

WEIGH UP

WIPOTEC CUSTOMER MAGAZINE

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INTRODUCTION

THERE'S NO SUCH THING AS IMPOSSIBLE

HOW TO SET STANDARDS



Theo Düppre
Chief Executive Officer Wipotec Group

DEAR READERS,

The genius Albert Einstein once said that you can recognise a good idea by the fact that it appears to be impossible to implement from the outset.

I took Einstein's philosophy and turned it into the simple maxim "There's no such thing as impossible". I wanted it to express our customer-oriented innovation and our infinite passion for creating new value-added solutions for you as a customer of the Wipotec Group.

Against the backdrop of this binding solution, the Wipotec Group with its main contractors, Wipotec Weighing Technology and OCS Checkweighers, has rapidly developed over the past 28 years into an expanding global hidden champion of weighing and inspection solutions that sets standards in more than eight target industries. Alongside the company headquarters in Germany, we serve our core European market with subsidiaries in Italy, France, Spain, the Netherlands and the UK. We also tap into other market potential with our own overseas branches in the USA and China with the addition of an extensive global sales and service network.

Through the core business with Wipotec EMFR weigh cells, we have further cemented our market leadership by cooperating closely with almost all major machine manufacturers worldwide. We are also seeing a positive development in the checkweigher segment where our highly precise and ultrafast entry-level machines and complex multiple lane engineering solutions are used to cover a uniquely diverse range of applications. I am grateful and particularly proud of the longstanding collaborative partnerships which we have developed with key customers and I am equally proud of the increasing number of new customers in the fastest growing areas of Track & Trace, Mail & Logistics and X-ray Inspection within OCS. The drug safety market is growing due to upcoming regulatory deadlines and it is here in particular that OCS, with more than 600 installed TQS solutions (Track & Trace), has been ranked in the group of market-leading players. In 2016 it also won a large number of projects with CMOs and pharmaceutical companies.

We also adhere to the values of consistency and sustainability at the production site in Kaiserslautern. With an almost 90% level of vertical integration, not usual in the market, we offer the highest guarantee for quality and innovation. I call this the "Everything from a single source" principle.

My goal is to be completely self-sufficient by 2020 – we're already 70% there – by using alternative energies (solar, geothermal, water and wind power), thus making our contribution to a better future for our children. We also reflect this maxim in the development of our Corporate Social Responsibility activities which focus heavily on encouraging children and young people in the areas of sport and education. It's more from pleasure than obligation that I, as a successful entrepreneur, support a large number of educational projects at all levels from kindergarten to university. In addition to our trainees and dual course students, we also train inspection technology experts, responsible for the development of those ideas which are otherwise deemed impossible by our customers.

Ethical entrepreneurship, growth, diversification and innovation derived from your needs and those of the market will continue to be the defining parameters for our activities. We aim to provide the solutions that generate added value and further secure your confidence in us in the future. I personally and the entire workforce of all companies in the Wipotec Group vouch for this.



Theo Düppre

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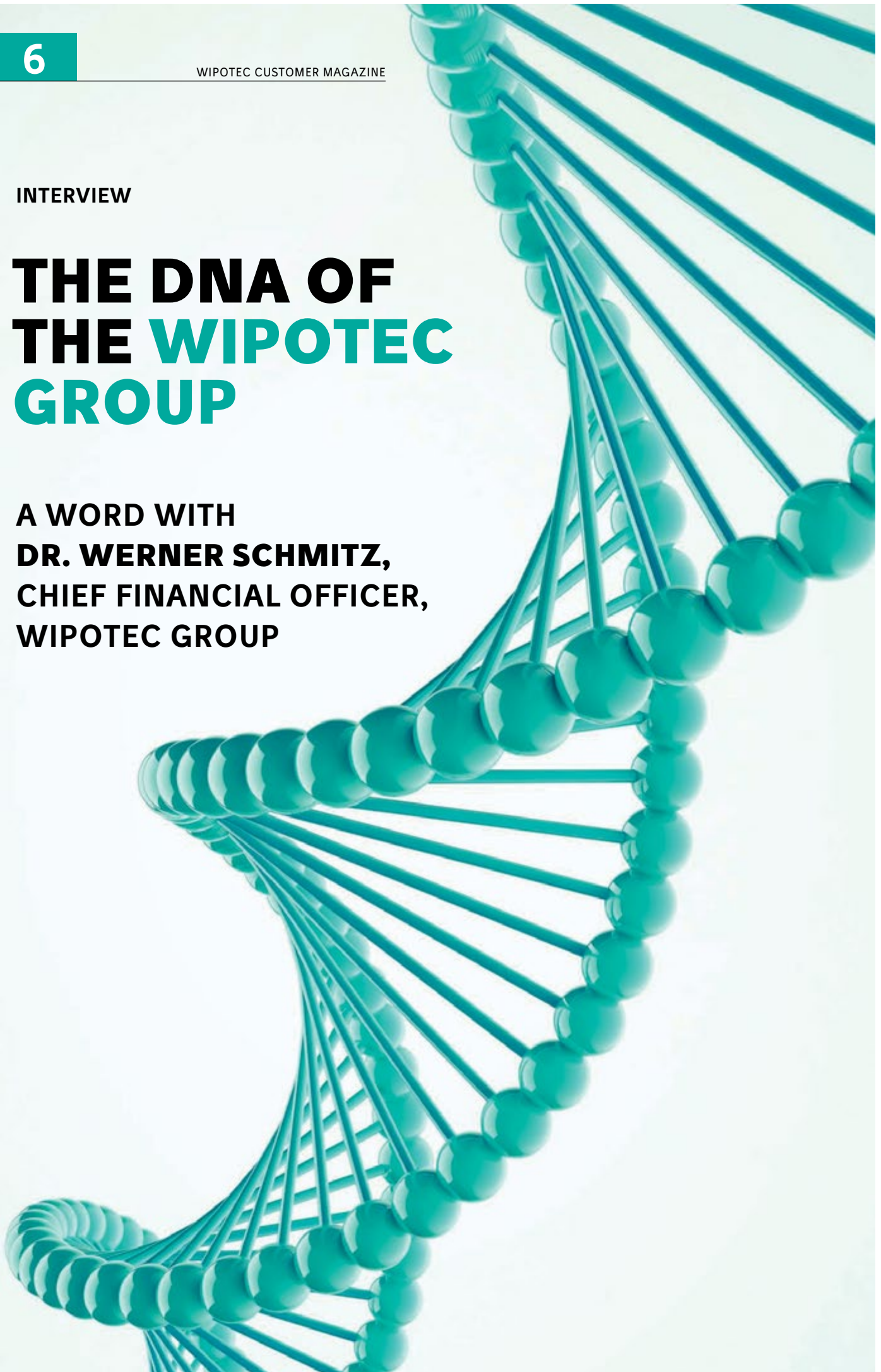
Photomontage of trade fairs in 2016

WEIGHING
HAM
METAL
TOTAL
INSPECTION
KEY
ACCOUNT
BUSINESS
THREE
STEPS
TO
SUCCESS
TRADE
FAIR
REVIEW

INTERVIEW

THE DNA OF THE **WIPOTEC** GROUP

A WORD WITH
DR. WERNER SCHMITZ,
CHIEF FINANCIAL OFFICER,
WIPOTEC GROUP





It's been possible to provide many customers with forward-looking solutions. New markets have been conquered with products that didn't even exist in this form a few years ago. I call that innovation and dynamism.



Dr. Werner Schmitz
Chief Financial Officer Wipotec Group

Mr. Schmitz, you've now been on board with the Wipotec Group for 6 months. What were your first and second impressions?

During my first walkabout, and even more so after further meetings, the impression I'd originally gained while I was still an outsider was confirmed: innovation and passion for new products and technologies are an exceptionally strong feature of this company's DNA. It's not only in the performance of the products where this shows up. This DNA is even more visible in those who carry it, the company's employees.

Even the figures speak for themselves, and of course as CFO I'm particularly interested in them. The company has grown very rapidly in recent years as a result of intensive demand in all business segments. It's been possible to provide many customers with forward-looking solutions. New markets have been conquered with products that didn't even exist in this form a few years ago. I call that innovation and dynamism. Considering again the financials: it's not just the figures, but what you do with them and how you use this information correctly.

Do you mean using information to drive forward strategic development or implement the targets set by the CEO?

Exactly. It's about information and operational processes. Both should support the management's freedom to act. Rapid corporate growth places high demands on the quality and stability of key operational processes. They have to grow organically and under control, even and particularly when the whole company is growing in all directions at once, three-dimensionally so to speak. This means in its range of products and services, in new technologies and in new markets, even geographically speaking.

The Wipotec Group has a highly motivated team of employees. They have not only kept these key operational processes running during the long growth phase but have also expanded and optimised them continuously. We have also implemented special project groups for this. In my capacity as CFO, I'd like to organise these challenges with my team. It's a similar situation when it comes to the information that passes through our hands. And it shouldn't only be large reference projects that are profitable but preferably all the other projects too. For this we need answers to



It's important that people see the financial organisation as part of the company that has a constructive task. This is why it's also necessary to spend more time with the individual business units, be that development, production, sales, service or marketing.

questions such as: Are all costs assigned transparently? Does the management have all the information required in due time so that it can make targeted decisions? Growing rapidly also means being able to make decisions fast. For this we need reliable information to base them on.

What do you have to bear in mind when growth is as fast as in the Wipotec Group?

Everything really. Of course, one essential task is to secure the Group's sustainable profitability and to guarantee the company's long-term financial stability. This includes actively participating in and supporting implementation of the corporate strategy. It also means spotting risks at an early stage, particularly those arising from complex external market conditions that might have an impact on the company. Another part of my daily workload is dedicated to managing and implementing operative administrative tasks: This includes implementing the finance strategy, managing cash flows, coordinating internal and external partners, such as accountants, auditors and banks.

We're interested in the risks. Tell us more about them.

