

# K»MOBIL

THE KIRCHHOFF GROUP MAGAZINE



**Innovation drives German industry.**

German Chancellor Dr. Angela Merkel was impressed by the innovative technology of the ROTOPRESS DUALPOWER hybrid vehicle. Read more about innovation management at FAUN from page 82. >>

## Imprint

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the KIRCHHOFF Group magazine

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# Seeing change as an opportunity

Arndt G. Kirchhoff, Managing Partner  
and CEO KIRCHHOFF Holding

Dear customers and friends of our group of companies,

Dear employees,

“ We are approaching the end of a turbulent year. We have seen the influx of refugees into the EU, the sanctions against Russia, the attempted coup d'état and its aftermath in Turkey, the fight against the so-called Islamic State, the as yet unresolved financial crisis, the recognition of China as a market economy, and finally the election in the United States of the country's new President, Donald Trump.

In all of these issues, unity between the countries of Europe and relations with the USA, Russia, and China will be particularly significant. We need a new way of cooperating that supports democracy, the market economy, and social partnership. We must counteract populism because the number of people who feel they have been left behind has risen.

## “Politicians must take up decision-making again and not hand it back to the people”

In this context, politics bears a particular responsibility. By means of elections, our democratic systems in the Western world transfer responsibility for action to the politicians in our parliaments, who must make decisions according to majority votes. However, it is evident that politics is increasingly taking account of minorities, delaying decisions, or even handing these decisions back to the people, as happened in the case of Brexit. Therefore, what really matters now is that all democratic powers push for the matters in hand to be decided quickly through legal and transparent proceedings.

## “Prepare and train people for change”

In terms of industrial development, this means creating the necessary legislation and realising the infrastructure required for digitalisation, mobility, trade, and financing. Our companies and social partners have the joint task of explaining to the population, to our employees, how their jobs will change. As in the past, training programmes must be provided in good time. After all, we cannot prevent change but must see it as an opportunity and use it to our advantage instead. We are convinced that all of this is only possible if we have a strong set of values, which guarantees democracy, human rights, and freedom of speech.

## Stable growth continues despite turbulence

The political and economic upheaval this year has taken its toll on sales, particularly in Britain, Russia, Turkey, and Brazil. Even though we have not escaped these effects completely, our Companies have survived these global difficulties in 2016 with continued stable growth. This year, the KIRCHHOFF Group will generate income of almost EUR 2 billion and employ 11,500 people.

Many questions remain unanswered. How can we save the Schengen area and control the flow of refugees by systematically developing Frontex? How do we improve relations with Russia, with reindustrialisation and investments that benefit the Russian population and our recognised industry? How will the EU single market develop in terms of the free movement of goods, services, labour, and finance following Brexit? Will Turkey remain a democratic country and how loyal is it to the EU? Can we defeat the so-called Islamic State? How do we achieve deregulation of the banks and companies in the financial sector so that they can go back to performing their actual function? How do we develop a cohesive approach in the Western world and promote free trade? What impact will the US election result have on global security?



In December, **KIRCHHOFF Automotive** could complete the takeover of the shares of Van-Rob in North America. We are very grateful to company founder and previous co-partner Peter van Schaik for his friendship and the good cooperation over the past 17 years. We are glad about the opportunity to continue his life work with our employees (see article on p. 22).

In summer we have inaugurated a new plant in Lansing, Michigan, where the key structural components and modules for the Chevrolet Camaro are manufactured.

In Poland, a new plant in Gniezno is currently in the start-up phase. As a JIT plant, it will supply the recently commissioned VW plant in Września, where the VW Crafter is being assembled. Plants have been expanded, with a new press shop in Shenyang and the addition of further large machines in Mielec. Following the construction of a hot forming line in Gliwice, we are currently relocating to the new plant with our first location in the Buma combine. The office building in Hungary and administrative offices in Mielec were extended. Now that our Agenda 2020 has been largely implemented, we will formulate the Agenda 2025/30 in April 2017 as a new medium-term strategy. With 9,000 employees, KIRCHHOFF Automotive will achieve an overall turnover of EUR 1.45 billion for the past fiscal year.

**KIRCHHOFF Ecotec** increased its turnover this year by 10%. This includes the takeover of Provence Bennes Environnement, a manufacturer in southern France, which builds disposal vehicles exclusively from aluminium. For the companies in the Ecotec Group, the leading IFAT trade fair held in May was a major highlight of 2016. ZOELLER and FAUN presented the extended range of side loaders and HIDRO-MAK introduced a new rear loader. The two German brands are focusing on expanding their service network. FAUN has won numerous

contracts with its service packages. The ZOELLER group opened a new assembly plant in the Czech Republic for lift systems.

**KIRCHHOFF Mobility** has continued to develop over the past year. In particular, the company pressed ahead with the integration of its new locations. Because of the recruitment problems in southern Germany, the Mobility business unit has sold the Kirchdorf location. It now operates 10 locations in Germany, Austria, and Switzerland, as well as a jointly operated location in Dresden.

At the end of the year, REHA Group Automotive GmbH & Co. KG and Jelschen GmbH will become KIRCHHOFF Mobility GmbH & Co. KG, and Pruckner GmbH in Tresdorf, near Vienna, will be renamed KIRCHHOFF Mobility GmbH. This means that the business unit will now trade as KIRCHHOFF Mobility, making the individual locations more easily recognisable to all customers. At the same time, this will allow for more streamlined, effective cooperation within the Mobility business unit. By broadening the product range, for example with the new VW T6 Colorado with a 130 mm lower floor or the Ford Tourneo Connect with weightless access ramp, the business unit introduced vehicles that appeal to both drivers and passengers and are suitable for families or as taxis. In addition, we have been able to intensify cooperation with vehicle manufacturers through premium and other preferred partnerships.

**WITTE Werkzeuge** had the opportunity to exhibit at this year's "Eisenwarenmesse" (International Hardware Fair) in Cologne, presenting a new product to the market and adding pliers to its range. Two product lines were also relaunched and additional new lines for our OEM customers were brought onto the market. Investments were made in production, including a new machining centre and a laser printing machine.

**D**ear customers, dear employees, the management of our group of companies offers you its sincere thanks for your loyalty, your strong commitment, and your support over the past year. We are optimistic about 2017 and look forward to continuing our strong and successful cooperation in the coming year.

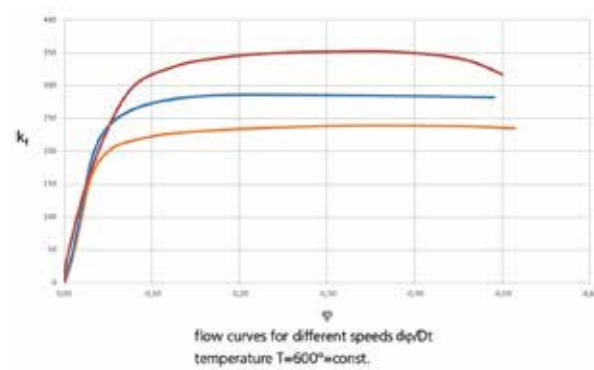
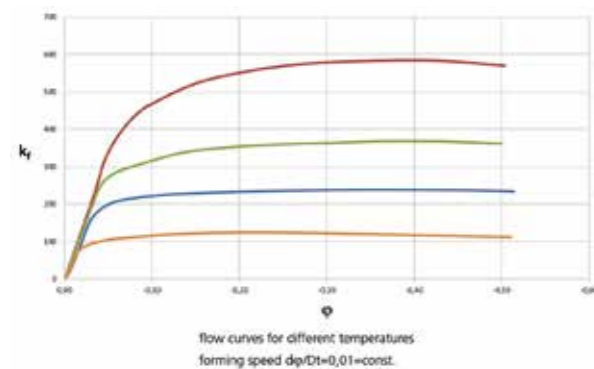
My father, my brother, and I wish you and your family a very merry Christmas, and health and happiness in the new year.

Yours

Arndt G. Kirchhoff

# Improved deformation simulation for hot-formed parts

One of the biggest challenges in the automotive industry at present is the reduction of CO<sub>2</sub> emissions and fuel consumption. For 2020, the legislature has set a CO<sub>2</sub> target of 95 g/km (since 2015: 130 g/km, source: VDA (German Association of the Automotive Industry)).



**Top:** Layer compression test evaluation—flow curves for different temperatures **Bottom:** Layer compression test evaluation—flow curves for different speeds

In addition to electric mobility and the hybridisation of drives, reducing vehicle weight will be key to achieving this target. With the increasing requirement for lightweight construction in the automotive industry, more and more use is being made of high-strength and ultra-high-strength materials. Hot-formed components with strengths of up to 2,000 MPa play a particularly important role and are manufactured by KIRCHHOFF Automotive at various locations in Germany, Hungary, and Poland.

