

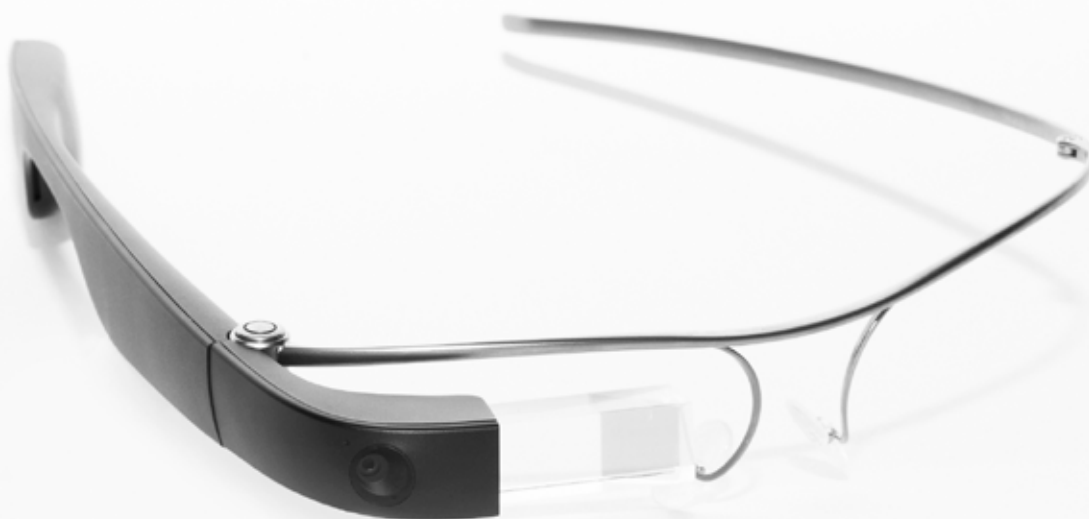
SCHNELLECKE

2017

Insights into the Schnellecke Group

SECRET SIGNALS

Google Glass and other
innovative technologies in daily use



“I HAVE GREEN BLOOD”

Schnellecke in Slovakia:
Innovation and a lot of Female Power

“CSR IS A PART OF SCHNELLECKE’S DNA”

The Influence of the Family Values
on the Sustainability Strategy



The first glasses that appeared in Europe before 1300 did not have temple arms and had convex lenses that made them suitable only for farsightedness or presbyopia. The so-called “Glasses Apostle” of the Bad Wildungen town church altar, which was painted by Conrad von Soest 1403, is the earliest depiction of a pair of glasses north of the Alps.

Source: Wikipedia



Google Glass is the brand name of a mini computer worn on the head and equipped with an optical display that is mounted at the periphery of the field of vision on one of the temple arms. As well as projecting information on the display, other information can also be combined with photos taken by the integrated digital camera. Furthermore, data can be downloaded directly from the internet and sent.

Source: Wikipedia

Dear Readers,

I am pleased to present to you the Schnellecke Group's annual magazine 2017. We want to invite you to take a look behind the scenes of our company and to emphasize the diversity of the tasks which we deal with and the diversity of the people who, with great commitment and expertise, pursue these tasks.

This magazine is not primarily about successes but about trends and market developments that a modern logistics company has to face today. That is why the topic "Logistics 4.0" is the focus of this issue. Our company has been paying the utmost attention to digital transformation for several years now. The focus is not only on the digitalization of existing business processes but also on the development of new approaches and business models - forward-looking initiatives as Prof. Dr. Michael ten Hompel confirms in this issue.

Furthermore, we take you on a visit to our company site in Bratislava, provide information on our sustainability policy, present to you our Transport division, and report on two of our CKD sites, at which we package vehicles and engines as individual components for our customers.

Enjoy.

Yours,

Nikolaus Külps
CEO Schnellecke Group



COVER STORY: INNOVATION

WAVING FOR THE COMPUTER PAGE 6 ►
Logistics 4.0 is already a reality at Schnellecke – in numerous departments

SECRET SIGNALS PAGE 14
Schnellecke reduces error rate to almost zero with the help of Google Glass

“LOGISTICS IS THE PRIME MOVER OF THE FOURTH INDUSTRIAL REVOLUTION”
PAGE 20
Interview with Professor Dr Michael ten Hompel, Managing Director of the Fraunhofer Institute for Material Flow and Logistics



“LOGISTICS PLAYS AN ESSENTIAL ROLE FOR US” PAGE 44
Interview with Dr René Graf, Senior Vice President, Corporate Logistics, Deutz AG

FROM TRUCKER TO TRANSPORT LOGISTICS SPECIALIST PAGE 46
Innovation is also mandatory in the Schnellecke Transport division



◀ **“CSR IS A PART OF SCHNELLECKE'S DNA”** PAGE 22
Dr Tim Kannewurf and Kai Kienast on Corporate Social Responsibility at Schnellecke

THE DREAM OF A HOUSE AND FAMILY PAGE 28
Afghan Refugees at Schnellecke Slovakia

“I HAVE GREEN BLOOD” PAGE 30
Schnellecke in Slovakia: Innovation and a lot of Female Power

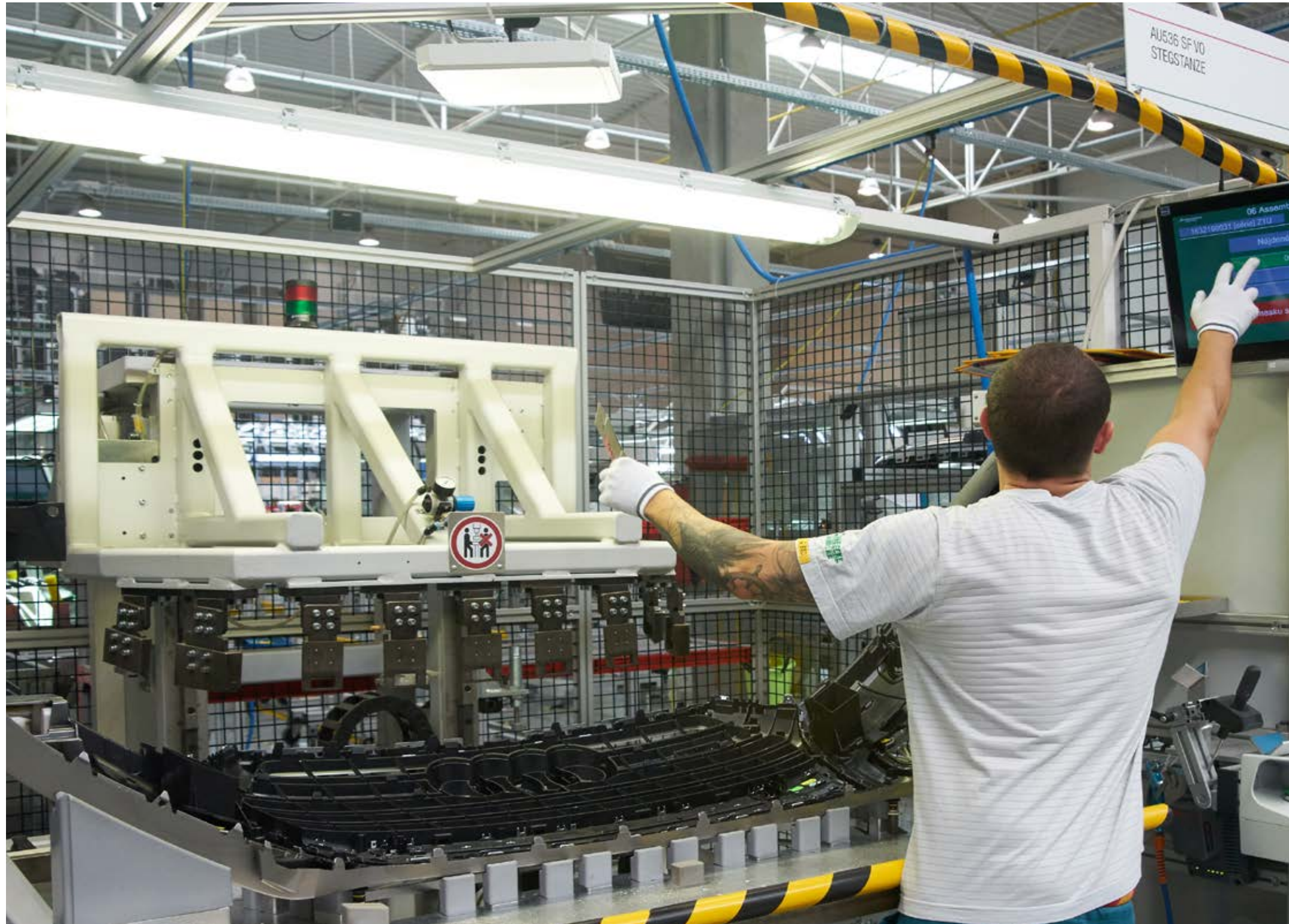
PACKAGING EXPERTS PAGE 38
A visit to the Schnellecke CKD centres in Cologne and Duisburg



WAVING FOR THE COMPUTER

LOGISTICS 4.0 IS ALREADY
A REALITY AT SCHNELLECKE –
IN NUMEROUS DEPARTMENTS

As we enter the large hall in Devínska Nová Ves in Bratislava, an assembler waves at us in a friendly way from the distance. We wave back, but he does not seem to notice us. Lubos Konopeus, our guide and Schnellecke's top IT man for Eastern Europe, laughs. What we assumed was a wave was a gesture intended for the Kinect module at the employee's workplace. No one presses buttons here anymore; they simply gesture.



tag for short, draws electricity in order to send and receive data.