There are always risks. But when things are going well, they normally recede into the background, if you like they drop below the perception threshold. When business is going well and the markets are dynamic, that's when, with high cycle rates, you really need economic early warning systems that sound the alarm in good time. This allows you to change course, even at high speeds, if those risks suddenly rear their heads again. Think procurement policy, human resources, foreign currencies, insurance, the environment and so on.

We're currently experiencing a period of low interest rates like we've never experienced before, with many positive aspects, as well as serious adverse impacts for a plethora of key market players. We need to take precautions with regard to long-term development of the interest rates and financial market trends. China, for example, imposed a very restrictive currency control

about a year ago. If you're unprepared when you're hit by such measures, you can lose your room for maneuvering faster than you think. We haven't always had to cope with these risks but the markets continue to develop and simply believing in globalisation won't save you from the hazards that you might fall prey to. So now more than ever, it's important to identify such risks early on and to respond to them appropriately. Our market dynamism should not suffer as a result!

And what about management control system?

I don't see myself primarily as a proactive information provider or a presenter of figures. It's equally important to have the financial expertise and analytical skills to underpin the strategic decisions. But it's also right, because of the last financial crisis, that CFOs have returned to concentrating more on their key areas of responsibility. The vital areas of cost management, risk management, cash flow and of course management control system are taking priority again. Nevertheless, I think that first and foremost, every operational director should be able to work out their "current status" in respect of their performance, himself, using the tools that we already possess or that we'll establish together.

How do you see the position of your department within the company?

It's important that people see the financial organisation as part of the company that has a constructive task. This is why it's also necessary to spend more time with the individual business units, whether that is development, production, sales, service or marketing. It's like this: nowadays we're consulted by managers from the business units about key aspects. This was not generally the case in the past. So it's important that the financial experts also familiarise themselves with the business units, understand the processes that take place there and work as a team. And that's exactly what we're doing. This will form the basis for good quality relationships between the departments of the Wipotec Group and will ensure that our internal communication is transparent. We call that organisational culture and we're proud of it.



E-MOBILITY

WIPOTEC GROUP: ENTRY TO E-MOBILITY

An e-Up for the company's fleet, an e-Up for Kaiserslautern University of Applied Sciences. Wipotec supports a joint research project on e-mobility and donates an electric vehicle.

Our own filling station on the company site? Now, anyone arriving by electric car can also refuel with green electricity at Wipotec. A station with two charging bays was recently installed at the West Gate while an electric vehicle was added to the Wipotec fleet at the same time. The renewable electricity which is available at the charging points comes from the nearby Hölzengraben solar park. Following completion of the geothermal plant, the company is now making a further contribution to the sustainable reduction of CO₂ emissions by using renewable energy.

It's not only the company vehicle that refuels with solar electricity,

the central production facility of the Wipotec Group in Kaiserslautern is also connected to a solar power plant. The company has invested in local solar technology and is now benefitting from cheap solar electricity across the entire site.

The Wipotec Group also donated an electric vehicle to the Kaiserslautern University of Applied Sciences. The background to this is a joint research project on e-mobility. The donated car is used as a test vehicle in the study. The project investigates the interaction between feeding domestic photovoltaic electricity into the grid and simultaneously charging an electric vehicle at work.

eUp!



The Wipotec Group's company filling station

INTERVIEW

INTERVIEW WITH MICHAEL KIRSCH,
GLOBAL SALES DIRECTOR
OF THE BUSINESS UNIT WIPOTEC WEIGHING TECHNOLOGY,
ON THE REASONS FOR LONG-TERM SUCCESS

WIPOTEC

GLOBAL MARKET LEADER

CE
PP-EC3000
0001730 | Max
PD:
SN: 0001730



Not standard practice:
all global markets are served
with the same high-quality
portfolio of weigh cells.



Michael Kirsch

Global Sales Director Wipotec Weighing Technology

Mr. Kirsch, what are the factors for the success of your market leadership?

We're a high-tech company and we develop, for and with our global customers, weighing systems whose superiority and performance centres on the Wipotec weigh cell. It's based on the EMFR (Electro-Magnetic Force Restoration) principle. One of the advantages of the Wipotec EMFR weigh cell is its very short settling time and sampling rates of one millisecond. It delivers very precise weight results extremely quickly and reliably. It's also easily integrated into the systems of our machine manufacturing customers in a way that's space- and cost-saving. As a result, inline processes influenced by weighing technology can be controlled and optimised even in extremely high-speed lines. Other advantages are also found in product features such as robust mechanical design, reliable overload protection of the weigh cell and an additional flexible dead load range for customer structures which together generate a very high level of customer benefit.

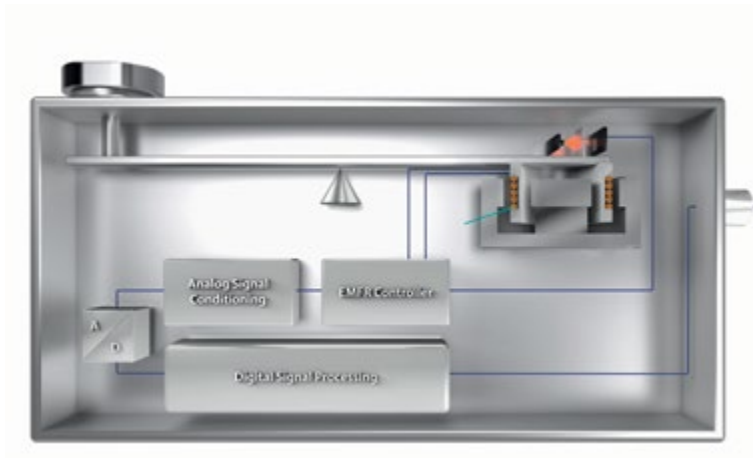
We should also mention our unique AVC (Active Vibration Compensation) technology which uses intelligent algorithms to guarantee precise weighing results even in high vibration

environments, e.g. due to forklifts or pulsed machines, without compromising at all in terms of overall performance.

I consider the second factor for success, after the product itself, to be our sales approach which is based on long-term partnerships. Customers generally see us as a consulting partner and we also invest a great deal in-house to meet the demand this places on us. Being in the market for over 25 years, we have successfully implemented the global projects with leading machine manufacturers. The ability to identify trends in good time has provided us with extensive expertise in how to integrate weighing technology best. It's also definitely worth mentioning the speed and quality of our expert service which is always available to our partners.

Our market knowledge has also been incorporated in the wide range of Wipotec weigh cells and weighing kits. These, as our customers confirm, cover relevant industry- and product-specific applications. The breadth of models and types, supplemented by a large number of interfaces and support for all common fieldbus systems, enables fast and efficient integration. For any requirements that can't be covered with existing types, we are





EMFR

The crucial advantage of a weigh cell with electro-magnetic force restoration (EMFR) from Wipotec is its extremely short settling time and sampling rates of one millisecond. Compared to the weighing principle with strain gauges, it provides very precise weights significantly faster and is also straightforward, space- and cost-saving to integrate into existing systems.

the machine manufacturer's best engineering partner when an optimum customer-specific application has to be found.

What does the Wipotec Group's principle of "Everything from a single source" mean in terms of the best integration solution for your customers?

Customers of the Wipotec Group benefit from an almost 90% level of integration, which is not usual in the industry. First of all, this enables us to provide market-leading quality and reliability. From basic research and design to the entire production of the weigh cell, from the monoblock to the finished product. All of this is implemented within the value chain at the main plant in Kaiserslautern. Customer-specific requirements are worked out together in close contact with our customers, drawing on the knowledge of experts from areas such as mechanical design, engineering, project management and software development. This enables us to rule out possible sources of errors in advance and to integrate the Wipotec weighing systems smoothly and flexibly.

Which customers benefit from your OEM solutions and which market trends do you take into account?

We're proud of partnerships with almost all the well-known machine manufacturers, and of course we also work with smaller specialised companies that integrate our OEM systems into their machines and lines. The industry focus is on the pharmaceutical

and food sector although we're also growing in many other industries, such as the cosmetics market, as the positive reputation of our solutions has also found its way into there.

We set up the subsidiaries in addition to our headquarters in Kaiserslautern in line with market criteria. So we entered Italy very early on to develop customer potential in Europe's second largest machine manufacturing market, which has since matured into strategic partnerships. As a result, our sites in Germany and Italy cover the whole European market. In addition to this, with our US presence in Atlanta, we have established a sales and service centre which serves the North American market. Due to the increased demand for high-performance weighing solutions in Asia, we are intensifying our commitment by means of strategic partnerships in China and India.

We're currently seeing the strongest market dynamism in the pharmaceutical sector. There are two major topics of interest for us here: the outsourcing of production capacities to CMOs and the trend towards increasingly small pack sizes and filling quantities. The latter, of course, is also a crucial topic in the food sector, if only due to demographic, consumer-side changes.

In case of contract packers or contract fillers, the pressure on margins and rapidly changing product orders, requires flexible and efficient processes. This naturally also has implications for



Wipotec weigh cell production, Kaiserslautern

the role of the machine manufacturer and consequently also for the OEM for weighing technology. This is where the advantages of our integrative approach, already described, put us in a good position.

We're also in the best position with respect to maximum flexibility due to the new Wipotec MMS (Modular Multilane System) which boasts an intelligent, modular and open construction. In line with customer requirements, it's scalable and has AVC (Active Vibration Compensation) while maximum flexibility of integration and the potential for changing the number of lanes in the future sets it apart.

What have you got planned for 2017?

I'd like to stay on course for sustainable growth, particularly by developing our longstanding partnerships that positively challenge us and continue to strive in taking steps forward each year. This includes the projects with or acquired from new customers,

especially in the countries mentioned outside Europe, as well as within the area of product development, targeting increasing customer demands and varying market requirements. We notice these through market observations and close cooperation with our customers. We recently introduced a new generation of slim weigh cells, enabling us to implement centre to centre track distances of 25 mm. It goes without saying that these weigh cells are also available in the MMS configuration referred to previously with or without AVC. Always focusing on the applications, we will be presenting some innovations at the upcoming Interpack 2017 that our customers can look forward to.