FE simulation is used to assess the feasibility of manufacturing components using forming techniques. Compared with the forming simulation for traditional cold forming steels, the simulation for hot-formed components is significantly more complex. This is because the material properties and other parameters change along with the temperature.

The material parameters used for the simulation, such as the flow curve, which describes the relationship between the applied force and the resulting change in the material's form, are vitally important if the result is to be meaningful. Recently developed at KIRCHHOFF Automotive's R&D Centre, the test bench

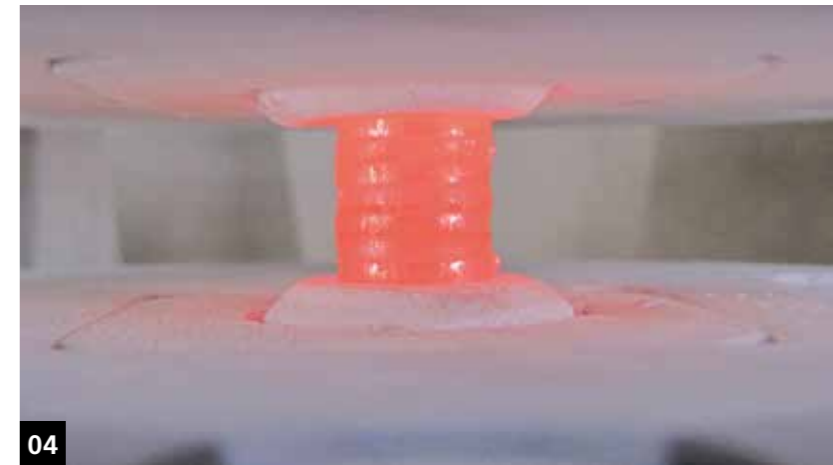
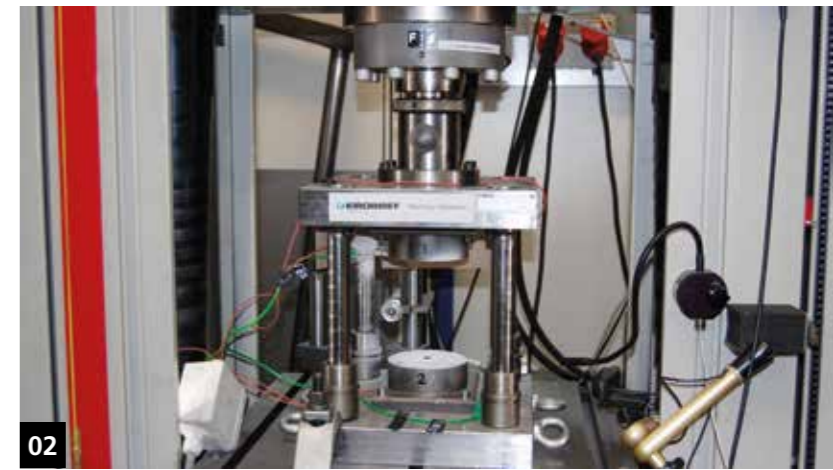
for carrying out hot layer compression tests allows flow curves to be tested at temperatures of up to 900°C.

In the layer compression test, a sample consisting of several sheet blanks stacked on top of one another is heated homogeneously to the target temperature and then compressed over a defined distance. As heat is given off to the surroundings and tools during the test, the temperature is actively controlled throughout the compression process. To cater for effects resulting from the speed of form change, the tests can be carried out at a constant strain rate.

During the compression process, the force necessary for compression is recorded, resulting in a characteristic flow curve for the material at the set temperature (see layer compression test evaluation diagrams). Besides hot forming materials, such as alloys made from 22MnB5 with or without AlSi coating, other materials, such as aluminium alloys for hot forming, can be characterised using the tempered layer compression test. In contrast to the tensile test often used to determine flow curves, the layer compression test allows the form change to be recorded up to significantly higher degrees of deformation.

In addition to the characterisation of materials using temperature-dependent flow curves, KIRCHHOFF Automotive is currently developing a test bench for calculating forming limit curves. Here, the curves are calculated in accordance with the Nakajima process in a temperature range of up to 900°C. With temperature-specific forming limit curves, it will be possible in the future to make a more accurate assessment of the feasibility of manufacturing hot-formed components using forming simulations at KIRCHHOFF Automotive.

Authors: Benedikt Poggel, Professor Christoph Wagener



**01** Test set-up **02** Layer compression apparatus **03** Sample in initial state (right) and sample once compressed (left) **04** Tempered sample



# Commitment to education, culture, sports and social issues

— The Dr. Kirchhoff Foundation continues to dedicate itself in various ways to the region. In 2016, activities were promoted with more than 67,000 Euros and numerous projects in the areas of education, culture, sports and social issues were supported.

## Hockey at a high level

The ERG Iserlohn offers hockey on a national and international level for 50 years now. In the past years the club has achieved great success with their youth teams. For example the u-11 team became champion of North Rhine Westphalia this season and reached 5th place during the German Championship in 2016.

## Sliding fun for the little ones

The Catholic Kindergarten program at St. Pankratius, which hosts children from 15 different nationalities of ages between 2 and 6, received a slide for the little ones during their redesign of their outdoor area.

Sliding fun in the new designed outdoor area at the catholic nature-kindergarten St. Pankratius in Iserlohn



New clothed with financial aid of the Dr. Kirchhoff-foundation: the young volunteer paramedics of the DRK Iserlohn

## Security clothing for young paramedics

The DRK in Iserlohn was able to educate and integrate many new young volunteer paramedics into the DRK society this year. With new members they can properly supervise events like the shooting match in Iserlohn, company celebrations as well as sporting events requiring paramedics. For the necessary security clothing, which had to be financed by donations, the Dr. Kirchhoff Foundation has donated a helpful sum.

## "Zeitgeschenk" – Mobile children and family hospice

Under the name "Zeitgeschenk" (time gift), the Caritas society of Iserlohn, Hemer, Menden, Balve has established a mobile children and family hospice to help children, teenagers and their families who are affected by death, grief and life-shortening diseases. The Dr. Kirchhoff Foundation has supported with financial aid.

## Fascination with basketball

The Iserlohn Kangaroos basketball team is not only active and successful on the basketball court but also vividly engaged in developing youth. The basis for a successful career lays in the younger classes, u-8, u-10 and u-12, as promotion and development should start at exactly this age. In order to realize that, those responsible at the Iserlohn Kangaroos work together with schools and only recently with kindergarten classes at different levels in order to pass on the "Fascination with basketball". Last year a basketball school was established even for the very young children from the age of one and a half up to three years.




To convey the "fascination with basketball" is a really big point for the Iserlohn Kangaroos. This year they started a ball school for the little ones (between the age of one and a half and three years)

Author: Kerstin Garmatter



# A new role

 After two years as the Chief Financial Officer (CFO) of the KIRCHHOFF Ecotec Group, Tanja Dreilich will also assume responsibility for finance and IT at KIRCHHOFF Holding, KIRCHHOFF Automotive's parent company, at the start of 2017.

*I am already very much looking forward to working in the automotive and automotive supplier industry once again.*

The current CFO, Rainer Spindeldreher, will be going into well-deserved retirement (see article on p. 016) In her interview, Tanja Dreilich talks about her career and describes her tasks, expectations, and goals in her new position.

**Tanja Dreilich:** I am already very much looking forward to working in the automotive and automotive supplier industry once again, with which I am also very familiar. That's where my career started—at Adam Opel AG and General Motors. By joining the KIRCHHOFF Automotive division, I will be entering an internationally successful family business, which is



Tanja Dreilich, new Group CFO of KIRCHHOFF Ecotec and KIRCHHOFF Automotive

experiencing dynamic growth and is very well placed, but which will nevertheless face great challenges in the years to come. The business is also well organised in terms of finance and IT but the challenges of the next three to five years will be both exciting and demanding, in view of political and economic uncertainties around the world, fluctuations in the global automotive market, the digital transformation process in the automotive and automotive supplier industry, and many other developments. There is a lot to do.

**What are the advantages of you now taking over responsibility for finance at KIRCHHOFF Holding in addition to KIRCHHOFF Ecotec?**

**Tanja Dreilich:** As CFO of the whole Company, I will need to be able to assess the business models of all corporate groups and their operational implications, to evaluate their risk–opportunity profiles, and to assess their funding requirements. I would like to see and understand the Company as a whole. The advantage is that I understand the economic circumstances and have a comprehensive overview of the Group's finances, which is a great advantage when making portfolio, investment, and financing decisions for the whole Company.

