus ejected.



At the HMI of an X-ray scanner
in Saint-Malo



Wipotec HC-A-IS-D checkweigher

Reliable Inspection Systems

The X-ray scanners used at Laboratoire de la Mer have been specially integrated into a U-shaped conveyor area to prevent radiation leakage. The resulting elimination of curtains further favored the flawless transport of the unstable bottles.

At the same time, the belts run evenly and seamlessly through the scanners, which also helps ensure safe handling.

As Luc Snyders, head of application technology, explains, the manual reinspection by employees has been completely eliminated since the X-ray scanners were added. These are now automatically adopted by the inspection systems.

Thanks to software developed in-house and the images transmitted by the HD TDI high-performance camera, correct product analysis now takes only a fraction of a second. ▲

Machine used

SC-S X-ray scanner

Advantages

- Most comprehensive inspection for maximal productivity
- Compact design for easy integration



Machine used

HC-A-IS-D checkweigher

Advantages

- Easy, user-friendly operation
- Flexible integration into production lines for maximum efficiency

/Optimized Weighing Systems for Confectionery: Reliable Verification at High Speed

The confectionery manufacturer Josef Manner und Comp. AG processes 140 to 150 tons of raw materials every day at the main plant in Vienna for the famous Neapolitan wafers. Such quantities require a totally reliable system, which can only be achieved by using highspeed checkweighers.





The main benefit for us is accurate weighing of all products, so that we retain full control of the line.

Lukas Weiss

Technical Manager Vienna



Company headquarters in the 17th district of Vienna

Manner is a prime example of a successful family business that celebrates its origins while never relying on its past fame. Far beyond the national borders, tradition and innovation go hand in hand for the confectionery manufacturer. Manner has been owned by the same family for generations (and for the most part still is) and sells confectionery in over 50 countries.

The iconic Manner wafers, delicate Ildefonso chocolates or Casali chocolate bananas, as well as the unique Mozartkugeln by Victor Schmidt are the core product range. There are a wide range of products, whose production and packaging always pose new challenges.

That is why Manner relies fully on Wipotec solutions for quality assurance. Meanwhile, one of the state-of-the-art checkweighers is located on each packaging line. >>

Our customer

Josef Manner & Comp. AG


With around 700 employees, Manner delivers sweet delicacies from Austria to the world. For over 130 years, the head office of the global corporation has been located at the same location in Vienna.

Established: 1890

Locations: Vienna and Wolkersdorf

Products: Confectionery

More information:

 josef.manner.com

Continuous process optimization

“Every Viennese is familiar with Manner wafers in their convenient pocket-size pack from an early age,” says Lukas Weiss, who manages projects to optimize the company’s internal technology.



Checkweigher for quality control of Manner wafers

As the person responsible for the test equipment, he is very familiar with the systems used on site. “Calibration, gauging, the usual service calls – we check our systems constantly.” There is always a need for a fast and secure process that focuses on tried and tested quality features.”

“We also frequently renew certain elements in order to further improve processes.” Checkweighers from Wipotec help us to ensure the usual quality, on the one hand, and to continuously raise our standards, on the other.”

Quality must be just right

Quality assurance is usually an important aspect for confectionery manufacturers. In fact, in the interest of consumer protection, the food industry has strict regulations, which manufacturers must comply with.

Manner has already been certified according to the international food standard IFS for years.

As a member of EHEDG (European Hygienic Engineering & Design Group), Wipotec demonstrates a similar commitment and therefore knows how to meet all hygiene requirements.

This is simply an effective partnership with one party complementing the other perfectly.

Everything in view:
The HMI of a checkweigher





Wipotec is a renowned company and one of the few suppliers in the high-speed sector that can actually deliver the systems we need.

Lukas Weiss

Technical Manager Vienna



The fastest slices

Manner's flagship product is in demand: On record days, the Viennese plant processes up to 200 tons of raw materials for its Neapolitan wafers. The production lines must keep up with this pace.

Thanks to technology that has been fine-tuned down to the very last detail, more than 500 products per minute are processed on several lines. "We always keep an eye on technical progress," Weiss explains. "Particularly when high-speed applications are required, the only choice is Wipotec."

That is why we have one of the checkweighers at the end of each line, 24 here on site alone. The first system was installed in 1992. Since then, the company has been more than satisfied.

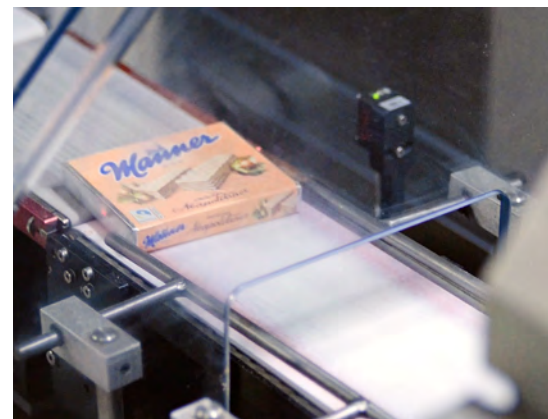
For good reason, the HC-A series checkweighers achieve the highest accuracy at throughputs of up to 640 products per minute. At the same time, the system remains compact and adaptable. Different modules can be added depending on the application.