There's one thing that won't change in 2017 and that's our philosophy of developing the best possible solution for our customers worldwide with maximum flexibility and dedication, and thus contributing to increased customer satisfaction, production efficiency and productivity.



CHECKWEIGHERS

AN INTERVIEW WITH INGOLF LATZ,
SALES DIRECTOR CHECKWEIGHERS AT OCS,
ABOUT CHECKWEIGHERS, MODULAR SYSTEMS AND
WEIGHING UNDER DIFFICULT CONDITIONS



Mr. Latz, what distinguishes OCS checkweighers from your competitors?

If you mean the end product, then it's imperative to look at the early stages – how are our systems created, how are they put together? The Wipotec Group, parent company of OCS, develops and manufactures all the key components itself. That is to say, even more than in medium-sized machine manufacturing in Germany where success is based on a high level of vertical integration. Absolutely all performance-critical components, which guarantee the performance of our checkweighers, are created in our development department. In addition to the weighing technology, we do not purchase anything out of house, including the motors, drives, belts and software. Even our circuit boards are developed and assembled in Kaiserslautern. This means we have control over the life cycle and product development and therefore makes us independent and flexible. This is just one example of the many benefits that we offer.

We specifically develop the performance-critical components in-house. Therefore we know exactly how to move the performance limits of our systems upwards. There are lots of adjusting screws in assemblies that interact with each other. As a technology owner, we can balance the overall system so perfectly across all the components, that it measures steadily and reliably even at the highest speeds. That's why we are premier league players, particularly when it comes to high-end systems.

So it's more than just about precision weighing?

Anybody can weigh. However, it really gets interesting when you add speed to the mix, especially with difficult products and high precision. When it is all about throughput rates, and reproducibility at high speeds, as well as low tolerances or multiple lane operation. We only install our own key components, which we are able to trust in, and then put our systems together using a modular system. So, even our entry-level machine benefits from the servo motor that's used in our high-end systems. The modular system guarantees lower unit costs due to large numbers of standardised parts, and the effect of this is increasing steadily for us as the years go by.



As a technology owner, we can balance the overall system perfectly. That's why we're premier league players, particularly when it comes to high-end systems.



Ingolf Latz
Sales Director Checkweighers OCS

You're saying the modular system saves money? For you and for customers?

That's exactly what I'm saying. We don't stockpile as a matter of principle, we operate make-to-order production. By using a modular system we can assemble the required components in each specific case, thus limiting the need to keep a large number of versions available for product series that have already been running for some time. You can order systems from us that have been on the market for 10 years or more and we can deliver. This benefits customers who perhaps already own 20 of our systems, whose experience of working with them has been very positive and who want to expand their line even further. I'm confident about the investment-proof durability of our products. All the systems that we build and supply benefit from any further development of the individual components within the module.





The demand for convenience functions is increasing in all sectors and more automation is requested. Both trends play right into our hands.

Customers, however, can also achieve cost savings in their businesses simply by installing and running our systems. Just think about the cost of product losses due to giving product away. Our checkweighers are accurate according to the application and guarantee the lowest tolerances. Our weighing instruments are highly precise, can identify overfilling or underfilling and, if desired, read just the filler. Or think about loss of image costs. They can be incurred as a result of recalls due to quality problems. Nobody wants something like that to happen and with our systems it can be effectively prevented. Take faulty ejection rates, they should be as low as possible because they too represent avoidable production costs or reworking. Last but not least, the maintenance costs: OCS systems are extremely reliable which means fewer spare parts, fewer downtimes. The long service lives of our systems are not mere chance, they're the result of intelligent engineering, a high level of vertical integration and our expertise in the field of weighing, inspection and product handling.

What's the advantage of networking checkweighers?

We call this technology, Comscale4. It is not only checkweighers that can be integrated with this software. We supply this technology in combination with all of our product range and is used mainly in process control. Comscale4 is a global "data collector" and it can be used to optimise the monitoring and documentation of your production data. This applies not only to checkweighers but also to X-ray scanners or metal detectors. Comscale4 makes your current production data available online. This means that you can network virtually any number of our checkweighers or network other systems with each other at different sites. You then have access to all the available data from your PC or some other central point and can create or view statistics and evaluations. This gets you a whole lot further with your quality assurance. For example, you can see your filling accuracy across all lines, the quality of a single production line and you can compare them with each other. Networking with Comscale4 also provides you



with key performance indicators in relation to plant availability and machine efficiency.

Let's talk about areas of use. What do you consider to be the main industries for checkweighers?

The main industries are food, chemistry, for example aerosols, and pharmaceuticals. It's a cutthroat competition; many customers are replacing their old systems with more powerful ones that have more functions. In the past, we only carried out metal detection, nowadays we use X-ray inspection to supplement the search for foreign bodies. Much greater importance is attached to quality assurance now than a few years ago because there's been a sharp rise in the quality demanded of products and in the liability risks for faulty products. Legal requirements have changed or voluntary quality documentation has been introduced. This is why our customers in all the industries mentioned are investing





in high-end products, particularly in inspection and weighing technology, to obtain reliable and verified results. There are also special factors, such as serialisation pressure in the pharmaceutical sector, that drive the markets. There is increasing demand for convenience functions in all sectors and requests for more automation. Both trends play right into our hands.

And what about regional developments? Which regions in particular are earmarked for growth?

We see the emerging markets as a special challenge. By this I mean developing countries, which are no longer showing the features typical of such countries. They have advanced so far along the process of industrialisation, that they can produce western products in their own country, where they may previously have been importing from OECD countries. Our focus here is on countries where this applies to the food sector. But we also have

an eye on those that already have comparable labour productivity even if the wage level is considerably lower. We're concentrating on countries which produce and pack for export, the way contract packers do for instance. This is where we're finding an increasing number of production facilities for the packing of foods or pharmaceutical products. Examples of this in the food sector are heavyweights like India. There are also more exotic countries, such as the Seychelles, where tuna is tinned locally, or the Ivory Coast, where the same applies to pineapple. Packaging is carried out locally but is subject to the international requirements of the target or exporting countries. A close-knit service network such as that of OCS is therefore an advantage as it has its own employees in the USA, China, the UK, France, Italy, the Netherlands and Spain. There are six service support points in Germany alone. The other regions are supported with the help of service-trained agencies.





INTERVIEW

CHINA

WE SPOKE TO
MICHAEL CHEN,
CHIEF PROJECT ENGINEER OCS
SHANGHAI, CHINA





Mr. Chen, how do you find your customers in China – or do your customers find you?

We mainly find our customers by taking part in trade fairs and similar events. Trade fairs are often used for presentations and demonstrations, and in China they are still very important places for meeting customers in person. This is why we exhibit at a lot of trade fairs. 90% of our customers are from the pharmaceutical market where the OCS name is not yet consistently well-known. Our own OCS subsidiary in China was only set up a year ago.

How do you rate the market opportunities for the OCS products?

The opportunities are good but there are also challenges. More and more local competitors are appearing on the scene.



Michael Chen
Chief Project Engineer OCS Shanghai, China

Prices in China are lower than elsewhere in all sectors. This applies particularly to the pharmaceutical sector, where people are prepared to pay more for the right quality. Machines in this area have a longer life expectancy than in other industrial sectors because they are reliable and therefore save a lot of money over their life span. "Save money in the future" is a widely accepted argument here. OCS systems are established as premium products in the upper segment and have proven themselves to come out on top when there is a chance to demonstrate and present them with our competitors. For our customers here in China, it's important that the systems are adjustable within wide ranges and easy to configure. The setup times must be short. There's an assumption in production that there will be a number of conversion phases given the rapid changes in the products manufactured.

And how are the markets for OCS products growing?

The markets in China are continuing to grow more strongly than in established industrialised countries. This applies particularly to the pharmaceutical and food sectors since they are starting from a much lower base level. We recently installed a comprehensive Track & Trace solution at one of China's largest pharmaceutical companies. The high-precision weighing of our tare/gross systems ensures that the correct number of tablets is always present in the pill box when filling tablets with broken tablets also being identified in the process. We're also seeing an increased demand for machines that can be used in areas at risk of explosion.

What has impressed you particularly?

OCS has supplied the fastest machine installed to date in a production environment in China. It's been running without a single service request since its installation. By the way, some



MADE IN GERMANY

The big advantage of the OCS products is that we can use this attribute to advertise them – and an even bigger advantage is that the products keep our quality promise in an outstanding manner.

time ago we responded to our growing number of customers by opening our own subsidiary in Shanghai. The result is greater customer proximity in these markets which is very important to us.

What changes are you expecting in the near future?

We are expecting more changes by the legislative authority, especially fine adjustment regarding the Track & Trace sector. Specifically in China, it is crucial to follow the law because systems and processes here tend to develop a certain sluggishness if they're left to their own devices. In contrast, you'll experience unexpected momentum in Chinese markets when the specifications change. Then everyone wants to be the first to implement them, which does not only apply to the pharmaceutical market. The food sector will experience similar mechanisms, such as milk powder. We are also expecting changes for wines and luxury foods.

Does 'Made in Germany' help too?

There is no question that 'Made in Germany' holds an excellent reputation in China. Anyone who can afford it prefers German products; people appreciate German engineering, the quality and the virtually built-in reliability. The big advantage of the OCS

products is that we can use this attribute to advertise them and an even bigger advantage is that the products also keep that quality promise. On the other hand, we can see that there are always competitors in this market manufacturing machines in China. They're competitively priced models which, among other things, can be exported very successfully to the USA. What helps us here is remaining state of the art and implementing the legal requirements as promptly as possible so that even in functionality we stay one step ahead.

Incidentally, people certainly make a distinction between German products that are manufactured in China and the originals that are made in Germany. So even in the future we should make time for company visits to the German production site if we're asked about them.