**Are there areas in which the different companies within the KIRCHHOFF Group can learn from one another?**

**Tanja Dreilich:** The business models of the corporate divisions are certainly very different, with very little correlation between them, which means that the diversification effects are substantial. However, there are some identical business processes, or processes that can be structured in a similar way. As a process industry, the automotive and automotive supplier industry is a very clear benchmark for process standardisation and economies of scale across all process functions. In the service areas (finance, controlling, IT, purchasing, technical development), processes can be replicated one to one, while conversion is certainly an option in logistics and production functions, and in sales there are separate requirements. There is ample scope for learning in the corporate divisions.

**KIRCHHOFF Automotive's business operations regularly require high levels of investment in new tools, machinery, and plants around the world. What challenges, changes, and improvements do you anticipate in our future relationship with the banks? I am referring, in particular, to the Deutsche Bank crisis, as well as digitalisation.**

**Tanja Dreilich:** We have traditionally enjoyed good relations and mutual trust with our banking partners and this will continue. I am convinced that we will always have the right partners at our side to finance our future growth and, therefore, our success.

**You have spent a large part of your career with corporate groups. Now you are right at the top of the corporate hierarchy in a family-owned company. What advantages, and perhaps disadvantages, are there for you and your position?**

**Tanja Dreilich:** Well, I've been at the top level of the corporate hierarchy of a company since 2005, as Head of Finance and IT, and also as CEO in my previous position. In each case, I worked at international companies in different sectors of the economy—listed and privately owned— so I am very well prepared for a challenging role in the KIRCHHOFF Group. The advantage is that I have become familiar with different business models, corporate cultures, markets, best-practice processes, and product–service portfolios in the past 29 years of my career. This knowledge can be employed very effectively in the automotive industry, which involves a continuous process of innovation and optimisation.

**Before you moved to KIRCHHOFF Ecotec, you worked for Opel and General Motors, among other companies. Does the step you're taking now bring you even closer to your roots? Or, as they say in Detroit, the home of General Motors: "Are you a car girl?"**

**Tanja Dreilich:** Yes, working for the KIRCHHOFF Group does mean "returning to my roots" and much more besides, naturally. Of course, I'm a car girl. I love cars—I like to spend time behind the wheel and I like to drive fast.

The interview was conducted by Andreas Heine, Executive Vice President Global Corporate Communication & Marketing KIRCHHOFF Automotive.



## A new stage of life begins



Rainer Spindeldreher, Chief Financial Officer of the KIRCHHOFF Group

What was the incentive to leave an international large corporation to switch to a middle-sized family business? Our Company has already been active on a global scale and Spindeldreher decided to improve the structures and processes at KIRCHHOFF Automotive as a CFO in a way that further growth could be tackled. That is why already in the first year of his employment the accounting of KIRCHHOFF Automotive was changed from the total cost method to the cost-of-sales method and a very effective controlling instrument was created especially with the aid of extensive and meaningful production variances. Then the introduction of our TIS, technical information system, followed which includes KPIs concerning our core processes of forming, assembly welding and surface coating. Largely renewed was also our IT infrastructure and of course, the SAP introduction in the area of Fi/Co (2004) as well as with respect to the ERP systems (as of 2007) under his leadership, which must be stressed in particular.

Rainer Spindeldreher also made significant contributions to our corporate finances. For instance the "Partnership model" for financing tools goes back

It was always a pleasure to discuss strategies with him, what my brother Arndt and I regularly did in the beginning of our C-P-K-meetings. Even though he dared to skate on thin ice concerning some details—even those he could not judge fundamentally—we constantly worked on an eye-to-eye level with him. The cooperation was always effective, successful, even though at times exhausting and sometimes uncomfortable. **Many thanks for that!**

After more than 16 years of employment our CFO of the KIRCHHOFF Group, Rainer Spindeldreher, will retire at the end of this year. Spindeldreher, a business graduate, returned to the Sauerland in August 2000 after 19 years in the service of the Compagnie de St. Gobain—as Menden is his home town.

to his initiative to get together with our commercial banks. Also the structure of financing with large promissory note loans was introduced by him, he is known as a respected expert and conversation partner of our finance partners.

In the VDA he acted more than 12 years as an auditor and in the Finance group.

We want to wish Rainer Spindeldreher and his wife Mariana in their new home Portugal a sunny next stage in their life and of course, for the sailor, fair winds and always a hand's width of water under the keel!

Good luck.

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J. Wolfgang Kirchhoff





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**KIRCHHOFF**  
AUTOMOTIVE

WE.MOVE.FUTURE.



# Less double work, higher competitiveness

Since the 1st of August, KIRCHHOFF Automotive and KIRCHHOFF Van-Rob are led by a common global managing level.



In interview: J. Wolfgang Kirchhoff, Managing Partner & COO KIRCHHOFF Holding, CEO KIRCHHOFF Automotive

Wolfgang Kirchhoff is the new CEO of KIRCHHOFF Automotive and responsible for the area of Global Strategy. Stefan Leitzgen accepts as Global COO responsibility for the areas of Operations, Manufacturing Engineering and Human Resources, Andreas Haase as the Global CFO is responsible for Controlling and Purchasing, Dr. Thorsten Gaitzsch leads as Global CTO in the areas of Technical Development and Sales. The KIRCHHOFF Holding remains unchanged and led by Arndt Kirchhoff, Wolfgang Kirchhoff and Rainer Spindeldreher (and as of January 2017 Tanja Dreilich, also on the interview p.14-15). In addition there are seven Executive Vice Presidents in the Automotive sector who accept responsibility for different corporate areas. So far you have been, Mr. Kirchhoff, the COO of the KIRCHHOFF Holding, now you are in addition the CEO of KIRCHHOFF Automotive.

### Do you as a managing director engage more in the operative business now?

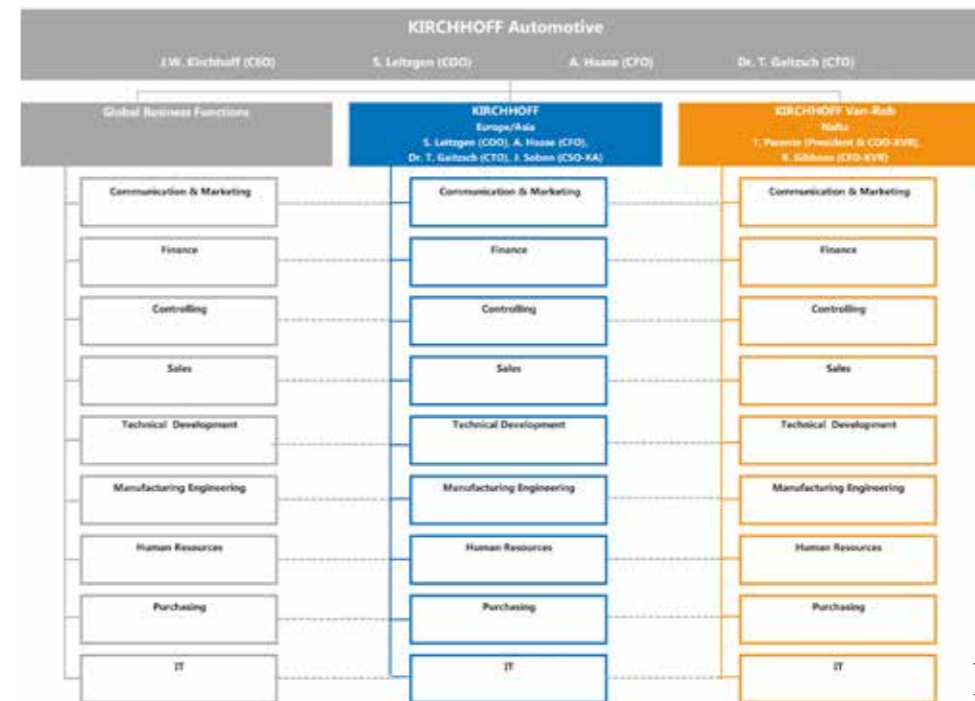
**J. Wolfgang Kirchhoff:** I do not engage more or less in the operative business with this new organization. It was also part of my responsibility beforehand. We have only eliminated one managing level in the organization.

### The North American and the European/Asian divisions of the company have been tied together by the KIRCHHOFF Holding. Now there is a new board with you as the CEO and three managing directors of KIRCHHOFF Automotive, in a global function. What do you want to achieve with this?

**J. Wolfgang Kirchhoff:** With the new structure we react to the requirements of the market. With our new, globally integrated managing structure we can decide and react faster, interface for instance is reduced. We bundle our worldwide components even more effectively and efficiently. Especially regarding large global vehicle platforms we avoid double work and increase our competitiveness.