The recipe for success in a partnership

In all respects, Manner's approach is characterized by values such as quality and sustainability. The collaboration with Wipotec is no exception. "Service calls can be scheduled at extremely short notice with the partners," Weiss reports.

"That's why our systems run so well." So far, we have always been able to call a technician in quickly when we have needed one. This is essential in an operation like ours, where a checkweigher occupies a critical point in the line. We are thus highly satisfied with Wipotec's service." ▲

Optimum product handling
with knife edge conveyors



/ Wipotec conquers the Tire Industry: Setting the Standard for Quality Control

The tire industry has to meet new quality standards and needs systems that make this possible. Our answer to this is the HC-MWS meter weight scale. In an interview with Jens Alder, Director Global Sales in the Mail & Logistics division, we examine the latest standards of the tire industry, the possibilities our weighing technology offers manufacturers, and clarify what tires have to do with mail and logistics.



Wipotec is better known in other industries to date. Why are we active in the tire industry?

We have been providing applications for the tire industry for years. In most cases, this involved heavy-duty weighers that were used for the final inspection of finished tires, as well as the inspection of intermediate products such as the cut-to-size wheel treads, also known as threads.

Similar systems are used for this application as in the field of parcel logistics, which is why this is covered by our mail and logistics division.

On the basis of these existing relationships, we were approached as experts in weighing technology to deal with new requirements. When it comes to the subject of weighing, we rarely turn down a challenge.



*With our help,
manufacturers can
achieve higher quality
standards.*

Jens Alder

Director Global Sales Mail & Logistics

What are these new challenges for tire manufacturers?

The production plants have certain quality requirements from different sides, which they have to meet. Firstly, there are statutory regulations. However, manufacturers also define internal standards, which results in a kind of competition between production facilities within a corporation. In our case, a market requirement was the deciding factor. Automotive manufacturers demanded stricter quality controls for OE tires, which are the original tires mounted at the factory. It is generally known that these tires are accurately matched to the models and their chassis. This makes variations within a type much more important. Maximum safety and the best driving performance also require the utmost precision. Raising these standards, but only checking the quality of the finished product, would likely result in a lot of waste. Naturally, this is something you wish to avoid.

That is why the material is tested as early as possible in the process. The position directly after extrusion is crucial – this means where the running surface and side walls still run separately as endless belts. This is the moment when the quality of the material thickness can be evaluated. And since the method of choice for this test is determining the weight per meter, this is where we come in. >>

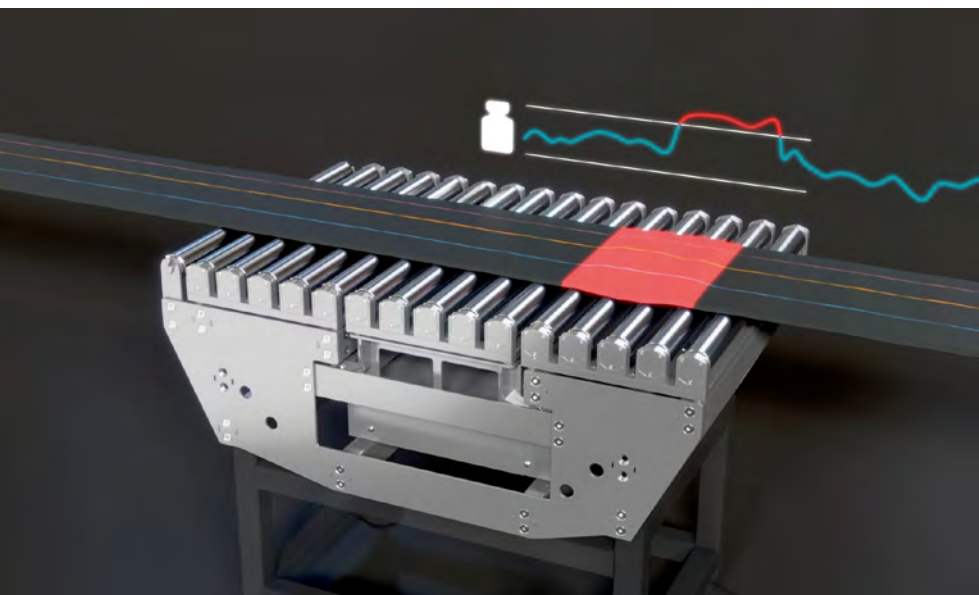


Jens Alder

Director Global Sales Mail & Logistics

has been working at Wipotec since 2006. He has been responsible for the Mail & Logistics business unit as Director of Global Sales since 2011. His team therefore focuses on the world's major courier, express and parcel service providers, as well as their sorting system manufacturers. However, the business unit is much vaster because the heavy load checkweighers used are also used, for example, in the intralogistics sector¹ and for bagged goods in various industries.

¹ see page 29



The HC-MWS detects the smallest deviations early on in the production process

What are the special challenges we face in this environment?