And when will you be in Germany again?

Hopefully soon, because I am supposed to get my mother some cookware, precisely from Fissler. They're still actually producing in Germany.



Kaiserslautern production site: A visit to the Wipotec headquarters covering more than 32,000 m² provides an impressive demonstration of what the company stands for in terms of cutting edge production standards, experience of global projects and an unusually high level of vertical integration.

32.000

TRACK & TRACE



WELL-KNOWN TURKISH PHARMACEUTICAL MANUFACTURER SANTA FARMA RELIES ON THE TQS SOLUTION FROM OCS

As one of Turkey's largest pharmaceutical manufacturers, Santa Farma has confidence in the "Traceable Quality System" (TQS) Track & Trace solution of OCS in its production lines.

The dynamic weighing and inspection technology innovation leaders equipped Santa Farma's new 40,000 m², ultramodern plant near Istanbul, with state-of-the-art TQS equipment. Both stand-alone machines and integrated OEM technology of the TQS was used in the process. Santa Farma produces 150 million folding boxes of medicinal products a year.

Simplest operation via a single software interface

The successful integration of TQS is the result of OCS specialists collaborating with prestigious machine manufacturers. The compact solutions TQS-HC-A and

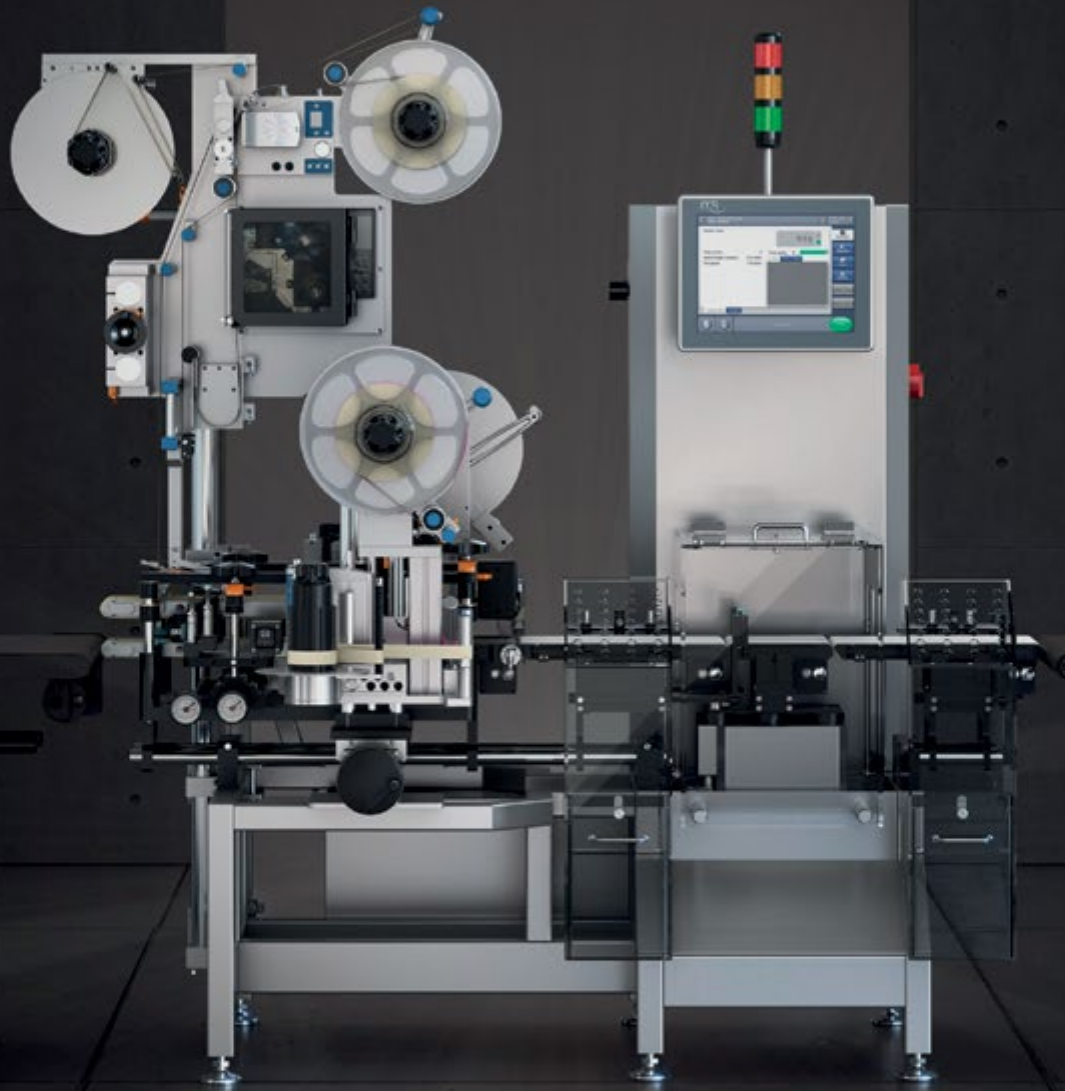
TQS-BP are used as stand-alone machines at Santa Farma. TQS-CP is integrated in existing packaging machines as a OEM version. TQS is impressively easy to handle via a single software interface. Both the content and also the print layout of the desired printing are generated simultaneously using ConfigureFast. At the same time, the print data is sent to both the printer and the image processor. This means an end to laboriously setting up different individual systems. Instead the operator saves time by working in a fully integrated system that can be operated intuitively by touchscreen.



We really appreciate the cooperation with OCS and feel we're in very good hands with this high-tech specialist.



Ersin Hayran
Technical Director Santa Farma



TQS

THE GLOBAL TRACK & TRACE
SOLUTION OF OCS

CONSUMER PROTECTION: HOW SERIALISATION AND AGGREGATION SOLUTIONS FROM OCS PREVENT COUNTERFEITS FROM ENTERING THE LEGAL SUPPLY CHAIN OF PRESCRIPTION-ONLY DRUGS

The breakthrough in the pharmaceutical market: A series of country-specific serialisation laws, with global effect, increased consumer protection in regards to drugs. The EU issued Directive 2011/62 and a catalogue of measures. As of February 2019, and the following 3 years after publication of the legal provisions, it is no longer possible to place any prescription-only medicinal product on the market, without the inclusions of the authenticity of the complete supply chain - from manufacturer to pharmacy. The solutions, generally known under the name Track & Trace, combine machine-readable codes and unique product assignment in the form of a product code and serial number. A global TQS solution is offered by OCS, part of the Wipotec Group, and provides the perfect answer in this sector to all questions of world-wide serialisation and continuous aggregation.

TQS represents a flexible and modular global solution, implementing all the legal requirements for greater drug safety. The systems are among the company's most successful solutions, although OCS only introduced the product family onto the pharmaceutical market in 2012. A clear message is sent out with the 600 successfully installed solutions worldwide. Volker Ditscher, Business Manager Track & Trace, says, „We have created a modular and open system, especially when combined with our excellent advisory skills. It reflects essential customer requirements and generates an ever-increasing demand on the world market.“

The first success story was first seen in 2008. Driven by regulations in the serialisation environment and followed by further implementation laws all over the world. This stimulated the global demand even further.

Daniel Anders, Product Manager Track & Trace, knows the answer, „During the first wave of introductions, many companies – suppliers and customers – were under time pressure. Optimum solutions were often missed due to the short-notice legal requirements which were introduced to everyone without any notice. When we were confronted with the first enquiries, after the initial excitement had died down, we realised that we already had many of the sought-after technologies. We had implemented solutions in



Volker Ditscher
Head of Sales Track & Trace OCS Checkweighers

the dynamic weighing systems market. We already dominated in what others were still searching for.“

The printing of drug packaging with machine-readable matrix codes or alphanumeric strings were functionalities to be retrofitted. These are subsequently verified via cameras. The individual



Where others just print and identify, we can additionally weigh the product in the same installation space and thus carry out a completeness check.

packages must also be packaged in order to be tamper-proof. It may also be necessary to provide the individual packages with vignettes. Serialising product packages into larger bundles (aggregation) may also be one of the tasks required.

The machines to be installed in the pharmaceutical sector, mostly have to make do with the available space even if machines are replaced in the process. The stated aim is for more functionality in the same space.

Daniel Anders says, "Pharmaceutical products share the most expensive production areas in the world. This doesn't really scare us. Machine compactness at high speed, combined with safe product handling, is a key quality feature for us. Where others just print and identify, we can additionally weigh the product in the same installation space, and thus carry out a completeness check. This is where our customers benefit from our experience from weighing technology. Sometimes the requirements on speed and precision are even greater."

The characteristic for Track & Trace questions is that there are always relative complex solutions that are searched for, even when it is only a matter of retrofitting or expanding a function within the existing production line by using a new machine. On top of everything else, serialisation solutions are highly strategic and they are assigned a key role in the production environment. It ultimately depends on them whether a product is saleable at all. The requirement for a completely controlled production flow can still fail right up to the last stage in the product design process, possibly the palletising of individual boxes prior to shipping. Volker Ditscher says, "With TQS we always bear the complete approach in mind. It's why during our projects we communicate with a wide variety of contacts and at all functional levels, from production management, IT, quality assurance and purchasing through to company management. And everyone has a different perspective on the assigned tasks. Our best-practice approach comes into play to meet all the requirements and at the same time to bundle them effectively."

Best practice stands for the requirement to provide standardised machines which fulfil the greatest possible number of required market- and customer-specific functions. The equipment is based on OCS' project experience. For this it collated the requirements of a large number of customers and



Daniel Anders
Product Manager Track & Trace OCS

standardised its machines in line with them. Pre-engineering thus enables a lead time of 12 weeks. Taking into account that the supply and configuration of an open XML interface is also included in all TQS, it becomes clear that there is hardly a faster way of meeting the requirements of serialisation and at the same time of avoiding a proprietary local solution.