### How does the production profit from this new structure?

**J. Wolfgang Kirchhoff:** In the future we will be able to profit even more from our production network. At the moment we run 30 plants worldwide. With the new structure we can realize and improve our global standards faster and more sustainably. It is easier to detect where and why a plant works



The new organization at a glance

successfully and learn from that success at a quicker rate. Our plants in North America will profit from that, as well as the ones in Europe and Asia.

### To what extent does this new organization influence our customers and suppliers positively?

**J. Wolfgang Kirchhoff:** To our customers KIRCHHOFF Automotive and KIRCHHOFF Van-Rob are deemed to be one company for a long time already. But we will be able to implement our standardized corporate processes in the new organization more effectively. In Program Management for example we can be better organized for our customers. For our suppliers nothing will change as we already work with a global acting purchasing organization for a long time now.

### So far most of the Global Business Functions have been led by the Managing Directors. Apart from the Sales and Finance Departments all areas had been equipped with Executive Vice Presidents. What advantages does this imply?

**J. Wolfgang Kirchhoff:** This will entail a closer and more effective coordination in the daily business. Especially in the areas of Program Management, Manufacturing Engineering and Controlling.

### Will the areas of Sales and Finance follow?

**J. Wolfgang Kirchhoff:** Right now this is not planned for but as a consequence this is only a matter of time.

### In 2011, KIRCHHOFF Automotive started to develop as a Global Player with the acquisition of the majority stakes of Van-Rob. Has this development come to an end now?

**J. Wolfgang Kirchhoff:** No, of course not. We want to continue to develop in other regions of the world.

### How has the management board in North America assessed the new organizational structure?

**J. Wolfgang Kirchhoff:** Positively. In an integrated structure we will apply and balance resources according to demand. This has a positive impact on all, also on North America.

The interview was lead by Andreas Heine, Executive Vice President Global Corporate Communication & Marketing KIRCHHOFF Automotive.



# KIRCHHOFF Automotive takes over all shares of its North American majority shareholding Van-Rob Inc. (KIRCHHOFF Van-Rob)

Effective December 1st, 2016 KIRCHHOFF Automotive has now also taken over the remaining shares of the Canadian company Van-Rob Inc. from company founder and shareholder Peter van Schaik. The integration into the global company network of KIRCHHOFF Automotive, that began in 2011, is now completed.

“I am grateful to all the Van-Rob people who have shared in my journey from a small die shop in 1976 to this wonderful, multi-national, world-renown company. I wish all of you well, and will be watching your success.”



**Background:** The headquarters of KIRCHHOFF Van-Rob in Aurora, Canada **Right:** Company founder and shareholder Peter van Schaik retires from the company.

The managing partners of KIRCHHOFF Automotive Arndt G. and J. Wolfgang Kirchhoff look forward to the future and gratefully back on their partnership with Peter van Schaik. “It is more than the longstanding very good cooperation that associates us with Peter van Schaik, and we would like to sincerely thank him for that. We are glad to be able to continue his work as a founder and we are sure that a successful future lies ahead for Van-Rob Inc. as part of the global company KIRCHHOFF Automotive. To our customers, KIRCHHOFF Automotive and KIRCHHOFF Van-Rob have been a single company for a long time. Now we will react to the market requirements even better and we will be able to concentrate on our worldwide competencies in a more effective and efficient way.”

More than 50 years ago Peter van Schaik had emigrated from the Netherlands to Canada. As a toolmaker, he had initially built up a tooling company. During the 90s, the first press facilities were established. At the time of the takeover of the majority shares by KIRCHHOFF Automotive in 2011, Van-Rob Inc. with its headquarters in Aurora near Toronto had

10 production locations in the NAFTA area (Canada, USA, Mexico) and employed about 3,000 people. For years Van-Rob Inc. had been associated with the family-owned company KIRCHHOFF Automotive by a close transatlantic cooperation, that led in 1999 to a successful joint venture in Querétaro, Mexico.

After all these years, the goodbye is not easy for Peter van Schaik: “I am grateful to all the Van-Rob people who have shared in my journey from a small die shop in 1976 to this wonderful, multi-national, world-renown company that is famous for quality and expertise. I will miss all of you, but leave happy in the knowledge that Van-Rob is now part of a global company run by great people with a strong commitment to your future. I wish all of you well, and will be watching your success.”

Author: Andreas Heine



# New products on the road

Author: Volker Tofall

In record time KIRCHHOFF Automotive built a fifth plant in Poland in order to supply VW's new plant in Września. From our Polish plants as well as from our plants in Germany and Portugal we deliver complex car body components for the latest models of our customers.



## Porsche Panamera Package of hot formed structural body parts

### Technologies:

Hot forming, laser cutting, projection welding of bolts and nuts

### Production plant:

Iserlohn/Germany

### Capacities/Year:

max. 48,000 vehicles

### Customer/Model:

Porsche Panamera

## A new Panamera on the road

Our plant in Iserlohn supplies an extensive package of hot formed body parts for the Porsche Panamera and Panamera Executive. Up to 48,000 vehicle sets are hot formed in Iserlohn annually. Using technologies like laser cutting and projection welding the products are completed afterwards.