We are used to a lot in logistics. Even though Wipotec often deals with smaller, uniform, packaged products, in the field of logistics we have always had to deal with heavy, irregular units and a harsher environment than, for example, our colleagues in the pharmaceutical industry.

As you might expect, larger machines are also used in tire production. Their movements cause vibrations that can have a significant effect on the weighing result. In some cases, we found weighing systems that rested on separate foundations. In such cases, the floor was decoupled at a huge expense in order to have more accurate weighing results. This was completely unimaginable for us, because vibration compensation has been a feature of our scales for a long time. We measure these interferences simultaneously in order to calculate the weight value. This way, we obtain a more accurate result even without a separate foundation.

Although the environment in tire production is known to be hot, dusty and sticky, the challenges for us lay more in the product itself: determining the weight of a taut, endless, warm rubber band to an accuracy within one meter. Once again, our development and manufacturing under one roof has proven to be an invaluable asset. We have not only solved the task, but we are now presenting a product that offers manufacturers entirely new possibilities.

We are entering this market with a healthy dose of self-confidence and are setting new standards. None of the production processes we have seen so far featured scales that could even begin to deliver the reliability and precision of Wipotec scales.

After our first scales were installed, we realized that manufacturers are not yet used to having such high-quality data available.

For example, no procedures were in place for sorting out overweight or underweight articles. This is precisely the information that we provide reliably and early in the process.

Why does Wipotec work with this industry and compete with established suppliers who have been in the business for much longer?

Immediately after extrusion, our customer can avoid putting further raw materials, energy, and labor into a product that will not meet the quality requirements. The customer simply has to eject the product.

This clearly shows us – which our existing customers also confirm – that this level of quality was previously unknown. All the discussions we have had so far confirm that there is considerable interest in our meter weight scale.

The tire industry and Wipotec are just at the beginning phases of a groundbreaking collaboration that is full of new possibilities. ▲

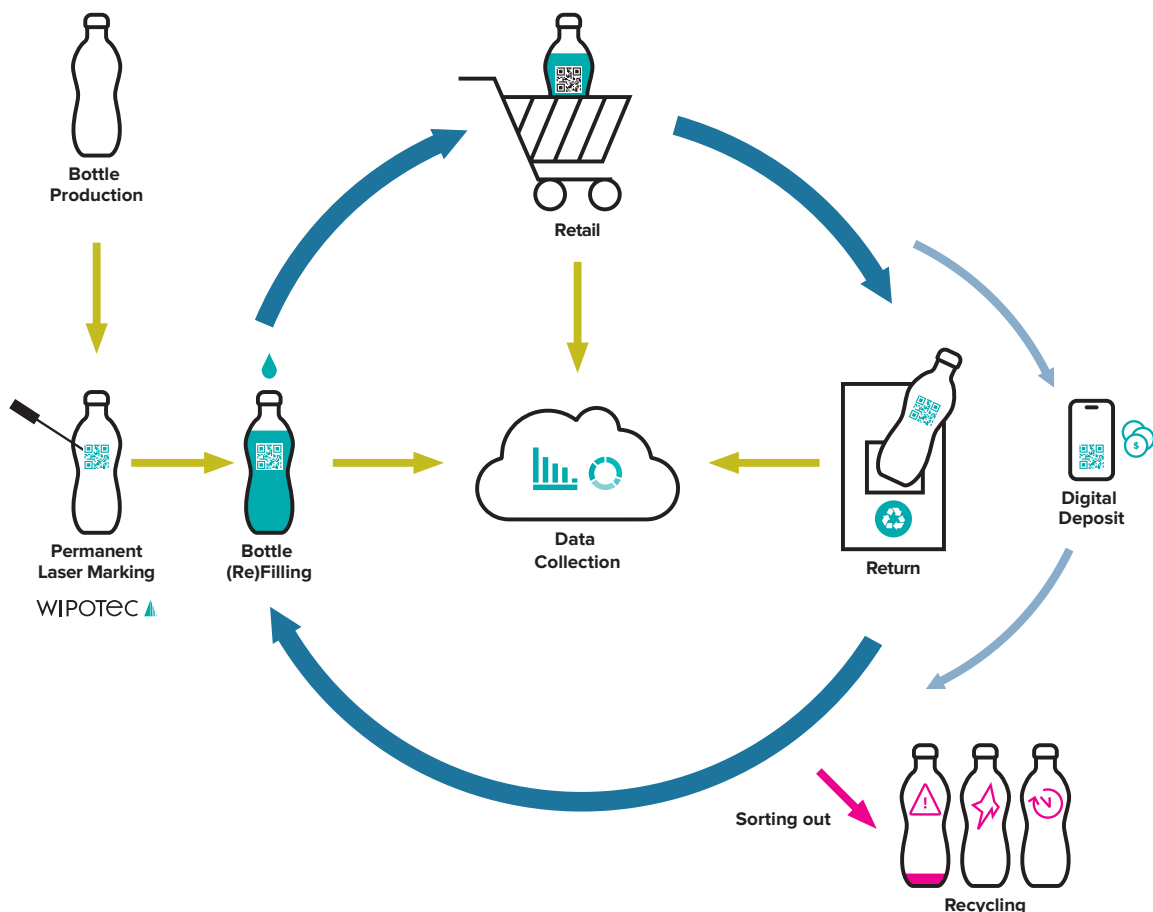
/Laser Precision for Sustainable Marking