Volker Ditscher goes on to say, "New deadlines, in the shape of new regulations or other market conditions, will most certainly come. Customers should make sure that they keep a few doors open for expansions. This should definitely include powerful interfaces like the ones all our Track & Trace solutions come with." He says that data integrity is not synonymous with the requirement to lock up data. TQS represents the open communication approach of Track & Trace solutions from OCS; supporting the philosophy of providing industrial interoperability standards for global serialisation requirements of the health industry.

According to Volker Ditscher, "It's only possible to avoid artificial vendor lock-in with open interfaces such as those in TQS. However, from the pharmaceutical companies' perspective, the often multi-disciplinary and multi-level provider scenarios inevitably lead to an involuntary obligation." He says these are not only functional obligations; an economic customer



TQS-SP
Serialisation



TQS-HC-A
Serialisation/Tamper Evident/Weighing



TQS-BP
Bundle Pack Aggregation



TQS-CP
Case Aggregation

obligation can also emerge which makes switching at a later date considerably more difficult due to the real or perceived cost of the switch. These manufacturer dependencies also increase the compliance risks in some countries or the risk of production losses due to delayed software adaptations.

Along with the open system interface, it is not only the very short delivery times for best practice machines, or the options for universal integration into other packaging machines, which are the key benefits of the OCS complete Track & Trace solution. The fact that the overall system originates from a single source, is built in a single location and is controlled via a single interface is at least equally important.

"You should never underestimate this," says Daniel Anders. If all the functionalities such as the coder, printer, camera checkweigher and labeler in a transport system can be controlled and adjusted through one common software platform, you have an incredible advantage. The advantage is over the management of individual systems in terms of time and convenience, especially when it comes to changeovers within the line. Our Track & Trace functionalities with TQS can be quickly and easily configured via one application that we call TQS ConfigureFast."

In addition to serialisation parameters, it is possible to detect other product attributes such as weight and code quality for a truly unique selling point. All attributes can be stored together with the serial number (TQS Traceability+).

Less obvious, and therefore more noteworthy, is the fact that there are no maintenance or support fees for software.

One must consider that the production environment and the data handling associated with it are dependent on country-specific regulations. These are subject to change over time, however the support promise provides a peace of mind and is comparable to lifelong map updates for navigation systems. This unique selling point of TQS represents a significant cost benefit at a time when new catalogues of measures and legislative adaptations cannot be ruled out.

Through a large number of subsidiaries and partners, OCS has quite close sales and service links to pharmaceutical customers and CMOs with a highly international profile. As a result, many doors worldwide are opening up for a solution provider with a wide range of Track & Trace options, such as those represented by the solutions of OCS.

Volker Ditscher sums up, "In addition to participating in working groups of the VDMA (Protect-ing) or as a solution provider for GS1 Germany, the company also focuses on international activities. For example, active participation in the GS1 Global Healthcare User Group and as a trend-setting founder member and part of the steering committee in the Open-SCS Working Group." Anticipating the direction in which national markets and economic regions will develop in the pharmaceutical sector is the requirement. Having a say in where it will go in the future and providing solutions that make its own customers more successful is the goal. With so many Anglicisms, even down to its own name, it's important here not to forget the most important thing of all: Made in Germany. Completely.



SECURITY TECHNOLOGY

MAIL & LOGISTICS

**DWS-SECURE SYSTEMS: INTEGRATED SECURITY TECHNOLOGY
PERMITS CONTINUOUS MONITORING OF CONVEYABLE PRODUCTS**



Fast-paced growth in the e-commerce business means that systems designed for B2B need to be adjusted to the rapidly growing B2C volume. Internet retailers with shipping volumes that rely on unit numbers are pushing transport and sortingsystems to their limits.



Jens Alder
Sales Director Mail & Logistics OCS

The Wipotec Group has a wide range of modular inspection systems which cover both the target markets for mail sorting, courier, express and parcel service applications, as well as the retail/warehouse sectors. It is expected that growth rates in these sectors will rise significantly worldwide, and the Asian market will soon catch up to, or overtake the American market. It certainly becomes interesting when analysing the additional performance requirements, which are increasingly asked for by global players in the recent past. It is not only a matter of weighing, recording dimensions and calculating freight volumes. More and more frequently security aspects are being added, justified by the increasing volume of cross-border parcel shipping, especially by air freight. Integrated security solutions for a wide variety of applications are provided by OCS itself and its system partners.

You only have to watch the evening news now and again to see that there's an increasingly strong response to the demand for more security, control and monitoring. While the public mainly connects this with CCTV in passenger transport, at events and in public places, the systems used by the transport services providers are also facing new challenges. Starting with dynamic weight recording, which is common in all industries, it has now become established practice to identify products using image recognition and video systems in addition to volume determination. The latter is required for volume rates, or for calculating the volume and centre of gravity in air traffic. DWS-secure systems (DWS: dimensioning-weighing-scanning) promise continuous recording of the event chain linked to identification and barcode reading, measuring, screening, weighing, sorting, distribution or detection of cargo represent the current status of development.

But first things first: dynamic weighing systems, such as those OCS offers in different performance classes, are widespread in parcel and mail sorting systems and represent the core weighing system in many places. Jens Alder, Sales Director Mail & Logistics,

discusses current trends, "The fast-paced growth in the e-commerce business means that these systems have to be adjusted to B2C conditions. Internet retailers with shipping volumes that depend on unit numbers are pushing transport and sorting systems to their limits."

The main transport products here are referred to as smalls (<10 kg); in the B2C sector there's an increasing trend towards smaller products. By properly designing the weighing systems for the longest product to be weighed, OCS can implement systems with shorter belts thus enabling shorter product gaps and therefore higher throughputs. While smalls are increasing rapidly overall, the shippers' mail business is declining; OCS has a fast VLS scale (Vertical Letter Scale) for this application which is integrated into the letter sorting line. These systems in particular are highly automated.

OCS has already been a step ahead for some time when it comes to larger products: in the case of irregrs, often very heavy and randomly shaped objects, a volume measurement system determines important freight characteristics such as length,





DWS-secure systems

DWS systems, combined with integrated security technology. The stated aim is comprehensive and continuous monitoring of conveyable products by combining freight- and safety-related data.

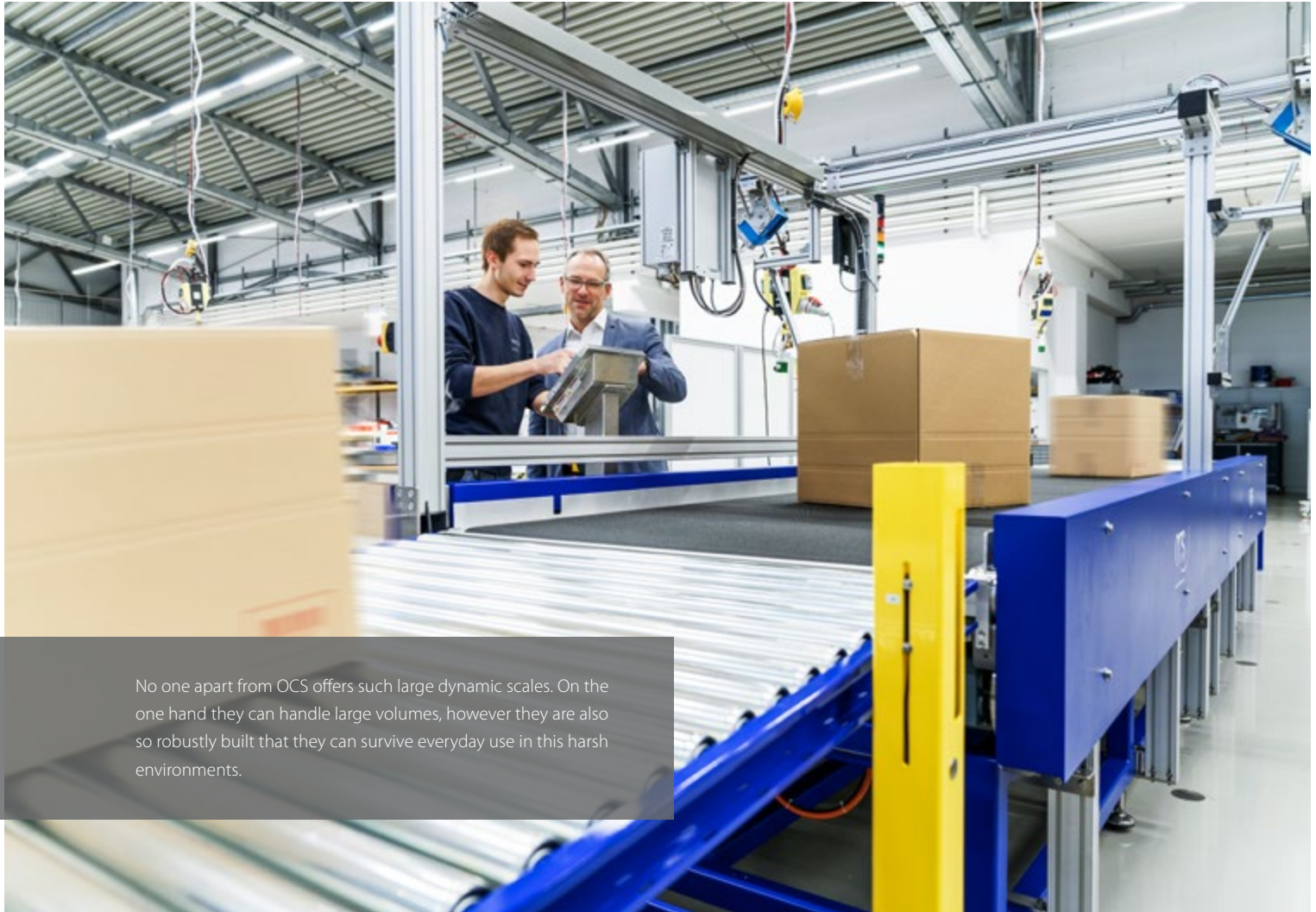
width and height in addition to the real freight volume. Irregs, by definition, cannot be transported on the conveyor systems designed for the standard range of parcels. This is where OCS systems have a key differentiator: no one apart from OCS offers such large dynamic scales. On the one hand they can handle large volumes, however they are also so robustly built that they can survive everyday use in this harsh environments. In addition to general freight characteristics, the systems dynamically detect the weight of the objects. DWS systems are in demand particularly in the CEP market (courier, express, parcel). This includes parcel service providers and local integrators.