Every part that is delivered by the bumper manufacturer is provided with one of these tags. The tiny chip is hidden by a small sticker that can be easily removed after the final assembly. The components are checked in at the assembly area via RFID (Radio Frequency Identification), and the parts that are to be attached are displayed on a monitor over the workplace at each assembly island, thereby virtually excluding errors by the assemblers.

The Intelligence is in the Software

“The whole thing does not work all on its own but because there is an efficient IT system behind it,” Konopeus says while he shows us the individual process steps. RFID systems create a large volume of data that has to be processed intelligently. This also includes filters for the information for whether it is to be observed or not. And of course the seamless transmission of the relevant data to the suppliers and the production line has to be ensured. Therefore the intelligence is in the software and in the way the information is used.

For Schnellecke, RFID is one of the technologies that helps the company consequently implement its zero-error strategy. But it is by no means the only one. Google Glass, laser-picking, even drones are used in module assembly, warehousing, and inventory. “Successful logistics without innovation is no longer conceivable,” said Dr Abaid Goda, Senior IT Manager at Schnellecke. We are under constant quality and price pressure, which can only be mastered with new technology. Therefore, the digital transformation at Schnellecke started a long time ago.”

“We have to be fast”

“Intelligent boxes” or “cellular conveyor technologies” – those are two catchwords that come up when talking about the digitalisation of logistics processes. What they have in common is that they are con-

Welcome to the world of Logistics 4.0! Microsoft Kinect is only one of the technologies that is used by Schnellecke in the module assembly in Bratislava. More important for the process is RFID, one of the magic words in logistics in recent years. RFID technology is almost invisible to the layman – and yet it controls the entire bumper assembly in Bratislava.

What is assembled here is not simply impact protection. These are complex vehicle components with integrated sensors and cameras. Furthermore, different model variants roll from the assembly line of the neighbouring factory, which means that the bumpers differ in shape, paint and inner workings. They also have to be delivered as they are needed just in sequence (JIS) to the assembly line.

“RFID is an enormous aid for us in this time-sensitive task,” Konopeus says. “Even before we start with the assembly, the bumper is assigned to a fixed place in one of the JIS frame, which will be delivered to the production line according to an exact schedule.”

A closer look at the individual assembly islands shows that they each have an RFID scanner, a flat box hanging from the ceiling or sometimes attached directly to the assembly surface. It creates an electromagnetic field from which the RFID transponder,

The speed at which new developments come onto the market is rapid.

nected to the Internet of Things, cyber-physical systems in which people and machines work together side by side, and the machines possess a high level of autonomy and autonomous networking.

This optimisation of existing processes is one side of digitalisation. The other is that completely new business models also result from it the more the standardisation of hardware and platforms progresses. With its Android Things, as well as with Eddystone for beacons (small Bluetooth radio transmitters), Google has already set milestones.

The speed at which new developments come onto the market is rapid. Schnellecke's CEO Nikolaus Külps knows this too. "Digital transformation is a core topic for us. It is a matter of keeping our competitive position while ensuring ourselves additional competitive advantages. And we have to be quick about it." The Schnellecke Digital Innovations GmbH was founded for just this purpose. It is to be an incubator for innovative logistics solutions and the use of new digital technologies both in operative as well as in administrative areas.

Automated Logistics Centre

While the Schnellecke digitalisation strategy is defined at the Wolfsburg headquarters, in the production halls visitors can see the next level of this process for themselves: The combination of Google Glass and RFID armbands. These kinds of wearables are becoming more and more popular, since the employees then have both hands free. This increases both the efficiency of the work and at the same time the quality. Vests with integrated technology are being used at other Schnellecke sites.

The RFID armband in Wolfsburg and Leipzig enables freehand confirmation. If the worker reaches into the right box, which is also labelled with an RFID tag, at the right time, the work step is automatically confirmed.

This means that in recent years many modules have been created that are now being consolidated into a bigger whole. This is called the Multi JIS Centre 4.0, and for Schnellecke it means the next large step in the direction of automation.

Multi JIS 4.0 denotes an extensively automated logistics centre in which several JIS projects can be handled at the same time in order to achieve the highest possible synergies. Autonomous driverless transport systems (FTS), Machine Vision, RFID, automated quality assurance and documentation, robotics, picking with wearables – all of this comes together here and ensures an unprecedented level of efficiency and process reliability.

The Plug & Play Anywhere concept was developed at Schnellecke using a similar "modular strategy". This stands for the outsourcing of the complete infrastructure of a logistics site to the cloud. While the opening of a site used to take several months, Schnellecke can now start up a fully functional site all over the world in a very short time thanks to Plug & Play Anywhere.





Involvement in Research Projects

Digital transformation does not only involve technical but also human challenges, since the employees in an intelligent working environment are no longer just “box pushers” but act as conductors of the digital processes. This places new challenges on their qualification. Continuous training and development seminars will therefore also have a completely different significance in logistics than they have today.

In order to study these and other consequences of the new logistics world, Schnellecke participates in various research projects together with OEMs and other logistics partners. VILOMA, which was concerned with ensuring the uniform flow of data over the entire process chain of an automotive component from production to the place of installation, has already been completed, since in the automotive production supply chain there are a lot of players who often still communicate by individual agreements. In the age of Industry 4.0 this is absolutely outdated.

That is why VILOMA was created at the initiative of VW. It should not only be possible to make the logistics data accessible via a uniform interface, but also to process it visually so that cause-and-effect relationships can be detected quickly. Only in this way can possible supply bottlenecks be identified as early as possible in order to react preventively to them.

eJIT, a pilot project for fully-electric semi-trailer tractors and the corresponding information systems, was started at the end of 2016 under real world conditions. eJIT stands for JIT logistics system on the basis of electro-mobility. It is therefore concerned with the just-in-time delivery of components to the VW assembly lines in Zwickau and Porsche in Leipzig. Furthermore, driver-assistance driving scenarios, including

autonomous driving under real world conditions, are to be researched. The combination of these technologies brings environmental friendliness and sustainability together through electro-mobility, as well as cost efficiency due to highly autonomous driving.

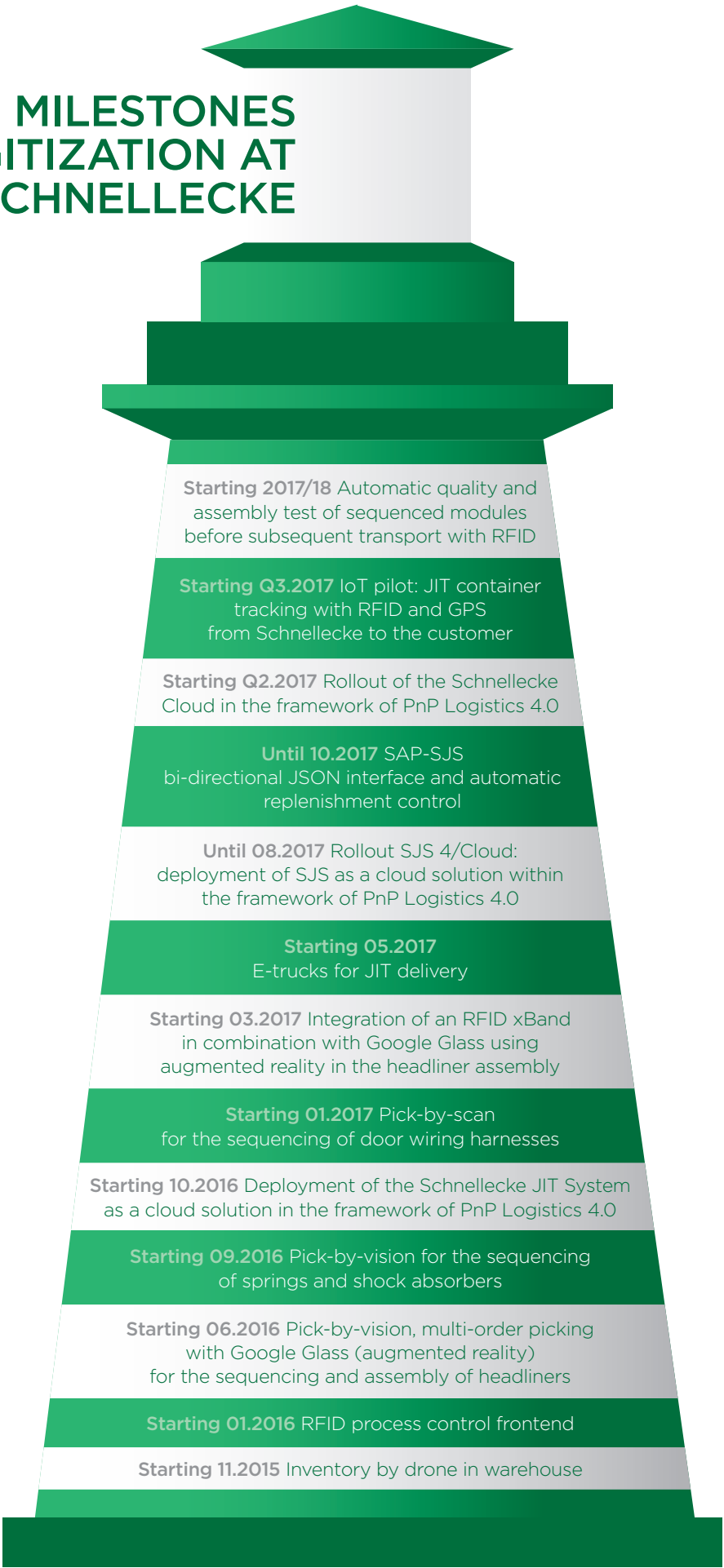
Despite all research activities, Abaid Goda attaches importance to the statement that Schnellecke is not an “inventor”, as he puts it. “We are a fast follower and adapter. We make technological innovations quickly usable in practice. This is our innovative power. Research is important for us to recognise new developments at an early stage and to think about the practical application in the scope of our processes earlier than others.”