In recent years, laser marking has established itself as a key technology for ensuring the traceability of reusable containers in the circular economy. In an interview with Thomas Krämer, Global Account Manager Product Marking at Wipotec, we learn about the milestones that have been achieved since the successful collaboration with Coca-Cola and what new challenges face us. From working with PET bottles at high speed to glass bottles, he provides insights into innovative approaches and the importance of sustainable systems for the future of the industry: how technology enables a transparent circular economy while also ensuring maximum efficiency.

Laser marking is actually nothing new at Wipotec. So, why is this aspect receiving so much attention now?

Yes, laser marking has been part of our TQS portfolio for a long time, especially for serialized data matrix codes on folding boxes. That is where our expertise originates. What is causing a stir now is how this is

applied to PET bottles. This material brings with it completely new properties. And we have mastered them. The development took place in close collaboration with our customer, Coca-Cola, and its test laboratory. The requirements are as high as they can possibly be in the beverage industry. >>





We now have a solution that is entering the market with the best possible foundation. At the same time, it is not just theory, but is already being used in practice by both bottle manufacturers and bottlers.

This environment also had new surprises in store for us, which we have dealt with successfully. And then there is the bigger picture, in which this special marking makes our system the key to a sustainable circular economy. I am really proud that we can make a contribution here.

Is this solution limited to PET bottles?

Although we are already working with other containers and materials, the focus is still clearly on the beverage industry – and there is good reason for this. Permanent marking of returnable bottles for automated data collection is becoming increasingly relevant for the entire industry.

In the beverage industry, where refillable bottles are already widely used, brand owners need solutions that go beyond today's standards. Many discussions still center on how the proportion of recycled material in disposable bottles can be increased.

There are simple adjustments that quickly lead to results. However, it is actually much more sustainable to use a bottle multiple times. We now have to ensure that our systems are used there – and every day I work to make this a reality.

What are the challenges in implementing such projects?

These projects are complex and require many participants. We talk to brand owners, bottle manufacturers, bottlers, and within these companies we talk to many departments that have very different interests.



Thomas Krämer

Global Account Manager Product Marking

In addition to his role as Global Account Manager for laser marking, Thomas Krämer is also Managing Director of the Wipotec in the UK – an unusual dual role that highlights his indispensable expertise and commitment. As the driving force behind this, he has been responsible for developing the entire area of laser marking, both technically and in terms of sales.

The close collaboration with Coca-Cola that led to the award-winning solution is just one example of his ability to successfully manage complex projects. His commitment to the team in the UK and the development of innovative laser marking solutions to meet our customers' challenges bear witness to his passion.



This entails a variety of challenges, which is precisely what makes it interesting. This required us to integrate the specifications in such a way that the codes on the bottles could be easily scanned both automatically on the production line and by the end user using a smartphone. What initially appeared an impossible feat has now become absolute proof of our commitment.

We have optimized our system to such an extent that the laser code meets the GS1 Digital Link Standard. This opens up completely new possibilities for everyone involved, from production to IT and marketing. So projects can take a long time, but I firmly believe that good communication and close collaboration pay off.

What technological developments can we expect?

We are working on further increasing the speed of marking to cover an even wider application area. Here, too, we repeatedly set new parameters based on our customers' practices. We are also going a step further: We not only mark PET, but also glass bottles.

We have managed to apply the marking on the cold bottle, so that bottles that are already on the market can be integrated into the system, which makes efficient fleet management possible.

The proof of concept has already been provided in collaboration with leading manufacturers and bottlers, and we are ready to proceed to the implementation stage with them.

This progress is helping the industry to take a great leap. We were already involved in establishing the first deposit system in Latin America. Let's see what else we can achieve.