DWS-secure systems are regarded as the latest development. They record or document the complete transport event chain, including its surroundings. All events within the overall system are linked to each other, via time stamps or events. All the sensors records can be compared with each other and analysed if safety-critical events occur. Jens Alder adds: "With more than 150 breaks in the supply chain of logistics services providers each month, the damage sustained amounts on average to 80,000 euros per damage event. On the demand side, we are increasingly encountering requests for the continuous monitoring of conveyable products, resulting in an increase in the complexity

of the systems because it's necessary to integrate a lot of sub-systems. Our DWS-secure systems for parcel service providers meet these requirements."

This is a typical solution: IP technology connects cameras and other sensors within the DWS system and in the next step connects DWS and other subsystems to each other. Sub-systems may be access control systems, modules for CCTV, vehicle GPS systems or fire and burglar alarm systems. Corresponding data is linked to one another via events or triggers, e.g. the read barcode of a parcel is linked to its X-ray, where the documented volume and video data from a conveyor belt camera is made available. Freight-related data is combined with security-related data by having a video management system that links logistics processes with video streams. Nowadays, software can also generate information from video images. The 4K technology, with its higher resolution and better zoom capability, represents substantial progress in this respect. The stated aim is comprehensive and continuous monitoring of conveyable products.

A DWS-secure system based on an OCS Dimensioning-Weighing-Scanning line is currently being planned for one of the



No one apart from OCS offers such large dynamic scales. On the one hand they can handle large volumes, however they are also so robustly built that they can survive everyday use in this harsh environments.



“On the demand side, we are increasingly encountering requests for the continuous monitoring of conveyable products. The complexity of the systems therefore increases because a lot of subsystems have to be integrated.”

world's largest parcel service providers. In addition to OCS and the actual integrator, it also involves a software house which will contribute CCTV, video management software and IP technology. For this, cameras and other sensors have been added to expand a DWS system which has been networked with security technology. “Sensors and cameras,” according to Jens Alder, “are triggered using the video management software and time stamps from the DWS system. For example, it would be possible to call up a parcel recorded through the barcode, video images or X-rays, freight data and videos of its environment (who was

near the conveyor belt, showing of the parcel and it's location) in a control centre. This raises live monitoring and consignment determination to an entirely new level.”

Combined with the freight data recorded via the DWS core system, this option provides for the integration of all data and processes in one higher level security solution which includes a central information organ among its components. Acceptance of the first DWS-secure system will take place in the coming weeks at Wipotec's main production site in Kaiserslautern.





The Chronopost sorting centre in Chilly Mazarin, France

CHRONOPOST

CHRONOPOST RELIES ON WEIGHING TECHNOLOGY FROM KAISERSLAUTERN

French industry giant Chronopost promises customers next-day delivery for national and international parcels with a weight of up to 30 kilograms. The conscientious achievement of this daily challenge is based on highly professional intra-logistics, the threads of which come together not far from Paris. The sorting centre in Chilly Mazarin processes 30,000 parcels an hour which are then collected by 450 trucks a day: impressive key data for an outstanding logistical achievement that is on a daily basis. To ensure that, where necessary, Chronopost can also bill customers for the logistics services actually provided in the form of additional charges, it relies on solutions from OCS Checkweighers.

All freight items at Chronopost are transported on conveyor belt lines with integrated DWS (Dimensioning Weighing Scanning) systems from OCS. These items are successfully sorted into appropriate delivery areas at the end of the lines. Each of these DWS systems has a barcode reading portal which guarantees clear identification and therefore excellent controllability and traceability of every weighed unit. After scanning, an integrated

catchweigher quickly and precisely determines the weight of each package. At the same time as the freight is being weighed, a certified measuring system detects the length, height and width of every parcel so as to determine its volume. Dimensions and barcode data are then transferred to the weighing system and stored there together with the weight data.





Pascal Triolé
Director Industry and Purchasing
at Chronopost



Thanks to using the DWS systems, we can determine the logistics services we actually provide with pinpoint accuracy and, where necessary, can invoice our customers for any additional charges.

Based on the information gathered, it is easily possible in Chilly Mazarin to establish exactly which transport service is to be billed and which customers are to be invoiced for additional charges. Unlike the fully automatic recording of normal freight, the inspection of freight items that are non-standard in respect of content, size or weight (so-called irreg)s is semi-automatic. Here, each parcel unit is identified manually using a scanner. In addition, the weighing and dimensioning of these items is also fully automated.

To achieve maximum throughput rates, DWS systems from OCS incorporate several technologies which work together simultaneously. With the help of a light barrier at the beginning of the system, packages are tracked along the entire process routes, thus reducing the gaps between packages to the absolute technical minimum. In the case of OCS catchweighers, this gap is significantly lower than the average for conventional systems because the Wipotec precision weigh cells, based on the EMFR principle, which are installed here have the shortest settling and measuring times. The weigh cells deliver very precise weight results extremely quickly and reliably. As soon as a valid measured value has been determined, the scales are ready to weigh the next product. The result is extremely short minimum distances between the packages, even at high transport speeds.

With this in mind and to optimise the processing and handling of parcels, OCS has been installing DWS systems and catchweighers in Chilly Mazarin and at numerous other Chronopost sites for many years. Pascal Triolé, Director of Industry and Purchasing at Chronopost France, says, "Thanks to the DWS systems, we can determine the logistics services we actually provide with pinpoint accuracy and, where necessary, can invoice our customers for any additional charges." He goes on to say that this potential

for revenue recovery is of immense commercial importance for Chronopost. "It makes it possible to charge fairly for the service we have provided. Thanks to the DWS systems we do not lose any revenue."

The new systems, however, also typify the increased commitment of many product service providers to the parcel delivery business. A sector which is predicted to witness significant growth rates due to the continuing expansion of the e-commerce sector. As Chronopost also handles shipments for Internet-based vendors, the volume of small and medium-sized packages will continue to rise, bringing with it a growing need to expand on the existing weighing technology in the future. In this sector, which is dominated by major service providers, OCS has carved out a good position for itself, due not least to a number of large-scale projects on different continents. In the traditional CEP sector, an increasing number of these big players, including DHL, FedEx, TNT, USPS and UPS, rely on weighing solutions with Wipotec inside. Large integrators frequently act as general contractors in megaprojects where conveying and handling technology is installed on a large scale and huge distribution centres spring up. At Chronopost, OCS was in charge of expanding the existing conveying and handling technology with DWS systems and catchweighers.

Jens Alder, OCS Sales Director of Mail & Logistics says, "We can design customised solutions very quickly and fit them perfectly into an existing customer environment. Our success is based on the fact that, as a manufacturer, we know our products and their possible applications in a wide variety of markets – Mail & Logistics is only one of these, and for us a highly successful one at that."



OCS CENTRAL EUROPE ON EXPANSION COURSE

WHETHER STARTING OUT, CHANGING SUPPLIER OR
TRADING UP, CUSTOMERS LOVE SHORT DISTANCES.
OCS IS THE NUMBER 1 IN DYNAMIC CHECKWEIGHERS



Dynamics count twice: even with ultra-short weighing times, OCS has a grip on product handling like no other manufacturer and therefore deserves its number 1 ranking in dynamic checkweighers in Germany.



Peter Radke
Sales Director OCS, Central Europe

The time had finally come at the end of September for the OCS North subsidiary to move into new business premises in Hildesheim. The testing, training and demonstration rooms spread out over 800 m2 in the new building. What began as a sales office in 1998, developed into an important OCS training and sales centre in Germany. A growing number of systems are sold from here and installed in northern Germany each year, and appropriate customer training courses are offered. The branch office in Hildesheim also plays an essential part in the integration of OCS solutions. According to Peter Radke, Sales Director OCS Central Europe, it is not only in Germany that OCS is growing.

“We are staying abreast of the positive business situation by establishing a new branch office in the Netherlands, which will be led by Remco van Zijl as Sales Director. Through our expanding team we will be in a better position to serve our existing customers, as well as concentrate on the new customer business. It goes without saying that with our Central European markets, our focus remains on our core OCS market in Germany. Here we score with a close network of six sales and service offices.” Peter Radke marks the locations of the branch offices in Schwäbisch-Hall, Aachen, Dessau-Rosslau, Hildesheim, Gröbenzell near Munich and Mülheim/Ruhr on a map. The headquarters of the parent company are in Kaiserslautern. “A few days ago we moved into our new premises in the Max-Planck-Strasse in Hildesheim. It’s an ideal location for us here because we have a lot of customers from northern Germany just around the corner – and our customers love the short distances and fast response times of our branch office.”

The Hildesheim office provides over 20 specialists who offer support for customers in the areas of testing, commissioning, servicing, training courses and integration. The solutions installed by the OCS North branch office are mainly high-capacity systems in the food and pharmaceutical sectors. They cover applications

in dynamic weighing, serialisation and X-ray inspection. They are frequently multiple inspection solutions or serialisation machines in different configurations. The North office is prestigious but not oversized. It is ready for further growth and a good position has been chosen for this. The area around Hildesheim is the location for many companies in food production, with a large number of firms in the meat processing industry situated further to the west.

When examining why customers ultimately opt for an OCS solution, it’s always important to keep in mind that checkweighers are measuring systems. The top one priority for customers is the expectation for accurate weighing. Following this is speed, maintenance-free operation, ease of use and durability. Many of our customers using OCS Checkweighers have enjoyed a hassle-free experience even after 20 years of operation – as though servicing didn’t exist.