PnP Logistics 4.0 - the Schnellecke digitization framework

In response to the challenges of digitization, Schnellecke has developed the PnP Logistics 4.0 framework. The goal: to provide a broad range of logistics processes and technologies through a high level of automation and autonomization on demand. Three essential components of PnP Logistics 4.0:

- Schnellecke Multi-JIS 4.0, the highly integrated and digitalized multi-JIS center with autonomous transport systems, paperless picking, and robotics.
- The Schnellecke Cloud is based on the SAP Hana Cloud and already supports processes such as Plug & Play Anywhere and our IoT applications.
- Schnellecke(ed) is an innovative new platform which serves the integration of technologies of different manufacturers and allows for the use of a uniform interface to control them and for them to communicate with each other.

MILESTONES
DIGITIZATION AT
CHNELLECKE



SECRET SIGNALS

SCHNELLECKE REDUCES ERROR
RATE TO ALMOST ZERO WITH THE
HELP OF GOOGLE GLASS

The hype was enormous when, a few years ago, Google presented its first Google Glass, a pair of glasses with a built-in camera, WLAN, and minicomputer whose screen was projected onto the glasses.



It was a hype that quickly fizzled out because nobody knew what good they would do in everyday life. In complete contrast to industry. There, the potential of Google Glass was quickly recognized.

“Glass at work” is the name of the programme in which a handful of selected Google partners makes technology usable for their daily work processes and develops it further. This all falls under the generic term of “Augmented Reality”, which at first sounds unfamiliar. Many people have heard of virtual reality, especially since the media was flooded with reports about the Oculus Rift. What is the difference between one of those 3D headsets and the slim, light Google glasses?

“Virtual reality is a self-contained world that doesn’t have to have anything to do with our reality,” explained Dr Abaid Goda, responsible for the IT implementation of Google Glass solutions at the Schnellecke Group. “Augmented reality, on the other hand, enriches our reality with context-related additional information.” As an example he gives the broadcast of a football match in which a virtual line is projected on the playing field before some free kicks in order to demonstrate the distance to the goal.

Well, Google Glass does not have much to do with football, at least not at Schnellecke. Here in Wolfsburg, the glasses are used to support the picking and sequencing processes of individual parts, more precisely, for the VW Touran and Tiguan headliners.

“Google Glass could do everything”

This includes a total of four processes: from pre-picking of the attachment parts to the storage of the completely assembled headliner in the sequence rack, which is then delivered just-in-sequence to the Volkswagen production line.

“So far nobody has ever used a Google Glass application at this process depth,” stressed Goda while he leads us through the giant hall, located in the Wolfsburg district of Sandkamp, to the first station, the preparation of the raw headliner. They are produced directly on the Schnellecke premises and delivered here just in time. We often have to dodge one of the numerous forklifts that noiselessly streak through the hall.

An employee wearing a pair of Google Glass is preparing the raw headliner for assembly by putting it in one of the two punching machines where the necessary openings are created. Each part is then provided with a slip of paper with a barcode sticker on it which an employee has previously scanned with a Bluetooth scanner.



“That is actually not necessary,” Goda explained. “That could be done by the camera in the glasses to document the entire process around the headliner paper-free.” However, not every external partner has developed that far yet.

The data glasses that the employee is wearing cannot be distinguished from conventional glasses at first glance. However, if you observe him for a while you notice that he taps the right temple arm of the glasses with his finger every now and then as if sending secret signals. “Menu items can be selected or selections confirmed with these taps,” Goda explained.

Marriage on the assembly bench

The raw headliner is not the only part that is pre-picked. All necessary attachment parts are also collected together in so-called car sets or kits. The employee is pulling four kitting baskets behind him on a picking wagon while he paces off the rows of shelves with the attachment parts.

The glasses display to him from where he has to take which part and in which kits they are to be put. The process is faster than it used to be because he now has both hands free to “pick”, which is the technical term. The scanner is also used here in order to later be able to clearly identify each part. When the kit baskets are full they are transported on the conveyor belt to the assembly area.

The raw headliners and other individual elements are assembled on the assembly benches. The process begins with the “marriage” of the kitting baskets to the raw headliner using a scanner, in other words a clear assignment. This is essential since to Volkswagen it is important that every individual part can be traced back to its origin if necessary. The marriage clearly assigns each small part used to one headliner. The assembled headliners are then hung in the intended position on the provided sequence rack.

Schnellecke now uses Google Glass for all levels of this process. Why? The individual work steps don’t look all that complicated. And doesn’t it take longer to work wearing the glasses than to work without them?

“The cycle times actually got worse initially after the introduction of Google Glass,” Goda confirmed. “But after an adjustment period, the picking



times were back to their usual values or even sometimes below them. And Google Glass has contributed to reducing the error rate to almost zero.”

Three Months of Programming

This is of eminent importance, since Schnellecke delivers just-in-sequence to the production line and there is only a small buffer. Each incorrectly assembled headliner costs time, and in the worst case can slow down the entire vehicle production. This is why each new technology that helps to avoid such a case is always welcome.

In the background, all data is flowing together in the Schnellecke JIT system (SJS), an in-house development that serves to manage the processes of the just-in-time production and pick-

ing, and one that also received the logistics award for best solution in the linking of logistics and information technology in the automotive sector. One of the strengths of the software is its flexible interfaces with which it can dock onto any other subsystem and control it, in this case the Google Glass application. “It took our programmers and our business partner Ubimax three months to write the software for these four workflows,” Goda said. “The introduction phase took another three months. Everything has been working in daily operations since June.”

And what happens if a pair of glasses gives up the ghost or is damaged? “No problem,” Goda laughed. “As a backup for every pair of glasses, we have a tablet on which the identical programs run. The work can be continued without any interruption.”

“LOGISTICS IS THE PRIME MOVER OF THE FOURTH INDUSTRIAL REVOLUTION”



Professor Dr Michael ten Hompel is the holder of the chair for Materials Handling and Warehousing at the Technical University of Dortmund and managing director of the Fraunhofer Institute for Material Flow and Logistics (IML). He has been focusing on the effects of the digital transformation on logistics companies for many years now.

Professor ten Hompel, in a study on digital transformation carried out recently, logistics companies finished last among the analysed industries. Is the logistics industry really that resistant to innovations?

Ten Hompel: We are currently observing an amazing development. On the one hand it is obvious that logistics is the prime mover of the fourth industrial revolution. In this sense, one can also see logistics as the leading application sector, i.e. as technology industry, from the point of view of the Internet of Things revolution. However, this has still not been embraced by many companies. Logistics service providers are positioned as more medium-sized companies and only a very few consistently consider a digital transformation. They would rather wait and see what is coming, what they might one day need. But the new technologies mandate new business models that are fundamentally different and can be disruptive – it is about the core business, and that is why the logistics companies have to take action themselves.

In your opinion, what exactly should logistics companies do?

Ten Hompel: Logistics companies have to get into IT development themselves, since in future the greatest competitive advantages will be in the software. If you don't understand anything about software, you don't command the most important raw material of the digital revolution. Unfortunately, many logistics companies in the past outsourced their IT and don't have the competences to develop their own products in this field. That's why it's better to start training your own people today rather than tomorrow! Because in the end it will be the same as with every industrial revolution: The fastest always win.

Especially value-added logistics still often requires a high level of personnel and usually has very small margins. Investments in new technologies are thus not exactly made easier ...

Ten Hompel: Innovation is not a question of money. All companies can develop innovations. Start with a small app that gives your customers some benefit. App programming today is not a kind of sorcery. New business models can sometimes also be communicated much more simply if they are connected to one individual piece of hardware, be that a smart watch, beacons, or a dash button like at Amazon. A prototype of such a button costs less than five euros and has enormous innovative potential. Every logistics company should be motivated to use this technology by seeing what Amazon does with the buttons.

What function could you imagine for a logistics button?

Ten Hompel: It can, for example, estimate distances, identify a person wearing a smart device, manage the inventory of a pallet, or locate things – and all of this for the price of a hamburger. The number of possible applications is huge.

Does this mean that employees fall by the wayside?

Ten Hompel: For the time being there is something that won't happen: Fully automated picking. The flexibility and intuition of people are still superior to that of a robot. In the institute we assume that we are headed to a social network industry in which people and machines will work as more or less equal partners. However, “social” also stands for “societal”. The companies that will profit the most are the ones that manage this digitalisation in the most socially compatible way.

Which consequences could the shift of emphasis of the automotive industry from car building to mobility have for logistics providers? And can digitalisation provide an answer to this?

Ten Hompel: I see a parallel development: The automotive industry is focusing on the mobility of people, and logistics companies on the mobility of things. Cars will certainly become autonomous and a driving platform whose individuality and functionality will be controlled by apps. This will entail new business models. For example, we are seeing a trend towards a shared economy and away from individual vehicle ownership. Individualisation would then mean the adjustment of the vehicle software to the user. I am also sure that in future it will be more important for automobile customers which operating system a car has than its material equipment, that is, whether the engine has 100 or 120 kW. Cars are starting to drive autonomously, and intelligent buttons are beginning to make independent decisions. If you are aware of this, you can drive the digital transformation as a logistics company yourself. The answer is: Invent what the car industry can use and don't wait until someone invents something that makes your own business model redundant.