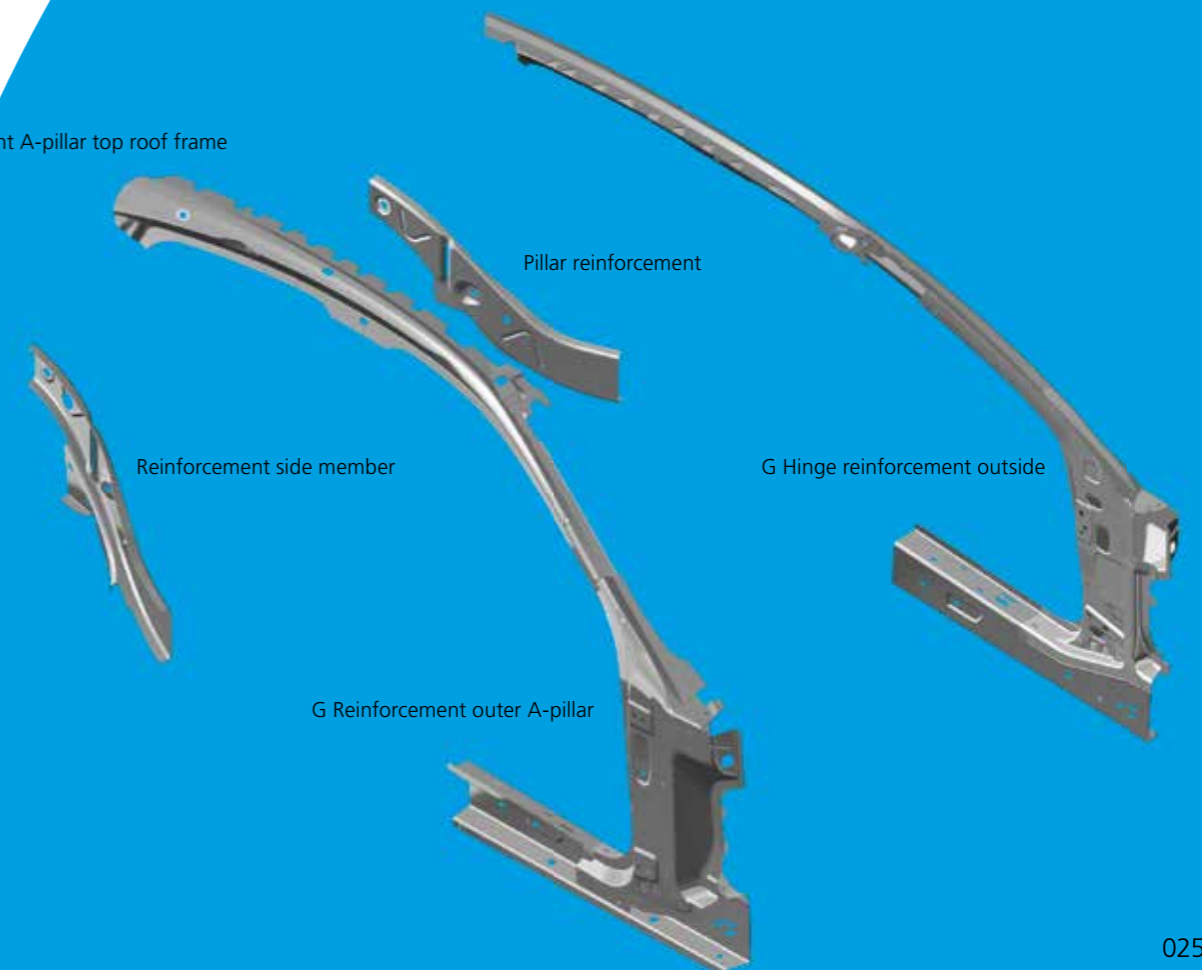
Reinforcement A-pillar top roof frame

Pillar reinforcement

Reinforcement side member

G Hinge reinforcement outside

G Reinforcement outer A-pillar





**VW Crafter Floor assembly, front Crash Management System and Cross Car Beam**

**Technologies:**

Stamping, spot welding, MAG welding, CDP coating

**Production location:**

Gniezno, Gliwice/Poland

**Capacities/Year:**

109,000

**Customer/Model:**

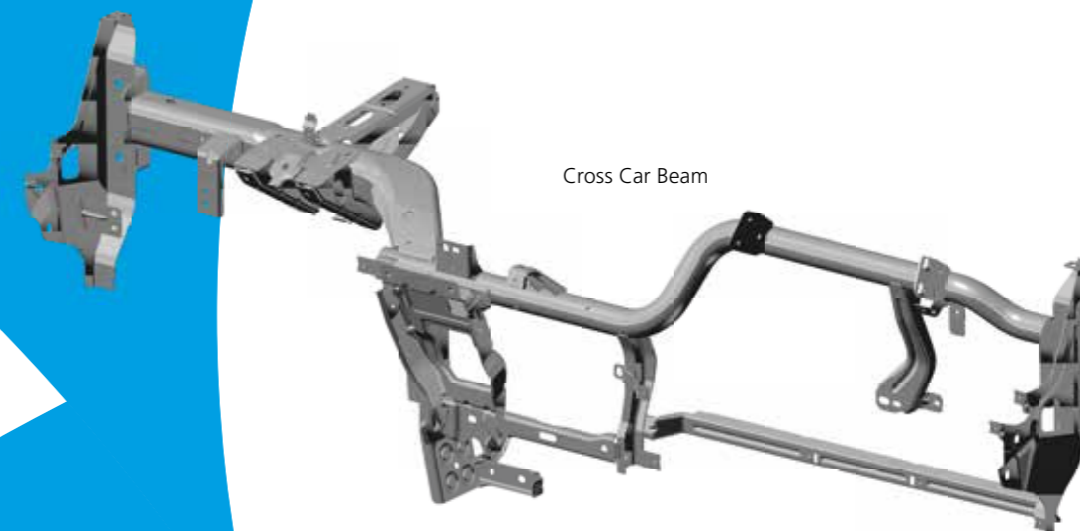
VW Crafter, MAN TGE

**VW Crafter – We produce for the 2017 Van of the Year**

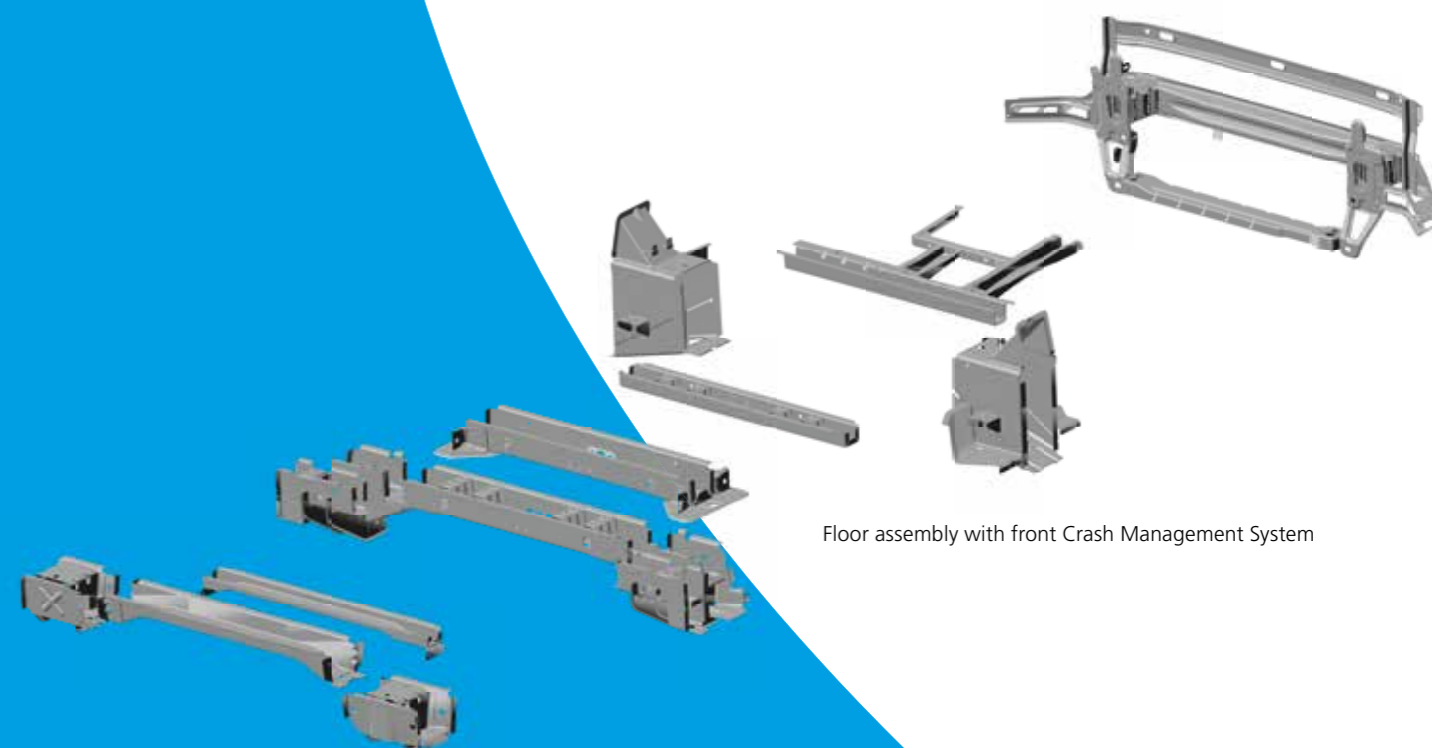
In record time KIRCHHOFF Automotive built a fifth plant in Poland in order to supply VW's new plant in Września. The series production of the VW Crafter has now started there. With three different lengths, three different heights and four basic models, diversity plays a big role with respect to the VW Crafter and its almost identical sister model MAN TGE.

During our presence at the IAA for Commercial Vehicles we could already have a look at the VW Crafter. We will supply the main parts of the floor assembly—67 in total—of the Crafter from our new plant in Gniezno. The Cross Car Beam for this vehicle developed by KIRCHHOFF Automotive will be the flagship of this plant. The front Crash Management System (CMS), which our plant in Gliwice will supply as a CDP-coated assembly, ensures the security of the vehicle.

After about 2,000 produced vehicles in the last quarter of 2016 VW is planning to manufacture 50,000 VW Crafters in 2017. Full capacity with a planned production volume of 100,000 vehicles is expected to be reached in 2018. We are happy to contribute an important part to the production of this commercial car which has been elected by an expert jury from 24 countries as the "International Van of the Year".



Cross Car Beam



Floor assembly with front Crash Management System







**Audi Q2 Crossmember floor inside, water tank, Crash Management System rear and front**

**Technologies:**

Crossmember floor inside:

Stamping, laser welding, resistance projection welding, resistance spot welding

Water tank:

Stamping, resistance spot welding, CDP coating, bonding, assembly

Crash Management System front and rear:

Hot forming, stamping, MAG welding, CDP coating

**Production locations:**

Mielec, Gliwice/Poland; Crossmember floor inside also Ovar/Portugal

**Capacities/Year:**

108,000

**Model/Customer:**

Audi Q2  
Crossmember floor inside also Seat Ateca

**Audi's SUV with four parts by us**

Audi's latest member of its SUV family is the Audi Q2, equipped with different materials in the body structure. KIRCHHOFF Automotive contributes four parts to the new SUV among those the Crash Management System which was specially developed. All components are manufactured at the Polish plants in Mielec and Gliwice. Crossmember as well as water tank are made of high strength steels while soft steels are used for the Crash Management System. With the current program our Company can equip 108,000 vehicles with the respective parts.

The crossmember floor inside is with its laser-welded Isofix hooks for a fast and secure placement of children's seat a novelty in the VW concern. As a platform part it forms for amongst others the Seat Ateca and further derivates the basis for the assembly of the back seat. The long-term process experiences of KIRCHHOFF Automotive in this special production process could be successfully realized with the customer in a joint development project.