Peter Radke is convinced that it is important to have confidence in the measuring systems, and a trust which must be earned over a long period of time. Until recently it was only about weighing and weighing technology. However, there is a lot more to weighing. What needs to be weighed must be placed

SERVICECENTER



We score with a close network of sales and service offices in Central Europe.

on the scale and taken off again. This means that the product is virtually weighed in passing, though this is more like flying given the speeds desired. Peter Radke: "We use the best technology that we can find because we've developed it ourselves. We even develop and build the drives ourselves."

The trend is clearly heading in the direction of higher speeds. While previously it was 200 products a minute, now it's at least 600 products a minute, defining the high-speed limit for dynamic checkweighers from OCS. Problems are increasing at higher speeds and managing them requires a great deal of expertise and experience if you want to weigh fast-moving objects. These issues include slipstream, lift and downforce, electrostatic charging, attraction and repulsion forces. And of course, the ever shorter weighing times. Even with ultra-short weighing times, OCS has a grip on product handling like no other manufacturer and therefore deserves its number 1 ranking in dynamic checkweighers in Germany.

Checkweighers are still measuring systems no matter how fast the products shoot past them. When they really need servicing, the service technician better not be far away – preferably just around the corner. A close-knit service network such as that of OCS is therefore an advantage as it also has its own employees in the USA, China, the UK, France, Italy, Holland and Spain. There are seven service centres in Germany alone. The other regions are supported with the help of service-trained agencies.

There are even more reasons for the growth of OCS. "Anyone looking for a checkweigher these days is already in the weighing business," says Peter Radke. "But now they're looking for something better. Maybe faster, but often with more functionality as well. A metal detector? X-ray inspection combined with weighing? Multi-lane operation? There are solutions for this: combination units which can cover two or more applications are on the rise, particularly the type supplied by OCS with almost

Growing and growing: the team of the OCS North office, Hildesheim



the same footprint as standard machines. Therefore, it is easier to integrate them where space is limited or even to integrate them at all.

Then there's the question of changing suppliers. It's only natural that customers want to remain in their familiar system environment if possible because this keeps training costs down. But they have to change anyway, even if they stay with the same supplier. They are often forced to change due to the discontinuation of products so they start looking around in the market. Of course, this is when they discover fairly quickly whose systems are considered to be reliable and have been in use a long time. Only a manufacturer with a high level of vertical integration such as OCS, which develops and produces motors and drives, conveyor belts and even circuit boards, can guarantee high product life

cycles and system compatibility for long periods. There is no problem getting spare parts because it isn't dependent on suppliers. And the same goes for the software that it also writes itself.

"Many competitor products have long since been discontinued by the time it comes to purchasing replacements. And new systems require relearning. With us, the customer only has to deal with one interface. Starting with weighing through to X-ray inspection, intelligent vision systems and box, bundle or paperboard machines. An integrated operating concept is applied everywhere. Our hardware, our software, our interface."

Anyone who doubts this can come and see for themselves at INTERPACK, taking place from May 4th-10th 2017 in Düsseldorf. Peter Radke and his team will be there exhibiting.



X-RAY TECHNOLOGY

X-RAY

TOTAL INSPECTION: MODULAR INSPECTION SYSTEMS IN QUALITY ASSURANCE FOR FOOD

The big bang in X-ray technology happened at OCS just 8 years ago; in the intervening period, one central core component has given rise to a system of equipment modules which are grouped around the ultra-compact base system according to application. Thanks to its modularity, the OCS solution is now found in many equipment versions in the food sector. Typically, OCS went a step further and, where required, integrated a high-precision weight check in addition to foreign object detection. In this case, customers receive an X-ray scanner and checkweigher in a single unit, taking up virtually the same space. Even more can be done on request.

SC-V

The SC-V model is a representative of cutting edge inspection technology. It combines reliable detection of product impurities using high-performance X-ray scanners with additional optical control systems developed by OCS in-house.



The machines are made entirely of stainless steel. We focus on our hygienic design with a weld-free product area executed in a C-shape.



In no other sector is foreign object detection as widespread as in food production. Nowhere are the requirements for inspection solutions as different, due to the extensive range of products to be examined. Metal detectors are widespread and already well established. We are seeing X-ray inspection system being integrated more and more frequently in the market, all of which are equipped with one X-ray source. However, this is where the similarities end. To successfully find foreign objects, it requires not only top quality X-rays, but also the most appropriate sensor in each case and matching powerful image processing software. OCS develops this in-house. Machines use it not only to detect foreign particles of metal, stone and plastic, but also to check products for completeness, correct shape and filling quantity. It can also be used to fulfil special requests by customers. Hasan Uygul, OCS Business Manager for X-ray systems, knows that it isn't just about inner values here. True functionality starts with the machine surfaces.



Hasan Uygul
Business Manager X-ray OCS

"Before we talk about inner values, we should look at the systems as a whole." Hasan Uygul points to the surfaces of an X-ray scanner. "The machines are made entirely of stainless steel. We focus on our hygienic design with a weld-free product area executed in a C-shape. The core segment of our machines meets the requirements of protection class IP65, and on request also those of protection class IP69K, as are specified for the meat sector.

These machines can also be pressure-washed with hot water. Appropriate pickling of the surfaces ensures increased resistance to cleaning agents."

The other modules are grouped around the core segment according to application. As with a modular system, modules can be added in a space-saving manner for handling bulk goods or





In the machines of the SC product family, we use a camera detector based on HD-TDI which we have developed ourselves. This suffers no loss of power over its entire lifetime which we state as being over 40,000 hours.

large, bulky products or for multiple-lane operation. Other modules extend the basic system with weighing technology or additional vision systems.

Experience gained from building checkweighers, where OCS is a market leader, has also been incorporated in the X-ray scanner series. It features an exceptionally large number of optionally available ejection mechanisms with which faulty products are removed from the product flow. Multiple lane inspection technology combined with a checkweigher is also available within one series. All X-ray scanners are inherently capable of generating the product gaps necessary for the inspection. This technology has also been borrowed from the weighing technology.

Experience gained in constructing scales is used particularly for high-speed solutions. The high level of vertical integration achieved in production is also standard for the X-ray scanners which are similarly built at the main plant in Kaiserslautern.

"In the machines of the SC product family, we use a camera detector based on HD-TDI which we have developed ourselves. This suffers no loss of power over its entire lifetime which we state as being over 40,000 hours," explains Dr. Siegrist, Product Manager at OCS. "We assemble our printed circuit boards ourselves. Therefore, we offer long-term spare part guarantees largely independent of suppliers. This also ensures increased product life cycles for our machines because we're not reliant on fast moving markets for the availability of our electronic components." Of course, it's good to hear this in an industry where machine life cycles of 20 years are not unusual.

There's not just one expansion of the range on the cards in 2017. Among other things, technological enhancements relate to optimising operability and handling with hygiene aspects in mind. The systems are also becoming more compact. Modular solutions with extended functionalities were showcased last year at IFFA 2016. In addition to X-ray inspection, integrated vision systems identify printed information (for example batch and best before dates or nutritional information) and check labels, barcodes and stickers for correct positioning and legibility.

Hasan Uygul says, "All checking systems are controlled via a common user interface. That's integration and user convenience

at its best and it also comes with one very significant advantage. There's no need for engineers or other specialists for setting up the machines – and here we're talking about highly integrated inspection technology, sensor systems and image processing, all at a very high level. Our customers are delighted that configuration and setting up of the machines can be carried out with the employees available on site. There's no need for experts to operate them; the training expenses are several times lower than with other solutions on the market. Overall control of the plant requires only a single colour TFT display with touchscreen, regardless of the configuration level being used. All the modules are perfectly integrated in the software."



Dr. Michael Siegrist
Product Manager X-ray Wipotec-OCS

Dr. Siegrist: "We have a lot of customer visits to the production site of the Wipotec Group in Kaiserslautern. For us, it's important to let our customers see how we design, build, integrate and test X-ray scanners.

We think it's natural that all the customers want to be shown around the test centre. In the production department we demonstrate the space-saving modular construction. Above all, we highlight the vertical integration of all our components which differentiates us from other suppliers. The ability of being able to experience this personally has convinced a lot of people."





There's no need for experts to operate them; the training expenses are several times lower than with other solutions on the market.

The test centre for X-ray inspection completes the area where all customer requirements are verified and trial installations are carried out. Product tests on customer samples create a basis for binding commitments to the customer. These tests are also used to check faulty ejection rates or demonstrate the detectability of foreign particles.

At present, the most successful key market for OCS X-ray scanners is in Europe, where its unique modular concept has already gained it significant shares in existing markets as compared with

competitors. The same applies to North America, because the X-ray scanners are winning recognition, not only because of their modularity. The systems are also optionally specified for protection classes IP69K and USDA standard. The models of the SC-E series were designed for particularly price-sensitive markets. They have a special price/performance ratio. This system family already comes with many advantages of a premium line as standard: all in stainless steel, balcony architecture with C-shaped product area, control via colour TFT with touchscreen.



HEAVY, MEAT & METAL



Quality assurance in food is a very high priority. A single incident can seriously threaten the existence of the company concerned.

Weighing ham and detecting metal: OCS checkweighers with integrated metal detectors in use at the Schwarzwaldhof meat company.

Quality assurance in food is a very high priority. A single food safety incident can seriously threaten the existence of the company concerned. So the entire chain must be monitored and controlled, starting in production and covering everything from processing to packaging, delivery and storage.

Schwarzwaldhof, the Blumberg-based company located in the south of the Black Forest, Germany, relies on OCS checkweighers of the HC-M-VA class when producing ham. The machines in the mid-output range guarantee a throughput rate of up to 250 pcs/min. This means they fit perfectly into Schwarzwaldhof's 11 packaging lines where over 10,000 tons of ham and sausage products a year are portioned and packaged ready for the end customer. As with all the machines of this family, these units are constructed entirely in stainless steel. Weigh cell, drive motors and conveyor construction permit extensive wet cleaning and use in light to average humidity environments (protection class IP 65). Schwarzwaldhof uses machines in single or multi-lane configuration.