DR. TIM KANNEWURF
AND KAI KIENAST
ON CORPORATE SOCIAL
RESPONSIBILITY
AT SCHNELLECKE

“CSR IS A
PART OF
SCHNELLECKE’S
DNA”

Some of them smile into the camera, some not: disadvantaged youths who have the opportunity to gain practical working experience at Schnellecke South Africa. The company invests well over a million Rand annually into this kind of development work and provides practical help.





The youths and young men who have gathered in front of the Khayaletu Oliver House in Port Elizabeth look tough. And they had to be tough because they were once street children without a roof over their heads, without money, without prospects. Until they found a new home at Khayaletu.

The Khayaletu Youth Centre is one of the many institutions in South Africa that attends to the reintegration and resocialisation of street children. In the Oliver House, youths between the ages of 18 and 21 receive their first vocational training and learn how to build an independent life for themselves.

The students of the Siyaya Skills Institute, also in Port Elizabeth, don't perhaps make such a hardened impression, but their lives have not been much easier. They all have a disability, and in South Africa that almost always still means being condemned to a life on the lowest level of society.

The South African education system has been in crisis for many years. After graduation, most students have neither the necessary reading and writing skills nor the necessary experience with computers to be able to pursue a demanding profession. Of every one hundred students in South Africa only twelve qualify to attend university. The rest of the 18 to 24-year olds have poor professional prospects and only seldom find a permanent job.

The Khayaletu Youth Centre and the Siyaya Skills Institute are only two of many institutions that are trying to change this situation through their work. However, they would not be able to carry out their work without the financial support of private citizens and companies, support that Schnellecke South Africa also contributes to.

Several dozen students of the Siyaya Skills Institute have now been able to gain one year of practical experience at Schnellecke and obtain the National Certificate in Wholesale and Retail Distribution (Warehousing). Furthermore, Schnellecke South Africa has participated in the Just Inspired Campaign since 2011 and supports the Skills Outreach Programme of twenty regional schools.

Lived Responsibility

“As a globally operating organisation we are confronted with many personal stories every day,” said Dr. Tim Kannewurf, Chief Legal Counsel of the Schnellecke Group and the company founder’s grandson. “This is especially true for developing

The *Schnellecke Spirit*

The *Schnellecke Spirit* consists of three primary principles which are further substantiated by addendums.

WE ALL TAKE ON RESPONSIBILITY

I AM RELIABLE
WE KEEP OUR WORD

WE ARE A STRONG TEAM

I AM DEDICATED
WE ALL PULL TOGETHER

WE HAVE THE COURAGE TO CHANGE

I AM OPEN TO NEW IDEAS
WE BREAK NEW GROUND



countries where poverty is to some extent still very widespread. And so of course we help the people when we can.”

That sounds quite natural for a company with more than 16,000 employees and a global presence. One of the reasons for this certainly is that Schnellecke is a family-owned company with a clear code of values that was being lived long before it was put into writing.

“Corporate Social Responsibility is, so to speak, a part of Schnellecke’s DNA,” stressed Kannewurf. “For us it is not part of a strategy but an integral part of our family-owned company. Taking on responsibility: for us this is not a question of guidelines but a matter of course that is part of our fundamental family values.”

These family values were compiled in the *Schnellecke Spirit* in 2010. It is not just a sheet of paper that new employees skim through and then put aside, but a call to action which the employees of Schnellecke all around the world orientate themselves on.

Social responsibility is clearly the focus, according to Kannewurf. “People are the be-all and end-all in logistics. It therefore seems logical that special attention is paid. It was a matter of course for my grandmother and my uncle. However, it is really a challenge to transfer this attitude from a small local company to a global workforce of more than 16,000 employees.”

Aid for People with Disabilities

But it is possible. Many initiatives come from the employees and are not dictated by management. “We are proud of this,” said Kai Kienast, head of Corporate HR.

Whether Mexico or Spain, whether Slovakia or Portugal, whether Germany or the USA – numerous examples prove how serious the organisation takes its responsibility. Alongside the support of children, youths and families from socially disadvantaged backgrounds, the support of people with disabilities is of great importance.

Schnellecke Logistics España, for example, has been working together with Can Casas, a project for the integration of people with disabilities, since 2012. The Can Casas team comes to Schnellecke three times a week with five people. They take on the assembly of the CKD shipping cartons and, as necessary, of the dividers, the web inserts in the cartons.

Ten people with disabilities have been working for the Schnellecke Logistics Verpackung GmbH in Duisburg since 2015. As part of a team they package car parts for CKD shipments. The employees, of whom the majority are intellectually disabled, work five hours per day. Schnellecke set up a workplace of their own for the new employees. Care is taken to make sure that the material is changed regularly so that the work does not become too monotonous.



No Greenwashing

CSR does not only consist of social involvement. The environment and economic behaviour are also a part of it. Do the family values also provide support for these fields as well?

“As regards to economics, certainly,” Kannewurf is sure. “We are an independent family-owned company and want to stay that way as well. That means that we do not live beyond our means and always pay attention to having a solid financial foundation. And we follow the laws and statutes wherever we are active around the world.”

The environment has come more into focus at Schnellecke just in recent years. “We also deal with this frankly because we do not want to be guilty of greenwashing,” said Kannewurf. “We still have a long way ahead of us in this area, even though we are already doing a lot. Whether in the vehicle fleet or building management, we have increased our energy efficiency considerably in recent years.”

Not only have investments been made in towing vehicles with lower fuel consumption but also in a new electronic route planning system which optimises routes and therefore reduces emissions. Solar panels on company owned buildings improve the energy balance, and the consumption of fossil fuels is systematically recorded and methods for reduction are explored. It is a process that is not only energetically pursued in Germany but also in other regional companies.

Kienast pointed out that the properties used by Schnellecke are often not rented or bought by the company directly. “We always carry out our work in close proximity to our customers, and a building on their factory premises is often made available to us. Therefore our possibilities of influence are limited.”

However, Schnellecke is active wherever it is possible because the connection between CSR and economic success, as Kienast stressed, can be seen. “If we, for example, invest in measures that improve energy efficiency then we are not only doing something for the environment but also something for the people who work for us. We save money on energy and create an environment in which the employees can work more productively.”

“This is the Schnellecke Way”

The various activities of the Schnellecke Group are summarized in the Sustainability Report for last year. According to Kienast this corresponds to the current corporate policy. “We are currently merging measures globally in order to be able to act even more sustainably.”

Despite these activities, for the time being the organisation is not planning to undergo a formal sustainability certification process. “More important for us than certificates are the activities behind them,” Kannewurf said. “This is what counts. And we don’t see any added value in having a certificate. I am happy that sustainability at Schnellecke comes from within and is not being done for the media effect. This is the Schnellecke way.”

2016 Sustainability Report of the Schnellecke Group

The 2016 Sustainability Report of the Schnellecke Group presents the various activities of the organisation in 2016, explains the corporate strategy in regards to CSR, and provides central key figures.

The report is available for download in English and German under www.schnellecke.com

We would also gladly send you a printed version. Please send your request to

Cersten Hellmich
Director of Corporate Communication & Marketing
cersten.hellmich@schnellecke.com



AFGHAN REFUGEES
AT SCHNELLECKE SLOVAKIA

THE DREAM OF A HOUSE AND FAMILY

Schnellecke knows no discrimination based on country of origin, skin colour, gender, or religion. Here is an example from Bratislava, where ten people whose homeland was originally Afghanistan are currently employed.

The late shift has started at the Schnellecke logistics optimisation centre in the Lozorno Business Park. An enormous high-bay warehouse system fills the hall, the automated pickers move silently between the shelves. The people stacking the finished picking bins on pallets look small by comparison.

This is especially true of Safi Nahzad, who is only 165 cm tall. But the man in his mid-thirties makes up for his slight stature with energy and dedication. He stacks the full boxes on top of each other almost effortlessly, concentrated and at the same time relaxed.

Nahzad is one of ten current employees at Schnellecke Slovakia whose homeland is far away, namely in Afghanistan. War drove all of them from their homeland, and they left behind families, friends, and relatives in order to build a better future for themselves. They were fully aware that they may never see their homeland ever again.

Safi Nahzad finished his veterinary medicine studies in Afghanistan – a profession he may never have the chance to pursue. In 2009 he left his homeland and came to Slovakia without any proficiency in the language. The first years he worked in

the kitchen of a pizzeria and learned Slovakian, a language in which he can now communicate perfectly. And he built himself a new life with his own flat and new prospects.

In January 2015, Nahzad joined Schnellecke Slovakia. Word had spread among the Afghan refugees that they were welcome at Schnellecke. “I am very happy here,” Nahzad confirmed, and those are not empty words. The work at Schnellecke is an important step to achieving his goals. He dreams of a house and of the reunion with his family, some of whom are now living in Germany.

“At a time in Europe in which the word ‘refugee’ is almost only used together with the term ‘crisis’ and in which more and more borders are closing for these people, Schnellecke Slovakia hired ten people from Afghanistan,” said Miriama Slazaková, HR manager for Eastern Europe at Schnellecke. “And we haven’t regretted it for a single day. The employees always have a smile on their faces and are an asset to our team. They prove every day that we made the right decision.”



“I HAVE GREEN BLOOD”

SCHNELLECKE IN SLOVAKIA:
INNOVATION, AND A LOT OF
FEMALE POWER





Schnellecke has been offering its services in Slovakia for almost twenty years. In this time the company has grown from one employee to around 850. A visit to a site that is fascinating for other reasons as well.