**Seat Ateca Crossmember floor inside**

**Technologies:**

Stamping, laser welding, resistance projection welding, resistance spot welding

**Production locations:**

Mielec, Gliwice/Poland; Ovar/Portugal

**Capacities/Year:**

108,000

**Model/Customer:**

Seat Ateca

**Seat Ateca: Seat presented its first SUV**

A few months ago, Seat stepped into the market with the new Ateca, the first of its modern SUV segment. Its name comes from the Spanish village Ateca in the heart of Spain. The Ateca is produced at Škoda's plant in Kvasiny, north-east Bohemia. Škoda has made large investments into the development and expansion of the plant recently and produces all SUV models as well as the successful Superb there. The Kvasiny plant is located not far from our plant in Gliwice, Poland, where we produce the welding assembly for the crossmember floor inside the Seat Ateca and the Audi Q2. As a second supplier of this assembly our plant in Portugal was selected to deliver from Ovar to the VW plant in Setubal.

Crash Management System front



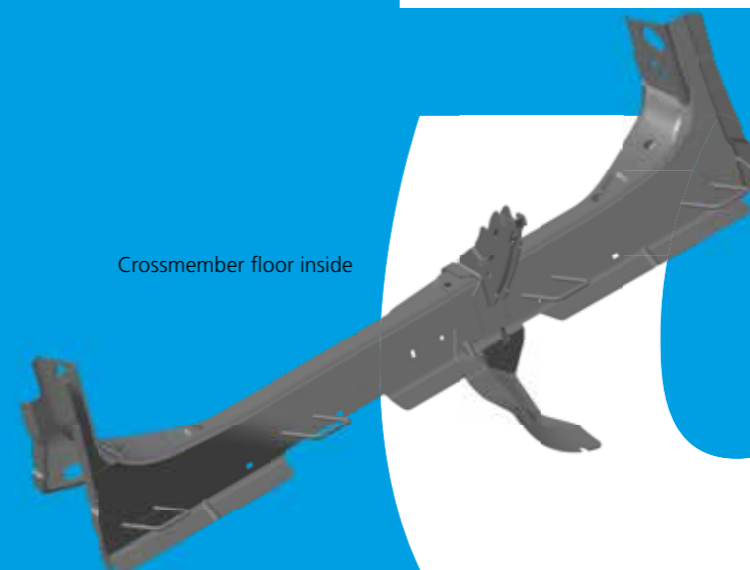
Crash Management System rear



Water tank



Crossmember floor inside

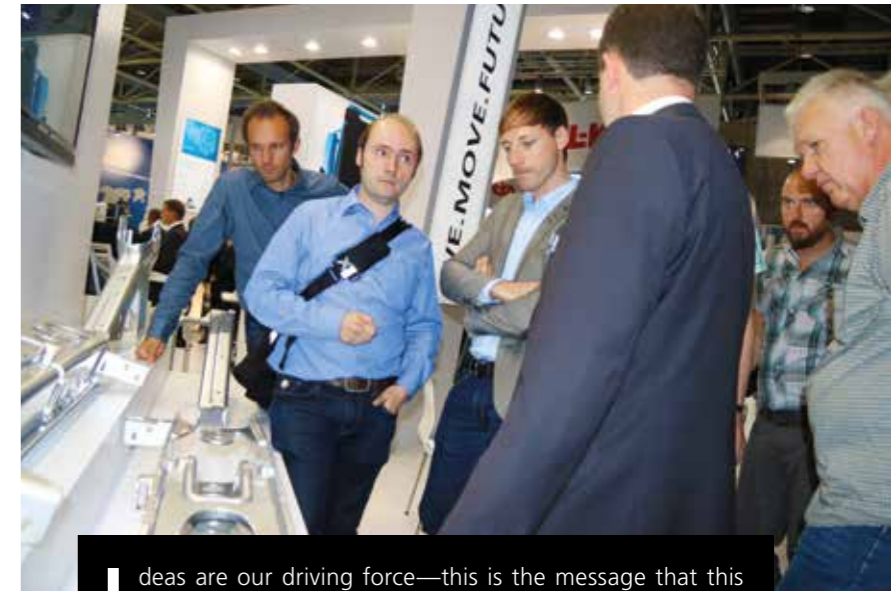




# Less weight, lower costs, higher quality

Partial hot forming, design optimisation, multimaterial construction, and innovative joining methods—KIRCHHOFF Automotive showcased various solutions for the reduction of weight and CO<sub>2</sub> in the passenger car and commercial vehicle sector during its trade fair appearances at the IAA Commercial Vehicles in Hanover and the IZB in Wolfsburg.

Generating considerable customer interest: quality, weight, and cost optimisation—presented by the example of the assembly cross-member for the Daimler Actros.



## 66th IAA Commercial

Ideas are our driving force—this is the message that this year's 66th IAA Commercial Vehicles conveyed to its visitors with innovation, creativity, and a pioneering spirit. The entire value chain of the commercial vehicle can be found at the IAA with a strong supplier presence—including that of KIRCHHOFF Automotive.

Over a surface of 113 sqm, the Company showcased product innovations for lightweight body construction in the passenger car and commercial vehicle sectors. The focus was on solutions optimised for weight and crash performance using multimaterial composites. These solutions included an aluminum bumper in a shell design, which is a KIRCHHOFF Automotive innovation and an example of design optimisation. The shell design is particularly well-suited for complex spaces and for the easy integration of fasteners when a lightweight solution is called for. Its advantages are minimal weight, cost-effective production, considerable design freedom, low wall thickness tolerances, and easy integration of fasteners. KIRCHHOFF Automotive also impressed visitors with its development support in the area of quality, weight, and cost optimisation—presented by the example of the assembly crossmember for the Daimler Actros. »



The KIRCHHOFF Automotive stand at the IAA Commercial Vehicles





**Left:** EU Commissioner Günther Oettinger (second from left), Prime Minister of Lower Saxony Stephan Weil (middle), and Mayor of Hanover Stefan Schostock (right) learn about the innovative products and processes of KIRCHHOFF Automotive.

**Bottom:** Arndt G. Kirchhoff (right) and Dr. Thorsten Gaitzsch (middle) welcome George Fotopoulos, Vice President of Sourcing Common Components at Volvo Trucks, to the KIRCHHOFF Automotive Stand.



**Bottom:** At the IZB, KIRCHHOFF Automotive presents optimised product solutions for all areas of application, individually designed to meet the requirements of each and every customer.

**L**ightweight construction still offers huge potential—KIRCHHOFF Automotive made this clear at its trade fair stand in Hall 7 at the IZB in Wolfsburg. The IZB is Europe’s leading trade fair for the automotive supplier industry and has come to be greatly respected by international experts. Over 800 well-known suppliers exhibited their products and innovations.

On its 90 sqm stand, KIRCHHOFF Automotive showcased hybrid and metal structure parts, which are produced using ultra-modern manufacturing and joining methods as part of a global production process.

The numerous visitors to our trade fair stand were particularly interested in the research findings of a joint project with Group Research and Advanced Development at Volkswagen AG, in which a realistic material pre-evaluation was carried out using crash management systems. The aim of the project was to standardise the material pre-evaluation process with validated methods. Using the component tests, it is possible to realistically represent production parameters and better evaluate the potential of the material at an early stage. Furthermore, material cards and new material models for the simulation are validated in a more realistic way.

Discussions with our customers were at the centre of our presence at the three-day trade fair. This is because everything we do, we do for and with our customers.

Author: Sabine Boehle



**Left:** Key decision-makers from our customers, including Thomas Decker (2.f.l.), Director/Head of HDT-FUSO Projects Daimler AG, were invited to the KIRCHHOFF Automotive stand.

**Bottom:** Visit of the apprentices to the KIRCHHOFF Automotive stand in Hanover.



The KIRCHHOFF Automotive trade fair stand at the IZB

66th IAA Commercial Vehicles

IZB International Suppliers Fair





The new welding cell in Iserlohn, Germany.