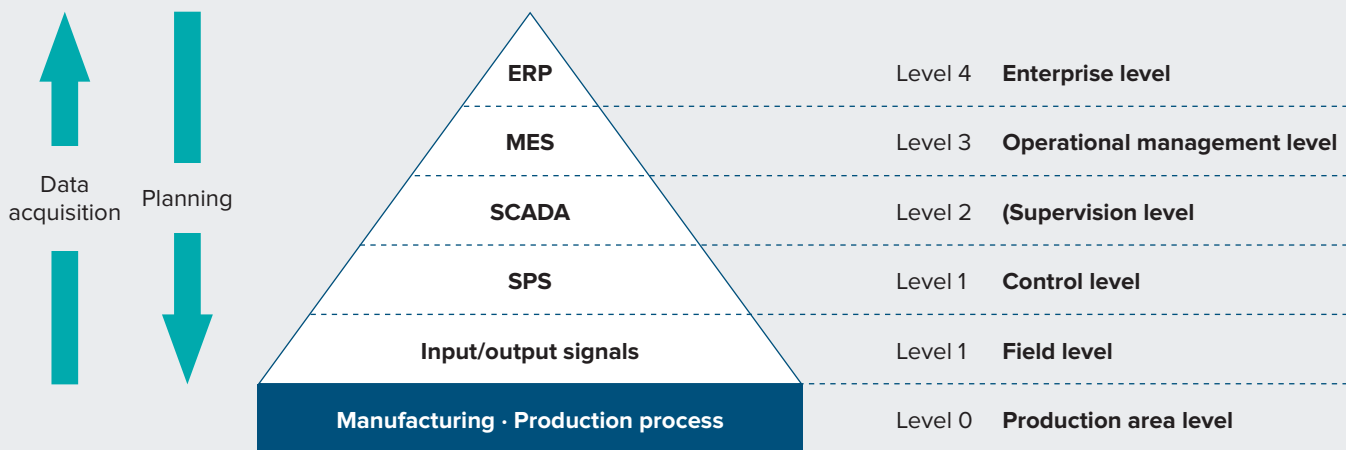
How do you rate the awards that you and Wipotec have received?

The awards that Coca-Cola received from GS1 Brazil and those that we received from GS1 Switzerland are a great honor. I see them as recognition of our hard work and confirmation of our commitment. It makes me proud that our systems can have such a positive impact. Gregor Mueller, Industry Engagement Manager Consumer Goods/Retail at GS1 Switzerland, says: "We are pleased to recognize Wipotec with the Best of Solution Partner Use Case award from GS1 Switzerland.

The audience vote at GS1 Excellence Day clearly shows how much this solution addresses the industry challenges and creates added value." This type of feedback motivates the whole team and me to stay focused on the future and develop innovative solutions that make a real difference. ▲

/ SCADA Connectivity of Checkweighers and X-ray Systems

Supervisory Control and Data Acquisition (SCADA) is proving to be an indispensable tool for many industrial companies today to continue to organize production processes efficiently. Flexible interfaces enable management and control of individual machines or entire lines across all sites.

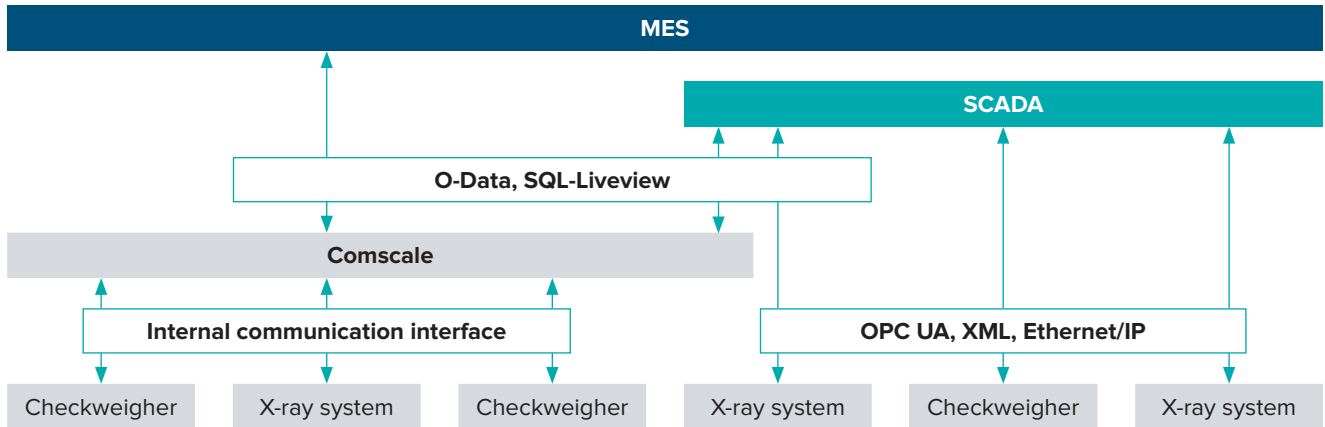


Data collection and documentation must also be implemented successfully at all levels of production. To this end, SCADA systems collect and record various operating data, thus helping to better monitor industrial processes. The aggregated data give companies important insights into the operating status of their equipment and reveal numerous opportunities for optimizing processes.



A company must contribute to the wellbeing and advancement of society – not just short term but long term.

Theo Düppre
Founder and CEO of Wipotec



Interfaces for connectivity solutions

Connectivity Solutions for All Areas

Wipotec's flexible product inspection modules offer a wide range of solutions for communicating directly with other systems at control, process, supervision, and management levels. One of the best-known options is SCADA: Supervisory Control and Data Acquisition.

Our technology can also be connected to existing SCADA systems via OPC UA, XML or Ethernet/IP. Alternatively, Wipotec's specially developed Comscale software, which exchanges either OData or SQL-Liveview data with a SCADA or MES system, is activated on the device.

Interface table for typical SCADA applications

For data transmission, we classify data into live data and real-time data. By real-time data we mean information or events that are reliable and available within a defined time, while live data is provided for display purposes in the lower single-digit second range.