Bratislava is no ordinary place. The city with five names in three languages is the only capital city in the world that borders two neighbouring countries. This location between nearby Vienna and the not much further away Budapest, as well as the Danube, which flows through the middle of the city, turned Bratislava very early on into a metropolis in which many peoples and cultures blended together.

Today, the city is again a boomtown. The many construction sites on which new office or apartment buildings are shooting up bear witness to this. The reason for the boom is the numerous international automobile manufacturers who have settled just outside the city, the most significant of which is certainly Volkswagen. With the automobile manufacturers came many other companies – among them Schnellecke.

Schnellecke's presence in Slovakia started rather inconspicuously. The catalyst was the enquiry of a customer that delivered to Volkswagen. So an old factory hall in Stupava just a few kilometres away from the VW factory

was rented in 1999. "I read a job advertisement for a Scheduler," remembered Elena Adamcová, who today is head of the transport department in Slovakia. "When I showed up for the job interview, I found one employee. I asked him about the HR department. He just laughed at me and said that he was it."

The "employee" was Lars Otte, today head of Corporate Business Development at Schnellecke, and it was his task to set up the site and the team in Bratislava. After Schnellecke in Wolfsburg had already taken on the joining of the tank nozzle and the tank bladder, as well as the just-in-time delivery to the VW Wolfsburg factory, this was now also to be done in Bratislava. At the same time, Schnellecke won the contract for the purchased parts supply from Spain for the Volkswagen Bratislava factory, and also took on the empties return management starting in August 1999.

The building in Stupava was soon too small, since the two original employees had become twenty. A new supplier park was being built in nearby Lozorno, so Schnellecke Slovakia moved in.

"Since then we've moved often," said Boris Bielik, director of the Eastern Europe division who came to Schnellecke Slovakia fifteen years ago. "From the supplier park in Lozorno to Devínska Nová Ves, then to a new business park in Lozorno, and finally we moved into an additional building in Devínska Nová Ves."

Firmly in Female Hands

Today, Schnellecke Slovakia has around 850 employees. And the company is firmly in female hands. Three essential positions are staffed by a trio of women: Zuzana Školárová is the country manager, Elena Adamcová is the head of the transport company, and Miriama Slažáková is the HR manager for Eastern Europe.

We meet the three in the Lozorno business park located directly next to the motorway. Schnellecke Slovakia has its logistics optimisation centre and the warehouse for the transport company here. The bright and friendly office wing that also houses the company management is on the first floor of the building.

Školárová, a petite woman with a friendly smile, speaks fluent German, as do many of the Slovakian employees here. She came to Schnellecke from VW in 2008 after having had regular contact with the company. After a year each as business unit manager in Poland and the Czech Republic, she came back to Bratislava as the project manager for the logistics optimisation centre. Before taking on her current position, she spent three years as the managing director in Nizhny Novgorod, where she set up Schnellecke's Russian subsidiary.

Školárová maintains an engaging management style, as can be found almost everywhere at Schnellecke. For her, this includes keeping in constant contact with the staff. "I meet with the individual shifts every three months. The shift leaders and the responsible business unit manager are not at the meetings. This way the employees can speak openly with me about everything."

The same commitment she conveys when talking about module assemblies or picking is also noticeable when the discussion moves to another topic, a matter that is nothing



less than truly dear to her. “For a few years now we have been supporting day-care facilities for children with Down syndrome in the neighbouring town of Malacky,” she says. It is support that takes on a multitude of forms. For example, Schnellecke buys the children’s handicrafts and gives them to its employees. The facilities are invited to the Family Day for the employees and can sell their products there as well. And of course the company provides special support on holidays such as Christmas.

“We don’t just offer our employees money”

Miriama Slažáková took on her position as HR manager for five Eastern European countries in the summer of 2012 after completing her studies. And this is, at least for Slovakia, not an easy job. There are a lot of vacant positions around the country, most of them around the boomtown of Bratislava. “We have a supplier market,” Slažáková said. “People can choose where they want to work. Whoever is no longer happy at a company today already has a new job tomorrow.”

This places special demands on HR, since Schnellecke Slovakia cannot offer the wage level of manufacturing companies. And it is generally accepted that vying for employees by increasing wages would cause an upward spiral that would not be economically sustainable. “Every day we have to find new ways to keep our employees and retain them long-term,” stresses Slažáková.



Therefore, Schnellecke regularly organises events such as Family Day, sports competitions, or Christmas parties. There are small gifts on national and international memorial days, for example flowers for all female employees on International Women’s Day. A lot is also being done for the health of the employees, for example through ergonomic workplaces, health days, medical consultations, or fruit day. Families in difficult life situations are supported. And various training programmes are offered for the personal development of staff members. In addition there are various bonus systems.

For Slažáková it is especially important that, “we don’t just offer our employees money but also respect and appreciation.” The demands on managers are accordingly high. That is why special training sessions, among other things, were set up for shift leaders in which they learned to develop an eye for staff members who are having personal problems and to look for a solution together with them. “Staff should feel that they belong to a team and that they can talk to their team leaders about anything, whether it has to do with work or with personal problems.”

Freight Forwarding Profit Centre

When you meet Elena Adamcová you immediately sense the enthusiasm with which she does her job – and after more than 15 years at Schnellecke it is just as it was on her first day. She has her own good explanation for this: “I have green blood.”

Freight forwarding plays an important role at Schnellecke Slovakia also for historical reasons, since in the beginning it was parts from Spain that Schnellecke delivered to the VW factory. “At some point there were around one hundred trucks from Spain sitting in front of the door at the same time,” said Adamcová, who was a scheduler at Schnellecke at the time. “We had to work together with VW to quickly find solutions for the unloading priority in order to maintain the flow of material, something that today is commonly known as time-frame controlling.”

That is all in the distant past. Today about fifty people work in the bright, modern open-plan office above the hall in Lozorno, about a third of them schedulers. Like their colleagues they are always available for their customers. “Freight forwarding services are interchangeable and are usually only regarded from the point of view of price,” Adamcová said, knowingly. “With such strong competition, personal contact is a way of building up long-term relationships based on trust.”

Freight forwarding is run as a profit centre and has been operating as an independent company for over eight years. The core of the activities is in the automotive sector, but the company also has a wide spectrum of other customers, including the glass industry, the construction industry, furniture component manufacturers, and the metallurgical industry. The company has its own fleet of vehicles that it uses, as well as some carefully selected subcontractors in order to be able to handle peaks in demand.

An additional plus is the cooperation with Schnellecke’s German freight

forwarding companies. However, Adamcová emphasised one aspect in particular. “Our customers also value us due to our trustworthiness and the corporate values that we live in our daily work.”

Assembly Control per RFID

If you drive from Bratislava and do not use the motorway but instead take the country roads to Devínska Nová Ves, you will first notice the shopping centres that stand in the middle of open green fields. However, this will soon all have changed because Bratislava is expanding. A completely new city district is to be built here in the coming years, along with all of the necessary infrastructure. On one side the wooded Carpathian foothills and on the other the thin chimneys of the VW factory rise upwards.

The industrial park, in which numerous suppliers have settled, is only a few minutes’ drive away. Trucks leave the premises in short cycle times to cross the few hundred meters to the JIS gate of the VW factory. Schnellecke Slovakia has rented two buildings here. Plant supply, module assembly, IT, administration, all of this and more are housed here.

Our destination is the bumper assembly, and we are not the only visitors. “Companies often come and visit us in order to see how we work here,” says Gabriela Novaková, managing director of the Devínska Nová Ves site. “This is of course an additional burden, but also certainly an honour for us.”

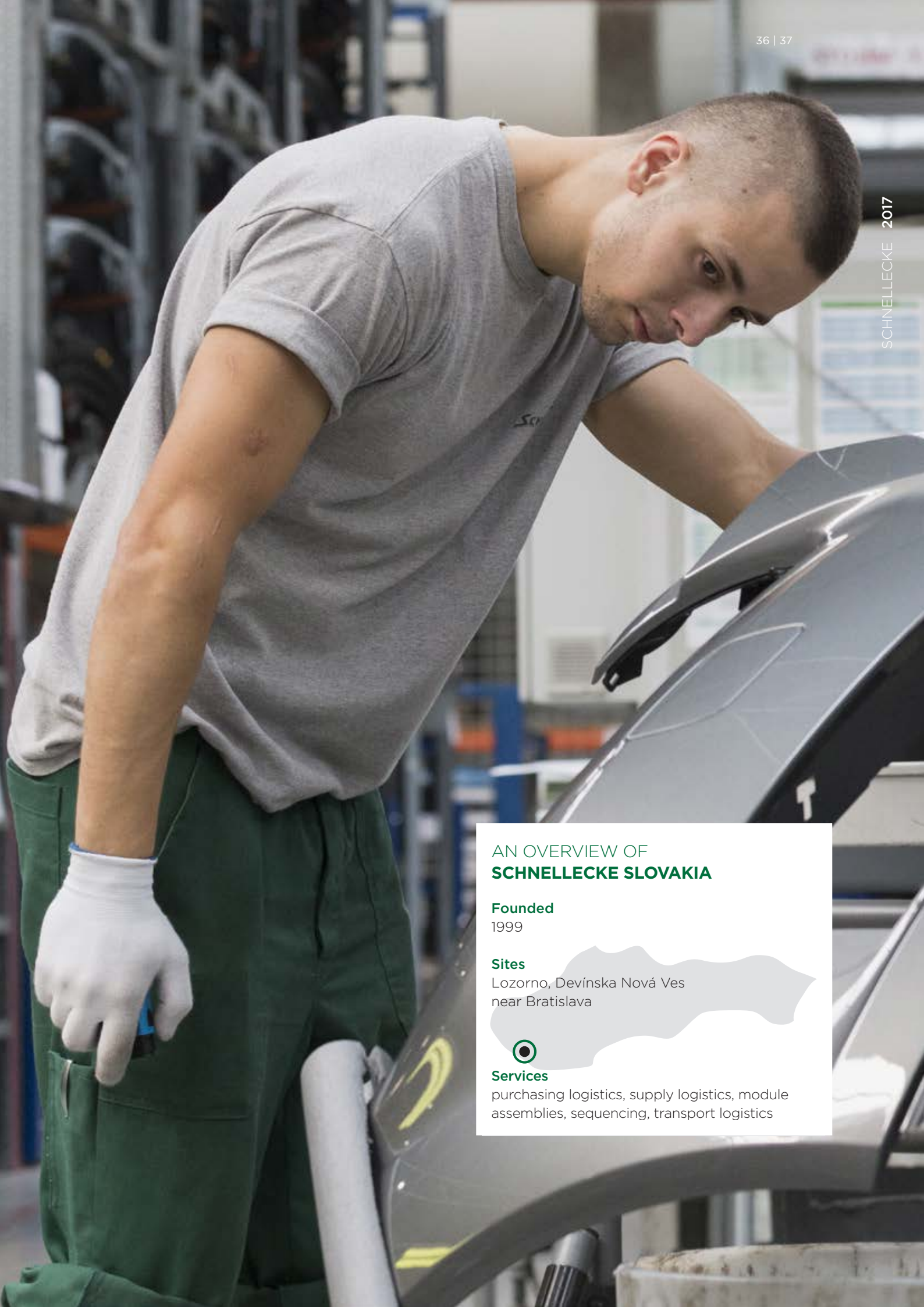
The cleanliness of the building is immediately apparent. Employees with brooms and dust pans go past