# Plant in Iserlohn: New welding cell

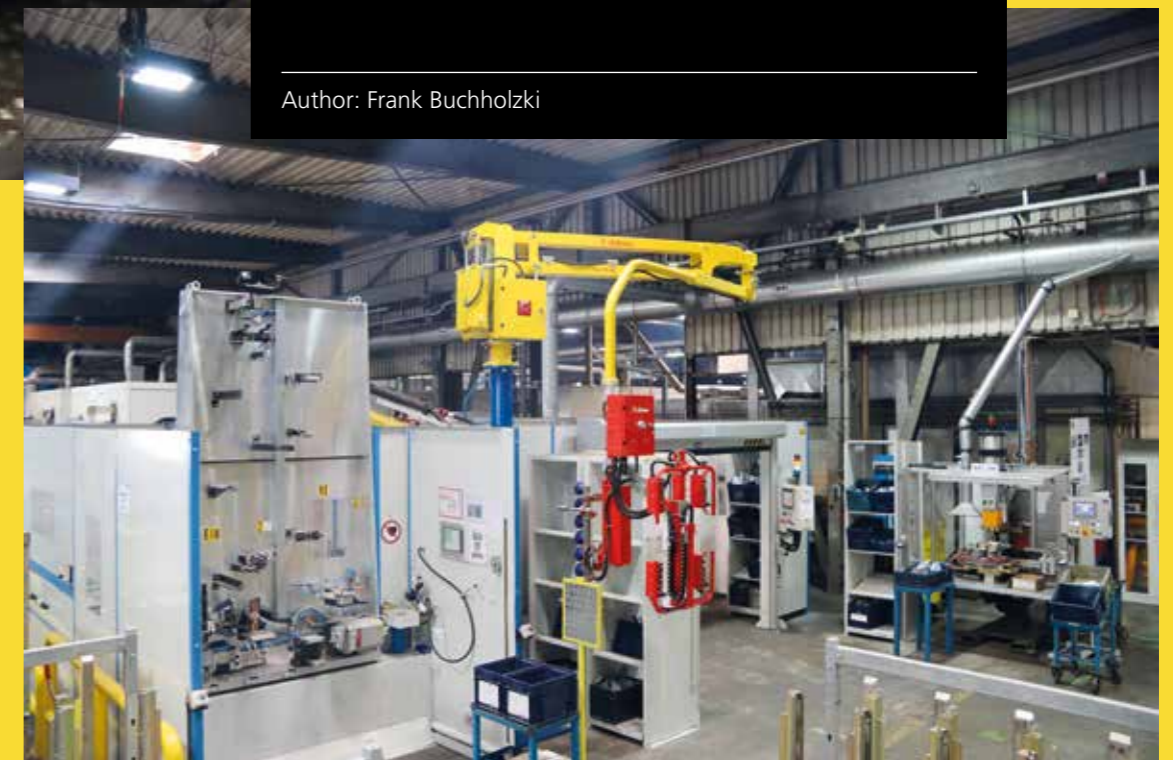
In preparation, an interdisciplinary team of Program Managers, Process Managers and Plant Managers developed a production concept which convinced the customers both, technically and commercially. The main part of the product will be pressed on a 2 x 2500 t tandem press. The employees of the plant in Attendorn produce the reinforcing plates. In total, the part is more than two meters long and weighs more than 20 kg.

For the assembly, the plant in Iserlohn has invested in a new welding system and its respective additional equipment. Depending on the variant the final product consists of up to 20 individual parts, which are connected by more than 100 welding spots. The new welding system includes various automated audits like e.g. a force/route monitoring, welding current/welding parameter monitoring and sensors in order to exclude all potential sources of error.

Further technologies, which are used during production, are riveting, nut welding and the application of adhesive that serves as corrosion protection. Before shipping, the finalized product is packed into an especially constructed load carrier.

Author: Frank Buchholzki

For a new customer project, which will start in January of 2017, a new welding cell has been brought to function at our KIRCHHOFF Automotive plant in Iserlohn.



Production Area with new welding cell.



## Cooperation for success

On February 11<sup>th</sup>, 2015 the leading automotive companies of the Polish province of the Carpathians foothills came together to found the Eastern Automotive Alliance. KIRCHHOFF Automotive is a co-founder and leading member of this future-oriented cluster.

With an overall turnover of more than 1.5 billion Euros generated combined by all founding companies and over 13 thousand employees the cluster's members make up a significant part of the Carpathians foothills Province gross product. Presently, 17 entities representing large, medium and small enterprises, state technical universities and business environment institutions are members of the Eastern Automotive Alliance.

"The cluster is intended to strengthen the business interests and the development of the automotive industry in Poland, especially in Southern and Eastern Poland", explains Janusz Soboń, Chief Strategy Officer KIRCHHOFF Automotive and Managing Director of KIRCHHOFF Polska. He is not only a member of the Management Board but was also elected Vice President of the Alliance. "Dynamic development in the automotive market forces the manufacturers in the branch to cooperate in various forms. Alliances like this one help to share know-how and develop competitive solutions together", describes the Vice President the decision to form a cluster.

As companies from many different operational areas come together, the cluster is divided into areas such as Lean Production, Human Resources, Quality Assurance, Technical Maintenance, Logistics and Technical Development. By visiting plants from other cluster members a benchmarking was carried out, giving the opportunity to gain insight into all of these operational areas. KIRCHHOFF Automotive then, presented our production potential in Poland specifically with regards to the Quality Assurance department.

Being part of the so-called Eastern Wall, the Carpathians foothills Province belongs to the less developed region of Eastern Poland and is therefore supported by the EU with funds for the purpose of economic development. The Eastern Automotive Alliance will be able to use these funds to finance innovative projects and promote the region with their economic activities. In order to realize these projects the Alliance is proud to rely on the help of academic staff from AGH University of Science and Technology in Cracow and the Rzeszow University of Technology. The latter university from Rzeszów may be a potential partner for KIRCHHOFF Automotive. It is not only close to the plant in Mielec but also offers large potential in terms of plastic forming, metal forming including extrusion and metal joining technologies like soldering, welding and friction welding.

The goal is clear to all, the Eastern Automotive Alliance wants to form an innovative and solid network in the automotive industry not only to strengthen the region but also to explore all potentials.



**Top:** Representatives of the founding companies, the agency for regional development in Tarnobrzeg as well as the principals of the AGH University of Science and Technology in Cracow and the Rzeszow University of Technology during the start of cluster activity on the 7th of February 2015. **Bottom:** Representatives of companies belonging to the cluster during a workshop at the KIRCHHOFF Automotive plant in Mielec, Poland.



# Shop-in-Shop model successfully implemented

Hot formed parts are growingly inquired about due to their special characteristics. Due to new orders the demand at the plant in Iserlohn was so high that one had to answer the question: "Do we extend our laser cutting systems or do we buy external services?"

Laser cutting

The Iserlohn, Germany location possesses this technology. However, laser cutting does not belong to the core competencies of the Company. With this background information in mind, conversations with the company Hujer started to discuss a potential cooperation. Hujer specializes in this technology. The high technical demand regarding component production and expected high transportation volume required the particular abilities of this new partner. Hujer has a high technical expertise in laser cutting and offers an optimal logistics chain.

A so-called Shop-in-Shop model seemed to be the right way to go. In this model the service providers produce with their own employees, on their own machinery within the walls of the customer. This physical proximity offers quick communication and information transfer, a visible reduction on transportation

efforts and a remarkable reduction of cycle times for products; as well as the associated reduction of work in process.

In the summer of 2014 the contracts were signed and in the beginning of 2015 the laser cutting specialist Hujer had moved into the newly built 2,600 m<sup>2</sup> production hall with the first laser cutting system in place. As of now, six highly modern laser cutting systems are in effect, laser cutting parts after they are hot formed in the adjacent hall.

An innovative customer-supplier-concept which only offers advantages for the customer and the supplier.

Author: Frank Buchholzki





# New plant, many goals, many opportunities



01



02

At the end of 2014, KIRCHHOFF Van-Rob purchased an existing facility of 11,600 square meters on Felton Road in Watertown Township. Since then, 160 new jobs were created in Lansing, Michigan/USA.



03

**01** Plant Manager Missy Smith is handing Arndt G. Kirchhoff the scissors for the ribbon cutting.

**02** At the opening ceremony of the Lansing plant, f.l.t.r.: Bob Trezise (President and CEO of Local Economic Area Partnership), Kenneth Mitchell (Clinton County Commissioner), Missy Smith (Plant Manager Lansing), Robert Showers (Chairman on the Clinton County Board of Commissioners), Vig Bernero (Mayor of Lansing), Tony Parente (President and COO KIRCHHOFF Van-Rob), Peter van Schaik (Chairman), Cristina Learman (Purchasing Director, Global Purchasing and Supply Chain at GM) and the shareholders Arndt G. Kirchhoff, Dr. Johannes F. Kirchhoff and J. Wolfgang Kirchhoff.

**03** Tony Parente spoke about the importance of continuous improvement in maintaining our strong partnership with GM.



04



05

**04** The barbecue during the opening ceremony was a great success. **05** Arndt G. Kirchhoff talks about the importance of global partnerships and about our continuous striving for a leading position with regard to innovations and technology in the automotive industry.