Not all available information (data) that can be transmitted via real-time capable communication technology is required in real-time. Real-time capable data, such as individual weight values and binary I/Os, can be transmitted via Profibus/Profinet and EtherNet/IP.

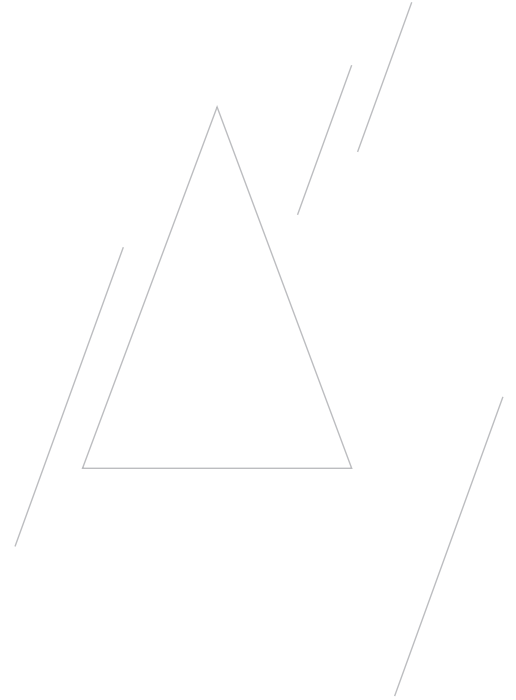
However, the actual data availability depends largely on the existing infrastructure on site. Live data are not considered time-critical and therefore have a higher latency. >>

Interface/ Function	Statistical data	Machine status	Error messages	Rejection images	Article change	Batch change
Comscale R+D	✓	✓	✓	✓ ¹	✓	✓
Comscale R	✓	✓	✓	✓ ¹	✗	✗
OPC UA	✓	✓	✓	✗	✓ ²	✓ ²
XML	✓	✓	✓	✗	✓	✓
FTP	✓	✓ ¹	✓	✓	✗	✗
EtherNet/IP (real-time capable)	✓	✓	✓	✗	✓	✓ ²
Profibus/Profinet (real-time capable)	✓	✓	✓	✗	✓ ²	✓ ²
Digital I/Os (real-time capable)	✗	✓	✓	✗	✓	✓ ²

¹ Not available for checkweighers ² Not available for X-ray inspection systems

Fully Connected with Comscale

Our in-house Comscale software enables data acquisition of machine-specific statistics, images of results and test reports, such as those used in measuring equipment control. In addition, processes can be monitored using configurable alarms or events to create an audit trail, which remains crucial for demonstrating Overall Equipment Efficiency (OEE). Our article management and other integrated functional tests make it easy to manage production in parallel.



Simple networking with Comscale:
Checkweighers and X-ray
inspection systems

Process Safety using Checkweighers and X-ray Technology

Thanks to SCADA-enabled checkweighers and X-ray solutions, adjustments can be made easily at the process and system level, either remotely or directly on site, and in real time. For example, linked systems trigger an alarm in the quality management application if defective items or even a line stoppage is detected so that corrective action can be taken without delay.

By reducing downtimes, increasing system efficiency, and ensuring product quality, checkweighers and X-ray systems with SCADA connectivity can help manufacturers improve the efficiency of their entire production processes.

Prepared for the Future

Wipotec is synonymous with high-tech solutions with maximum operating convenience for almost all customer applications. We are a one-stop solution for the entire value chain, from basic research, project planning, design and production to sales or service.

This makes us largely independent of suppliers and other external factors. This exceptional vertical integration sets Wipotec apart from other suppliers and guarantees application-specific flexibility, allowing us to set global standards in the production lines of leading manufacturers. ▲

/New Technologies for Future-Proof Production

In the constantly evolving world of packaging and manufacturing, staying updated on the newest technologies is crucial.



Together with product manager Daniel Anders, we take a look at groundbreaking developments and new solutions for marking and inspection in this interview..

In all areas, from printing, to labeling, to laser and optical inspection, he relies on advanced technologies that set new standards for quality and flexibility. Our innovations always meet the requirements of our customers and their processes.