again and again to remove even the smallest impurities. This is not just due to cosmetic reasons; highly sensitive components are assembled here, for example bumpers with cameras and sensors. This is why the assembly area of around one thousand square metres used for this purpose has an antistatic coating. The employees enter it through a special doorway for the discharge of electrostatic charges.

The thing that makes this place so special is not visible. “The complete assembly area is controlled by RFID,” Novaková explains. The tiny transponders are coupled with Schnellecke in-house developed software and at every assembly station they show exactly the right parts with the right paint that the employees have to reach for. They also set the correct position in the JIS rack so that later, on the car manufacturer’s assembly line, the right part is also always available.

Novaková already has plans to expand the use of RFID. In this way, it will not just be possible to locate the mobile JIS frames at any time, but a pending maintenance will also be automatically signalled. The headsets that the employees wear which guide them when they are compiling the picking bins in the warehouse are to be replaced by vests with integrated speakers and a microphone. And the first Google Glass projects started in 2017.

In the evening we take a short excursion to the historic Bratislava old town. No high-tech prevails here, just the ghost of an extinct empire in which the city once played an important role, a role that may never return politically, but one that has been experiencing an economic revival for several years now.



AN OVERVIEW OF
SCHNELLECKE SLOVAKIA

Founded
1999

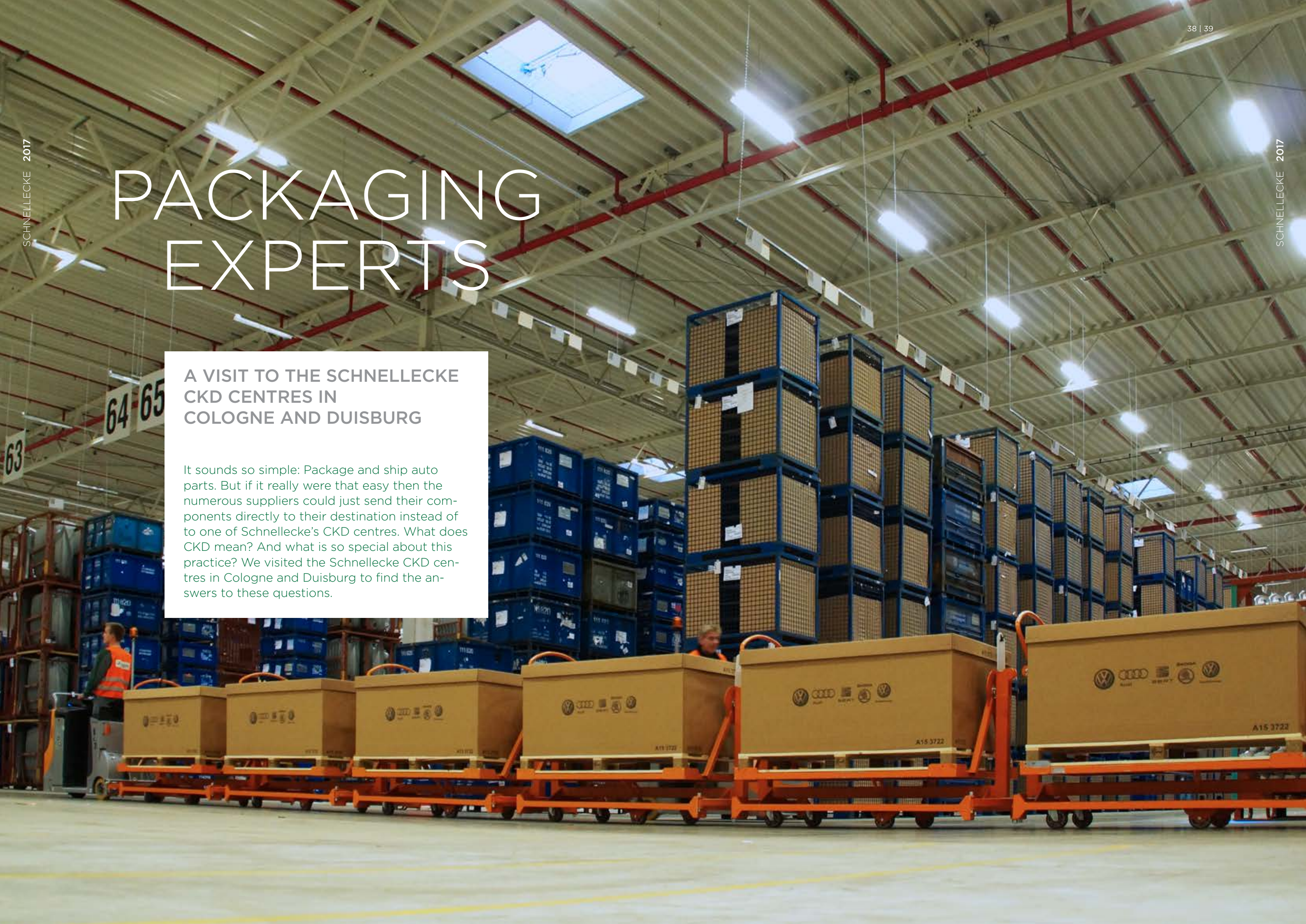
Sites
Lozorno, Devínska Nová Ves
near Bratislava

Services
purchasing logistics, supply logistics, module
assemblies, sequencing, transport logistics

PACKAGING EXPERTS

A VISIT TO THE SCHNELLECKE CKD CENTRES IN COLOGNE AND DUISBURG

It sounds so simple: Package and ship auto parts. But if it really were that easy then the numerous suppliers could just send their components directly to their destination instead of to one of Schnellecke's CKD centres. What does CKD mean? And what is so special about this practice? We visited the Schnellecke CKD centres in Cologne and Duisburg to find the answers to these questions.



The Cologne Eifeltor Cargo Centre is Germany's largest container transshipment station for the combined rail & road freight transport. The giant portal cranes are in operation day and night and flood the site in a bright light even at night.

Numerous companies and logistics service providers have settled in the area, and the influx continues unabatedly. Since 2016, Schnellecke has its CKD site in one of the new logistics parks too. Engine assembly kits for the DEUTZ AG are picked, packaged, and made ready for shipment here.

CKD is the acronym for Completely Knocked Down and describes the extensive disassembly of a vehicle or engine into its individual components and functional units. The process is an indispensable part of modern vehicle production (see Info Box). It is not vehicles at the DEUTZ AG in Co-

logne but engines that Schnellecke prepares for shipment around the world. Furthermore, so-called EATs are picked and packed according to orders.

"EAT stands for the Exhaust After-Treatment system of diesel engines," explained Dominik Krok, the site general manager. Lawmakers continue to stipulate increasingly lower particle limit levels. In order to comply with these, the use of a diesel particle filter is indispensable. Furthermore, depending on the engine, other systems are used, such as a diesel oxidation catalyst or selective catalytic reduction. These advanced systems have to be both compact and individually adaptable to the client device.

The DEUTZ AG offers both with its EAT systems. Schnellecke creates an EAT package for every engine, which is then sent together with the engine. As well as



the particle filter and the catalysts, the contents of the EAT accessories pack can also include the most varied small parts, hoses, control units, or dosing units for the AdBlue tanks.

With its EAT system, DEUTZ offers both. It consists of a so-called single unit that combines all systems into one. This means that the entire technology for emissions after-treatment is integrated into just one extremely compact component. Schnellecke generates an EAT package for each engine, which is shipped together with it.

Parts to China, South America, and North Africa

The CKD engine assembly kits are packaged and loaded in individual parts. They are subsequently transported to various sea ports and airports in Europe. From there they are shipped to clients and joint ventures, among others in China, South America, or northern Africa where they will be assembled. "This includes, for example, cylinder

heads, crankcases, crankshafts, camshafts, oil pans, but also small parts such as screws, discs, and sealing rings that have to be packaged individually," explained Krok.