Underweight products or inadequate product filling may give rise to recalls and cause long-term damage to the reputation of a branded product. The checkweighers' tasks: the weight of every single package is checked by the checkweighers and those with the wrong weight are ejected. Too much of a product would probably not worry the customer but it would be equal to giving the product away and should therefore be prevented.

But that's not all: in addition to checking the weight, the packages are also examined for any contamination by metallic foreign objects. A metal detector integrated in the OCS checkweigher detects any production-related contamination and the package affected is reliably diverted into a lockable container. This is a fully integrated system, controlled and operated from one panel and within one software program, not two separate units made up of weighing and inspection technology.

The machines work impressively in routine use. The employees praise the fact that operating the checkweighers is particularly easy and intuitive. They are also impressed because all the inspection results are clear and easy to read on the displays.



KEY ACCOUNT BUSINESS

The structures surrounding the key account business have a long history in the Wipotec Group. They represent the business relationships with key customers who have focused on intelligent weighing technology from the outset. It is not only the consistent enhancement of this technology and development of its market leadership by the Wipotec Group that has been and still is crucial to this company's success in the market.

These relationships have been maintained and developed over decades and are a demonstration of thriving partnerships. The current expansion in the product range, which includes solutions in the inspection and Track & Trace sectors, now provides suppliers and customers with many new opportunities. Key account managers provide customers with timely information about design concepts, new developments and solutions in their areas of interest. This enables them to make decisions in good time and as a result to stay a step ahead of their competitors not only technologically but also chronologically. Key account managers also think entrepreneurially on behalf of their key customers. "Both the major food manufacturers and also the pharmaceutical companies among our customers are positioned

globally," says Carsten Röben, Key Account Manager at OCS, referring to the current situation.

These are markets where trust really matters; no other sector is as sensitive in terms of the quality of its products. The effect of issues arising here is immediate global visibility and reaction. Companies in these sectors make global value propositions against which they are measured. These value propositions have to be honoured locally which is impossible without massive support and complete trust in the local partners. And there's more to this than just service and support. It's also about understanding the customer's business, its challenges and its presence in the market. Without this basic knowledge, key account managers at OCS would be unable to support their customers either with developing new business segments or optimising business processes.

"Our key accounts know their business, as do we," says the account manager who looks after selected customer, of the Wipotec Group, in the food and pharmaceutical sectors. "In the past, for example, weighing technology and product inspection were the essential tasks in the food sector. By thinking outside the box, and our customers certainly expect this of us, we can see



Carsten Röben (centre)
Key Account Manager OCS demonstrating
a high-definition camera

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“We invest in technologies tailored to our customers, we implement solutions jointly with them. This is what we mean by long-term partnerships, it’s what matters to the key account.”

how neighbouring markets are influencing their surroundings. Let us consider how new standards are suddenly removing barriers and generating competitive advantages that were not previously considered. The Wipotec Group’s product range, for instance, includes Track & Trace solutions that start with a single application in the area of serialisation and can be expanded by further aggregation solutions in subsequent steps. This goal is achieved by using a single common system platform, the Traceable Quality System (TQS) from OCS. In this case, there’s no increase in the number of interfaces and ultimately that’s precisely what matters to the company. Carsten Röben says, “The overall system, when viewed from the outside, must not become more complex even if the number of tasks completed increases.”

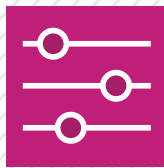
Key accounts are global corporations. Their contracts can reach large dimensions; in return, the requirement specifications on which the contracts are based may be as thick as a book. They describe all the performance parameters which must be met by the system to be supplied: starting with the speeds that have to be achieved and including output, product weight, format sizes and installation position to faulty ejection rates that must not be exceeded. The requirement specifications also describe the environment in which the system must operate from a global perspective and in which it is to be integrated locally. Extensive

factory acceptance tests demonstrate to the customer that the systems are also adequate to the designated tasks in practical use (and with regard to its products). Even tests in the customer’s environment, that is on the spot at the customer’s premises, are usual.

The modularity of the TQS platform from OCS ensures that integration into the customer’s environment always proceeds identically – even if a national organisation has not yet achieved the worldwide standards of a global parent company. This knowledge and certainty that joint developments will not somehow limit the global growth of its own organisation, but accelerate it further has persuaded many global players in the food and pharmaceutical sectors to opt for solutions from the OCS portfolio. Quite a few of them are surprised when they realise the real net output ratio, which shows up on closer inspection of the solutions, illustrated here by a high-definition camera for X-ray technology developed in-house.

Carsten Röben knows, “This camera will give us exactly the advantage we want to achieve when in use. Others buy off-the-shelf. We invest in technologies tailored to our customers, we implement solutions jointly with them. This is what we mean by long-term partnerships, it’s what matters to the key account.”

OCS ONLINE



Product finder

Three steps to your solution

OCS-CW.COM

The screenshot displays the OCS-CW.COM website's product finder tool. At the top, there is a navigation bar with 'SOLUTIONS', 'SERVICE', and 'COMPANY' tabs. Below this, a breadcrumb trail reads 'Home > Sell > Product finder'. The main heading is 'Fast track to our machines', followed by a brief description: 'Our product finder will quickly navigate you to the right solution within our innovative machine portfolio.' A three-step process is outlined: 1. Choose an industry, 2. Opt for your solution, and 3. Set product parameters. A progress indicator shows '1' selected under 'INDUSTRY', '2' under 'SOLUTION', and '3' under 'MACHINE'. Below this, a grid of industry icons is shown, including FOOD, AEROSOLE, PHARMA, CHEMICAL INDUSTRY, MAIL & LOGISTICS, MACHINERY, NON-FOOD, COSMETICS, and BUILDING AND MINERAL COMPOUNDS. The footer contains a list of services (Checkweighers, Calibrators, etc.), company information (OCS, Technicians, etc.), and a large image of a machine with the 'Product finder' logo overlaid. The footer also includes the OCS logo, WIPOTEC logo, and copyright information: '© 2017 OCS Checkweighers GmbH. All rights reserved.' and 'Impressum | D3C | Policy'.

NEW WEBSITES FREQUENTLY COME WITH INTEGRATED PRODUCT FINDERS. OCS HAS ALSO INSTALLED ONE ON ITS WEBSITE. A BRIEF INTRODUCTION.

Customers of the Wipotec Group will already have noticed that the new OCS website has been online for a few weeks now. Warning, a little bit of bragging from our side - what do we see: an appealing design, tidy appearance, easily accessible, responsive, communicative, good content, lots of white space, left-justified composition, trendy and classic at the same time... And of course, a product finder. This slides out for attention from the right-hand side of the page if you get too close to it, and positions itself discreetly in front of the text in banner form – you can't miss it. But what exactly does a product finder do? And are you really where you want to be after using it?

Three steps to a solution – that's the promise. The process begins by selecting the industry. Listed here are food, pharmaceuticals and mail & logistics etc.; all the industries for which OCS provides solutions. Once the industry has been chosen, the palette in which the applications are presented opens up and the solutions offered are described in greater detail – on the one hand weighing technology, plus inspection technology in the form of metal detectors X-ray scanners. Depending on the industry selected, Track & Trace or combined solutions are also presented. These could be weighing technology combined with metal detection, or X-ray inspection with weighing technology, or optical inspection systems. It is all dependent on the industry.

This is where the product finder displays a distinct advantage. While searching for a suitable solution, it also displays versions that go beyond a simple solution and suggests options that complement it. This may be very useful for the person searching. It is because the OCS systems are modular and other inspection technologies can often be integrated without the need for additional space, space that would not be available with stand-alone solutions. Of course, these solutions can also be found by visiting the website in the conventional way but the route is then much less direct.

The suggestions are also based on the best practice solutions of OCS and they reflect which system versions have been put together and ordered by comparable customers. By suggesting existing standard versions, customers also benefit from the cost advantages of these combinations which many customers are already using. This clearly shows that using the product finder provides additional knowledge that goes beyond the product data alone and thus fulfils another aim of the OCS website.

However, we still haven't come to the end of the product finder's functions. On a further decision level, it's possible for weighing technology to enter throughput, weight and other options. As a result, the target system can be specified even more precisely. The same applies to X-ray scanners where product specifications such as flat, horizontal products or bulk goods can be selected. This narrows down the product selection even further at this point. In many cases, downstream filters result in the final selection of the system that exactly meets the requirements of the sought-after solution in detail.

Three steps is usually all it takes to reach the target – as promised. So, is the product finder the perfect solution for visitors to the OCS website? You could say it depends. At any rate, it's a very good alternative for all visitors who already have a good idea of the requirements to be met by a future machine. However, for those who want to get an overall impression of the technologies on offer to begin with, the traditional approach is a good route. Unfettered by the menu-driven version of the finder, you're free to browse the OCS website to investigate in-depth wherever you like. If OCS has an appropriate solution to the problem, it can also be found this way. The concept of "Three steps to the right solution" was developed and implemented by Jennifer Fuchs (Marketing Wipotec Group).

Last but not least: like any good website, the OCS website also provides the most direct route to making contact, something many people probably see as the most important element of a website. The call-to-action is displayed as a contact button in the middle of the upper margin of the website and is therefore always in a prominent position – it couldn't be easier to contact one of our sales experts directly. It used to be a case of simply lick, stick and post. Now we pay the postage for you. How times have changed.

NATIONAL AND INTERNATIONAL TRADE FAIRS

Look out, tongue twister: What do IFFA, CFIA, PPMA mean to us? Or Modex, Fachpack, Emballage? Of course, they're trade fairs for food, packaging and mail & logistics.

The Wipotec had its own booths at these and other trade fairs in 2016 as the photos below show. Partners, resellers and representatives exhibited technologies and systems of the Wipotec business units and its subsidiaries at more than 40 other events.



INFORMATION

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