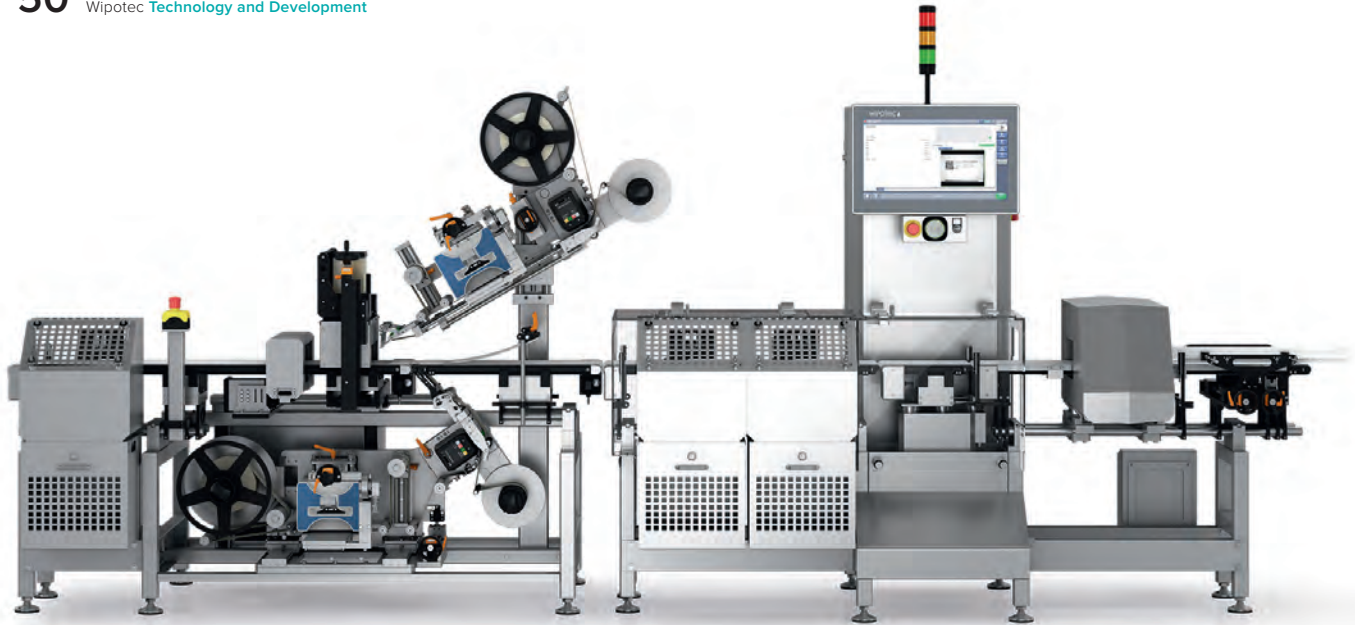
What technological innovations are currently available in our TQS portfolio?

Our portfolio has developed substantially and now goes far beyond traditional track and trace systems. Many of our solutions are now aimed at entirely different applications, for example, at the increasing requirements in the retail sector following the introduction of 2D codes¹.

This market development is currently in pilot projects and will soon become the standard – and we are fully prepared for it.

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Labeling, printing, optical inspection, metal detection, check weighing – all in one control system

Another innovation is that we have integrated piezo inkjet printers. These printers enable us to print on large areas of carton, and also on both absorbent and non-absorbent surfaces. This technology complements our existing marking solutions, while maintaining full integration. We have also developed laser systems for the permanent marking of reusable containers, which are particularly in demand in the context of the circular economy. This is a prominent and pioneering topic, which is why we are already in the process of adapting our solutions to other applications and materials². All these technologies offer our customers in a range of industries the opportunity to make their production processes more efficient and more flexible.

Why are more and more Companies Turning to Piezo Inkjet Printers?

Many of our customers want to be able to mark different materials using a flexible approach. For large formats, piezo inkjet printers offer significant advantages here, as they can work precisely on a wide variety of surfaces, whether carton, coated materials or non-absorbent surfaces. This flexibility is particularly crucial for companies that use a range of packaging materials in their production processes. Another advantage is that we have fully integrated this printing technology into our systems. This means that our customers do not have to operate separate printing systems, but instead receive a seamless and easy-to-use solution that also directly checks the print result.



Automated inspection of lids, seals and labels

This integration not only saves you time for article changes, but also saves on maintenance and training costs. The technology perfectly meets the requirements of customers who need classic packaging printing or also shipping information. In contrast to traditional labeling, there is no need for warehousing and changing labels in production, which makes carton marking more efficient.

² see page 43

Daniel Anders

Product Manager Track & Trace

As the architect of our TQS solutions, Daniel Anders plays a decisive role in developing our technologies. With his finger on the pulse of market developments and an in-depth understanding of our customers' needs, he has established groundbreaking systems. He is constantly working to improve and expand our portfolio and transforms complex challenges into effective solutions. Combining technical know-how with visionary thinking, he is driving the application of new technologies to redefine the standards for quality and reliability on our customers' production lines.

What Production Challenges do you see for our Customers?

Our customers operate in very different industries and face a range of challenges. Some are just taking their first steps towards partially automated production, while others are already highly automated and are always seeking ways to optimize their processes. For some, the focus is on marking and inspection, while others focus on integrating different systems into a smooth production process. Our portfolio is so flexible that we can offer solutions for both approaches. Whether you are integrating simple, scalable systems or further automating highly complex production lines, we have the right technology.

Our customers especially appreciate the fact that all our solutions are fully modular and tailored to their needs. These range from integration solutions without their own transportation to complete systems that combine printing, labeling, inspection, and even foreign body checks.

What does Optical Inspection bring to our Customers' Lines?

Automatic – and thus complete – inspection ensuring that every single product is correct is a task that concerns manufacturers from all sectors. The requirements for quality, correctness and the integrity of packaging and marking are constantly increasing. It is no longer enough to perform random sampling.