The workplaces in the large hall are as different as the individual components. Small parts are packaged in plastic covers, large and heavy components are packaged in appropriately sized transport boxes. Cartons are filled with parts on another line. All of this takes place virtually automatically. Each employee knows what they have to do and does the work at a brisk tempo but without any noticeable rush. "This is only possible because all processes were meticulously planned beforehand," Krok knows. Only in this way can the arrival of boxes with all parts that belong together at their correct destination be ensured.

Forklifts take replenishment to the lines from the high-bay warehouse or pick up the packed boxes and pallets. These are lined up at the doors ready to be picked up by the freight forwarder, who takes them to their next destination on behalf of DEUTZ AG.

Innovative Solutions in the CKD centre Duisburg

We leave Cologne and head down the Rhine River a few dozen kilometres. Logport II south of Duisburg is a relatively young offshoot of the Duisburger Hafen AG. Several buildings – among them a Schnellecke CKD centre – were built in a very short time in the shadow of a closed down disposal site on which Duisburg's latest landmark, Tiger & Turtle, rises into the sky.

Car parts for the Audi models A3, A4, A6, Q3, Q5 and Q7 are prepared for sea transport to China, India, and Mexico. Schnellecke employees receive, warehouse, pick and package the components in special CKD bins and load them into overseas containers. The worldwide largest Audi CKD site covers a total of around 53,000 square meters of building space on the 106,500 square meter premises. That is about the size of eight football pitches. When running at full operation, 450 people work here.

4,000 Individual Parts for one Vehicle

“As well as avoiding high import duties, the optimisation of the assembly process at the final destination also plays a role,” explained Judith van Briel, managing director in Duisburg. “We collect the components here that come from the car manufacturers themselves and from many suppliers. We put the JIT components together in such a way that in each case two containers contain all parts that are necessary for the assembly of a complete vehicle. That speeds up the work at the destination considerably.”

For one vehicle, up to 4,000 individual parts have to be properly compiled and packaged in as space-saving a way as possible. This is not possible without an ultra-modern IT in the background. That is why the employees are equipped with barcode scanners, tablets, and touchscreen computers with whose help they can find the right components quickly and without errors.

Work in a modern CKD centre is characterised by drastic workload fluctuations. This leads to noticeable fluctuations in the number of employees. This is why Schnellecke has developed special qualification concepts. Employees in key roles who are always present are already trained many weeks before the start-up of a new packaging operation. On the other hand, employees who are deployed at short notice to compensate for workload fluctuations have to be qualified in a very short time.

Tugger Trains with Remote Control and Bicycle Lights

Employees riding pedal-scooters dart between the rows of shelves and the noiseless tugger trains in the enormous, almost 500 meter long halls. The tuggers are electric with several trailers and appear to randomly drive this way and that – and yet each movement follows an exact and sophisticated plan. It is immediately obvious that every tugger is equipped with a remote control. It used to be necessary to have an extra staff member for instructions in order to position the trolleys precisely in front of the conveyor belts for loading, but this can now be done just by the driver.



When a tugger train is fully loaded, a standard battery-powered bicycle light attached to the first trolley is switched on – an innovation developed at the Duisburg CKD centre. The tugger driver can tell by the blinking light that the trolleys are ready to be picked up.

The small part packing places are also innovative. For example, scissor lift tables are hydraulically raised to the desired height by operating a foot pedal. By using a bracket the upper platform can be tilted forward for better access to the goods that are further to the back of the load carrier.

All of this not only supports the smooth flow of the processes but also lightens the load on the employees. Because Schnellecke is convinced: High productivity and ergonomics are not contradictory but complement each other.

In Other Countries as Well

Schnellecke does not only perform CKD services for its customers in Germany but also in Spain and India. Every year Schnellecke packages more than a million cubic metres of parts in total at its CKD sites worldwide. And this figure will soon rise because Schnellecke has just started an additional CKD centre for Audi in Soltau.

Today, Schnellecke is one of the worldwide leading CKD providers for the automotive industry. The importance of this business for the company can also be expressed in the fact that the corresponding activities were recently bundled together in their own company, the Schnellecke Logistics Verpackung GmbH.

INTERVIEW WITH DR RENÉ GRAF,
SENIOR VICE PRESIDENT OF
CORPORATE LOGISTICS, DEUTZ AG

“LOGISTICS PLAYS AN IMPORTANT ROLE FOR US”



High-tech diesel engines with a displacement of between 2.2 and 7.8 litres which will one day drive agricultural machinery, construction machinery, forklifts or generators are manufactured at the DEUTZ AG production facilities in Cologne-Porz. The brand DEUTZ has stood for excellent engine technology worldwide for more than 150 years, as Dr René Graf pointed out. He is the department head in charge of logistics at the DEUTZ AG.

“We are a tier 1 supplier for several well-known OEMs in the field of construction and agricultural machinery,” said Dr Graf. “We supply our customers’ factories all over the world. This alone means that logistics has a key role for us. The logistics functions of the DEUTZ AG include the complete order-to-delivery process. That spans from the assembly programme planning, to the in-house production planning and the scheduling of the material deliveries, up to the material flows in the receiving area. Furthermore, the picking and sequencing up to the assembly line, the packing of engines and accessories, and the shipping are managed.”

However, logistics is not just important for the manufacturers who install DEUTZ engines in their products, even if the adherence to deadlines is especially important here. “We also service dealers and our own subsidiaries on different continents, who in turn supply their customers,” explained Dr Graf. “Furthermore, we also have joint ventures or licensees, for example, who build engines using our parts. They are all supplied via CKD. That is why outbound logistics is an integral part of our corporate activity.”

Many logistics operations are conducted by the DEUTZ AG itself, according to Dr Graf. “We take care of the preassembly with integrated picking or sequencing on our own because this way we can ensure the best quality assurance and reliably control the production process. We have a relatively high complexity in the parts, the preassembly variants, and the assembly line itself, which we run at different cycle rates. That would not be so easy to carry out for an external service provider. CKD, on the other hand, does not primarily deal with cycle-dependent picking but with safe packaging in particular. This is not one of our core competences. That is why we have outsourced the process.”

Handling peak periods is only possible in this way, as Dr Graf reported. “CKD orders sometimes come in at short notice and are associated with considerable effort that requires a high picking and packing output. Sometimes a planned amount of six tonnes can suddenly become 16 tonnes due to an increased number of parts.”

CKD: SHIPPING CARS IN INDIVIDUAL PARTS FOR ALMOST 100 YEARS

The term Completely Knocked Down (CKD) has its origin in the automotive industry and refers to a special form of vehicle manufacturing and marketing. It is by no means the case that completely manufactured cars are entirely disassembled and then subsequently packaged for shipment to overseas, but rather a vehicle that has not been completely manufactured is sent in the form of individual parts and modules to the respective assembly plant (usually overseas), where it is assembled to a complete vehicle.

Generally, the manufacturers and suppliers deliver the parts and modules to a packing company. Here they are packaged for transport, consolidated in accordance with their order, and loaded onto trucks or into sea containers for the scheduled transport to the assembly plant.

CKD logistics includes the packaging planning according to the customer and suppliers’ requirements, the interim storage of prepacked and non-prepacked car parts, and the picking and packing of the individual orders in accordance with the programme, as well as the scheduling of the complete packaging materials. Container handling and empties management are also key elements of the CKD business.

The Ford Motor Company was already delivering its vehicles in individual parts to other countries where they were then assembled to a complete vehicle in 1922. The reasons for this have stayed the

same until today: Many countries level a duty on the import of vehicles. Duties for partially or completely disassembled end products are often considerably less. By assembling the parts in the destination country, the vehicle can then be sold for less money and is therefore more competitive on the market.

Vehicles are also delivered in individual parts at the start of local production in another country. This means that the investments in the new market by the manufacturer remain manageable since complicated components are imported. The remaining components are produced in the importing country or sourced, meaning a part of the value added is generated there (local content).

There are now three variants on this principle: the complete disassembly of vehicles (completely knocked down – CKD), the partial disassembly (medium knocked down – MKD), and the disassembly into a few assembly kits (semi knocked



FROM TRUCKER TO TRANSPORT LOGISTICS SPECIALIST

INNOVATION IS ALSO
MANDATORY IN THE SCHNELLECKE
TRANSPORT DIVISION

Trucker – that was then. Today, the trucker has become a transport logistics specialist, a part of a meticulously working system that leaves no room for deviations. The comprehensive planning, organisation, and execution of tailored transports requires precise scheduling. Ultramodern communication equipment in the vehicles enables the exact tracking of each transport.

“The fun factor has suffered a bit in recent years,” said Torsten Behrens, who has been a long-haul truck driver for Schnellecke for fifteen years. “Today I no longer drive across Europe but almost only in Germany. Eastern European forwarders are simply cheaper for European transport operations.”

Behrens is an old-school long-haul trucker. One who loves to be on the road the whole week. It is a species that is getting rarer and rarer, according to Thomas Lammer, head of Transport at Schnellecke. He said, “Of every ten drivers who apply with us, eight say: no long-haul transports, please. I want to be back home in the evening. That makes it difficult to find good people in Germany.”

The average age of the truckers at Schnellecke is around fifty. This is not necessarily a bad thing for Lammer. “It shows that the truckers enjoy working for us. We have a rate of fluctuation that is almost zero. This certainly also has to do with the fact that we take good care of our drivers. To us, the drivers are not machines, and they know it.”

Comfortable Workplace

This appreciation expresses itself, among other things, in a workplace design that is as comfortable as possible, since this is often the driver's place of residence during the week. Fridges, air conditioners, wide enough beds – those are only some of the trucks' equipment details. The independent air-conditioner is simply great in the summer,” said Behrens happily, who certainly also appreciates the numerous safety features.