And it is not enough to simply install a camera. Our optical inspection systems check whether labels are correctly positioned, applied cleanly, and wrinkle-free. We take it even further by checking every piece of text and code to ensure that they meet the specified standards. This check takes on a whole new meaning when a code printed on the line is later reliably read at the supermarket checkout.

Our option for performing cap or lid inspections is particularly innovative. We check, for example, whether a screw cap is correctly placed and properly closed and whether a seal ring is present and intact. So far, this has met with a great deal of interest in sectors such as agrochemicals and motor oil.

In addition, many of our customers are now asking whether we can also fully integrate labeling, as they have recognized the advantage of combining all these process steps into a single system.

Our modular solutions allow us to combine not only marking, but also optical inspection, foreign body checks, and much more, thereby offering a complete production solution. We are constantly exploring new vision systems and how we can integrate them into our range, so that we will be able to react to new customer requirements in the future. ▲

Evolution in Full Swing: 2D Codes in the Retail Sector

In the future, 2D codes will be scanned at supermarket checkouts instead of the established barcodes. Retailers and manufacturers are working collaboratively to drive this introduction forward. Without any legislation – the numerous advantages speak for themselves. The possibilities offered by these codes are diverse, just like the printing technologies employed. Volker Ditscher, Director Global Sales for Wipotec's Track & Trace business unit, presents to us the most important updates from this global development.



Volker Ditscher

Director Global Sales Track & Trace

In many respects, it can be said that he operates between two worlds: From the already established Track & Trace system in the pharmaceutical industry to the consumer goods industry, which is just beginning to take advantage of 2D codes. From the everyday challenges in the production process to global standardization matters.



Already in the last issue of our customer magazine, we reported on the transition to 2D codes. So, what has been happening in the meantime?

The year 2027 as the target date for the migration has been moved a year closer. And this has been very clear. Over the past year, we have made significant steps forward. Not so long ago, our customers and partners, as well as visitors to trade shows and events, were still very hesitant when we broached the subject. For most of them, it was simply a completely new area. Many were skeptical as to whether it would even happen. But now, our discussions have taken a very different turn. Now we are talking about specific projects and solutions.

A milestone for me was the publication of the Global Industry Endorsement Statement by GS1. In this document, the retailer sector and the consumer goods industry have jointly committed to introducing QR codes as per GS1 standards. The list of signatories includes the biggest names from both industries: Carrefour, Dr. Oetker, Lidl, L'Oreal, Metro, Nestlé, Procter & Gamble, and many more.

These companies have recognized the advantages and are already working on implementation.

Furthermore, the subject has become more complex for us. It is not just about marking of products for the checkout or for consumers' smartphones. We mark reusable bottles with QR codes according to the GS1 Digital Link Standard in order to be able to digitally map their cycle¹. There are also always new specifications for codes on cartons and shipping labels that manufacturers can comply with using our solutions. The possibilities for using our systems are endless, which is why we are constantly looking at new applications and packaging types.

How can companies efficiently convert their existing production lines to 2D codes?

Everyone wishes to make as few changes to their processes as possible. That is completely understandable and also makes perfect sense from a production point of view.

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¹ see page 43

We also see again parallels here to the developments when serialization was introduced in the pharmaceutical industry a few years ago. Many have also chosen the path of least resistance for the time being, only to constantly encounter new obstacles during implementation. Specifically, it is about printing, labeling and camera technologies. In most cases, the technical requirements are simply not yet met. Investment is needed. We are constantly talking to customers who wish to expand these components themselves in lines. Some use independent devices from different manufacturers for this purpose, while others use at least superficially networked elements.

However, our approach is to combine all the required modules under a single central control system, including transportation, rejection, weighing and many other options. The added value of this deep integration is already clearly noticeable during commissioning and every day in practice. Our systems make production significantly easier thanks to their simple operation, user-friendliness and fast changeover. We also ensure interoperability with existing software systems through standardized interfaces. This not only makes it easy to automate processes, but also to transfer batch data securely for future coding. The current situation is the perfect opportunity for manufacturing and packaging companies to take the next step towards automation.

Those responsible for technical operations usually recognize this quickly, but they often do not have the key figures available to demonstrate this actual added value and to argue for it internally.

That is why we are doing everything we can to be involved in this migration from an early stage and to educate people. My team and I are constantly working on these solutions across the globe.

What Challenges does this Development Present for Wipotec?

We have made considerable efforts to expand our knowledge internally. It is important that our teams on the ground are able to support their customers in these areas across the board. There were also some initial reservations. This was particularly so among experienced colleagues who always have the best interests of their long-standing business partners at heart. Our customer service representatives are committed to providing reliable and practical information. Under no circumstances would we wish to abuse the trust placed in us just to make a sale.

Consequently, such trends are then also scrutinized critically. This is precisely the challenge we have set ourselves. Exchanging experience and dealing openly with criticisms have ultimately not only ensured acceptance, but also enthusiasm for the new opportunities that we can offer our customers. And what is even more important: we have created the basis for an exchange of ideas, the insights of which are incorporated directly in our product development. We are always mindful of our customers' needs. ▲



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