Lane assist systems, braking assistants, distance-control systems – all of these are a matter of course in Schnellecke trucks, as are numerous other innovations that are not only of a technical nature. A good example of this is the CarCube by Trimble, an on-board computer with GPS and a large display that offers various functions.

“With Trimble we can utilise our trucks better and avoid empty journeys,” explained Lammer. “Furthermore, we can give our customers more detailed information about when a truck will arrive. But that is only one side of the coin. Trimble measures more than thirty criteria about how the driver drives and behaves. We award points for this, and the driver gets a bonus at the end of the month when a certain number of points is reached.”



150,000 Euros for One Litre

At first this sounds like surveillance, and some of the drivers also saw it this way. But this is now history. “Trimble simplifies the control of my own tasks for me,” Behrens said. “I have, for example, a better overview of how many hours I've been driving. Route changes are displayed to me with all necessary information, and I don't have to constantly call Scheduling anymore.”

The point incentive also seems to work. With it Schnellecke has been able to reduce the average fuel consumption by 1.5 litres per 100 kilometres. That does not sound like much, but as Lammer emphasised, “A savings of one litre of fuel per 100 kilometres adds up to about 150,000 euros for our entire fleet. Economics and ecology come together here.” But Trimble can do even more. Schnellecke hands

out a regular newsletter to the drivers which informs them of any news in the company. “The driver is generally cut off from the company five days a week,” Lammer said. “But he is definitely still interested in what is happening in the company. In the future, the newsletter will be delivered to him electronically via Trimble and he can read it in peace and quiet in the evening. This way we strengthen the sense of belonging in the company and actively bring him closer to the community.”

“Driving is Hard Work”

Do you really need old-school drivers with all of these innovative solutions? Or do the technological achievements turn truck driving into a rather easy job that anyone can carry out?

“Absolutely not,” countered Behrens. “Truck driving is still hard labour. You feel safer today, but that doesn't make it easier to concentrate. On the contrary. You have to pay more attention to not become distracted. If anything, it is physically less demanding than it used to be, but it isn't any less mentally demanding. You notice after a long shift that you are really exhausted.”

Trailer Found in Two Minutes

In recent years Schnellecke has invested increasingly in new trucks and tractor-trailers. Around 250 new vehicles have been bought, since Schnellecke is one of only a few companies that maintains their own large vehicle fleet. For every tractor there is an average of three trailers in order to keep the downtimes

during deliveries and pickups as short as possible.

Schnellecke has four parking areas for about 300 mega-trailers in the Braunschweig area alone. So it is not always easy to find a certain vehicle. “In the past, two workers used to walk around in the morning registering all trailers and determining their locations,” Lammer remembers. This is all history now – since 2014 Schnellecke has been using telematics for this as well. It only takes the system two minutes to find the pulled units. A tractor incurs about several hundred euros in costs per day. Therefore every minute gained means hard cash.

The Heart Beats in Braunschweig

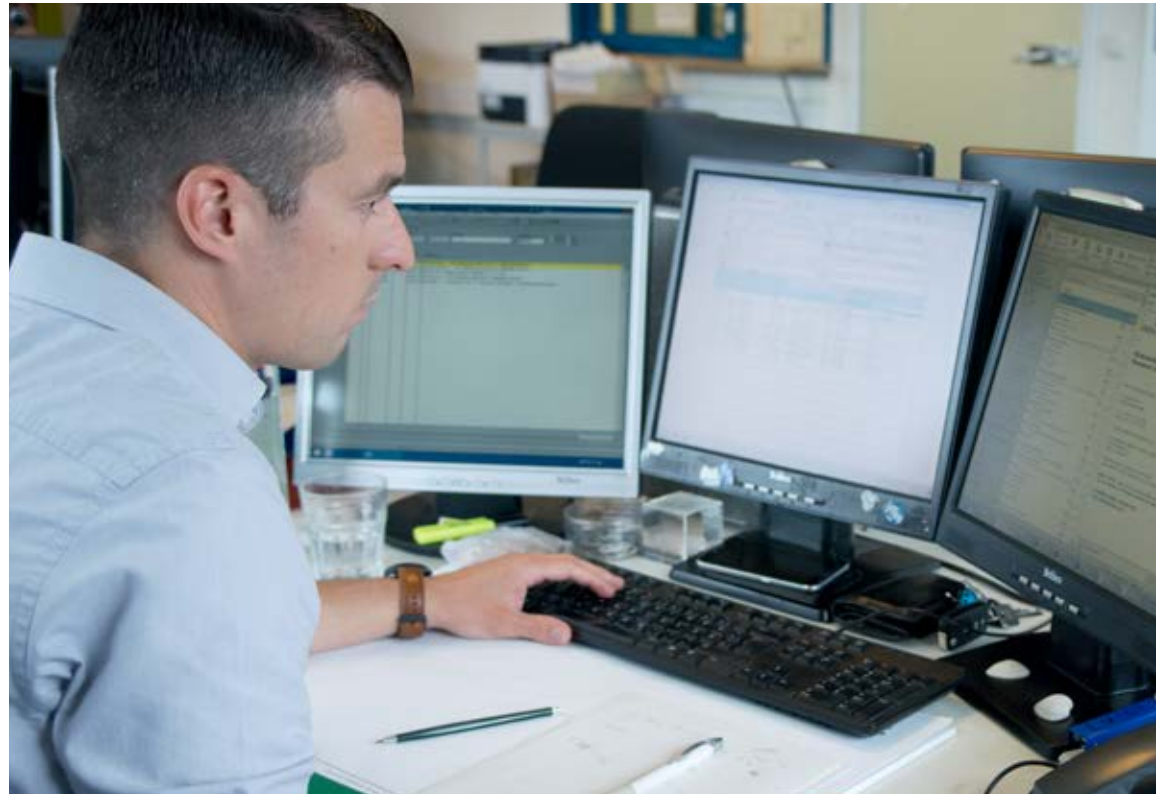
While the Schnellecke trucks drive back and forth all over Europe, the heart of the entire complex is in Braunschweig, or, more precisely, in Scheduling. It looks a little bit like a stockbrokerage here. A darkened room in which each employee sits in front of three computer screens, enters data, talks on the phone, and monitors.

One monitor is used for cargo purchasing, another one is for scheduling, and the third one is used for cargo sales. Schnellecke employs twenty schedulers, who are there in shifts every day from six in the morning until ten in the evening. And they have very special demands placed on them, according to Lammer. “Schedulers have to have two basic character traits. They have to have tremendous integrity and be highly principled, since they have to be able to communicate well with everyone, with me, with the drivers, and the customers. Sometimes they have to be dominant, sometimes understanding.”

The second essential trait is organisational talent, since technology provides support but does not do everything. “That is why this job is so hard,” stressed Lammer. “Schedulers cannot put their pen down at five and go home. They are always under pressure, and their day is only finished when the customer is satisfied.”

Innovation is Mandatory

The increasing competitive pressure on the market makes innovation mandatory for Schnellecke. For this, the compa-



ny also cooperates with manufacturers. “We are already innovation drivers in the market,” Lammer is convinced. “The manufacturers implement our ideas for certain features that we then test in practice. We try to test every technology for ourselves and at the beginning don’t only pay attention to the economic efficiency.”

In this, the reduction of pollutant emissions plays an important role. “The forwarding industry is one of the primary producers of air pollution, and we want to do whatever we can to reduce this,” Lammer explained.

However, the trend is progressing at a very fast pace. As soon as there is a new technology, the next one is already being announced. According to the current status, natural gas powered trucks would be ecologically friendly and economically efficient, but the supply network for natural gas is non-existent, and the procurement of such a truck is associated with substantial extra costs. The result is that no one is investing and everyone is waiting to see how e-trucks develop.

Research Project with E-Trucks

Of course Schnellecke is a part of this. The use of electric trucks is being tested in a research project that includes VW and other partners and has been going on since the beginning of the year. “We also have hybrid vehicles in our vehicle fleet,” said Lammer. “Unfortunately, they have not lived up to our hopes when you look at the investment compared to the reduction of fuel consumption and therefore also emissions.”

Only one problem cannot currently be solved with our entire innovative strength: parking places. “That is the real problem for us drivers: finding an adequate parking place that has sanitary facilities,” said Behrens. “Although parking areas are being built, it isn’t enough. You now have to start looking for a parking place at 3 or 4 in the afternoon. You can’t find a good one at six. We tested the Highway Buddy app, which provides information about parking places. This is helpful. But unfortunately it can’t create any new parking places.

Imprint

Schnellecke 2017
Insights into the
Schnellecke Group

Published by:
Schnellecke Group AG & Co. KG
Stellfelder Straße 39
38442 Wolfsburg
www.schnellecke.com

Editors:
Cersten Hellmich (responsible
in accordance with press laws),
Gerd Ruebenstrunk

Texte:
Gerd Ruebenstrunk, Schnellecke

Layout and design:
Pascal Frank

Photos:
Arndt Baumüller, Dierk Schaefer/
Flickr (Glasses Apostle),
Lutz Kampert, Fraunhofer
Institute for Material Flow and
Logistics (IML), Schnellecke

Printed by:
Meiling Druck

Copyright:
© 2017
Schnellecke Group AG & Co. KG

No reproduction without
the express prior consent of
the publisher. The contents
do not necessarily reflect the
views of the publisher.

Contact:
insight@schnellecke.com

Cover Photo/Back cover:
Google Glass



SCHNELLECKE
LOGISTICS