In the summer of 2016 a celebration took place to mark the official opening of the plant in Lansing. With the Lansing plant being one of the newest of the eleven KIRCHHOFF Van-Rob facilities, they have profited from a lot of experience. Also celebrated at the official plant opening was Lansing's success after being the lighthouse plant for KAPS (KIRCHHOFF Automotive Production System) implementation in North America. Now fully functional, the plant operates guided by basic and advanced KAPS tools such as Total Productive Maintenance (TPM), Shop Floor Management (SFM), First-in-First-Out (FIFO) and Tugger (Milkrun). For a JIT (just-in-time) plant efficiency in logistics is crucial. The KAPS team was able to properly train all new employees on all KAPS tools, promote their accurate implementation and further allow for ideas for improvement to be brought forward by employees. By now, KIRCHHOFF Van-Rob Lansing has become a training ground for KAPS managers from different North American locations.

Van-Rob for choosing Watertown Township and our region. This company has impacted hundreds of families in our community and we are thankful."

The plant in Lansing has established a very special partnership with the Capital Area Michigan Works. Michigan Works is a job placement program that offers a wide range of educational opportunities and training. This organization has influenced the level of training and qualification of some of KIRCHHOFF Van-Rob's employees. The plant in Lansing encourages and enables employees to take part in such career advancement opportunities. For this partnership KIRCHHOFF Van-Rob was recognized in a special tribute from Michigan's Governor Rick Snyder.

Cindy Disbrow, Team Leader at KIRCHHOFF Van-Rob Lansing had a special reason to celebrate; she went through the Michigan Works program to further her education and job placement. As a testament to her hard work during the program, Cindy has received the "State of Michigan Impact Award" for her career achievements.

Present at the opening ceremony were Shareholders Arndt and Wolfgang Kirchhoff, President and COO of KIRCHHOFF Van-Rob Tony Parente, Christina Learman, Purchasing Director Global Purchasing and Supply Chain at General Motors and Virg Bernero, Mayor of the City of Lansing. Bob Trezise, President and CEO of the Local Economic Area Partnership is very pleased with this mutually beneficial partnership: "The Lansing area is rapidly becoming a significant international community, creating diverse, global opportunities for business and people, so we welcome and thank an international giant like KIRCHHOFF

Authors: Nathalia Abreu, Missy Smith



# Kickoff for the new Audi Q5

KIRCHHOFF Automotive contributes to the lightweight design of the new Audi Q5 with a package of body structural parts as well as aluminum Cross Car Beam.

The Q5 is a success story in the booming SUV segment. After remaining in production for more than eight years, the second generation is now no longer produced in Ingolstadt but in the new Audi plant in San José Chiapa in Mexico. There, the facility occupies an area of 460 hectares, 2,400 meters above sea level, being the highest location in the Audi production network all together.

KIRCHHOFF Automotive actively accompanied the development of the new Q5 as well as the building of the new plant. Besides a big package of car body structural parts made of aluminum and steel, KIRCHHOFF Automotive has also received the order for the development and serial supply of the modular crossmember; Cross Car Beam or dashboard support as it is called at Audi. In very close cooperation with the Audi departments, KIRCHHOFF Automotive developed a modular crossmember within the given time frame which fulfilled all the requirements of the broad specification sheet. As a complex aluminum welding assembly the part is a central interface between the dashboard and the car body.

For the surface coating, investments were made into a new powder coating system unique to KIRCHHOFF Automotive's technology portfolio. The parts for the new Q5 are produced at the KIRCHHOFF Van-Rob plants in Querétaro and Puebla, Mexico. Aside from the necessary commercial competitiveness, Audi was especially interested in the criteria used to select the potential suppliers and assigning the serial contracts. High value was placed on suppliers with pre-existing locations in Mexico in order to guarantee the proximity to the Audi plant. In addition, potential risks were to be minimized by choosing proven suppliers with a long-term partner-like cooperation. With its production plants, which have been established in Mexico for many years, KIRCHHOFF Automotive fulfilled Audi's desired profile.

The plant in Puebla, which is only 60 km away from Audi, was significantly enlarged for the Q5 products and is now ready for further orders from the nearby customers, Audi and VW.

Aside from production in Mexico the new Q5 is also manufactured in China. We are very happy to be nominated for significant volumes of the Q5 in China in addition to the volume in Mexico.

Author: Jens Römer



## Audi Q5 Modular Crossmember

### Technologies:

Stamping, assembly welding, powder coating, automated bending

### Production locations:

Querétaro and Puebla/Mexiko

### Capacities/Year:

174,000 vehicle sets

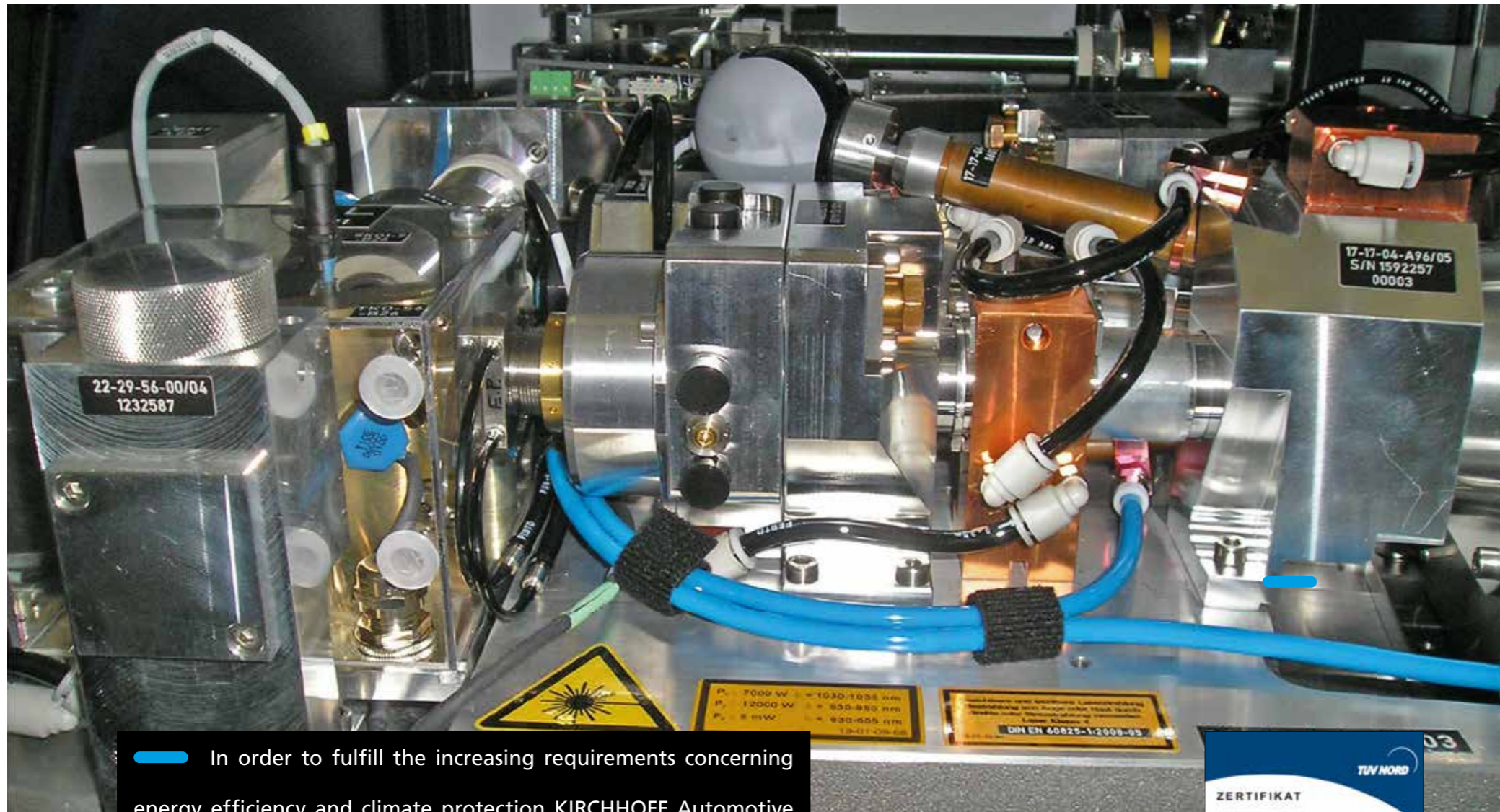
### Customer/Model:

Audi Q5





# Saving energy with ECS



In order to fulfill the increasing requirements concerning energy efficiency and climate protection KIRCHHOFF Automotive uses at German locations since 2012 the Energy Control System (ECS)—an instrument for the analysis of energy consumption.

The ECS is combined with a mobile measuring box, a separate measuring unit. This measures the electricity of the system not connected to a permanent measuring system. With the aid of the ECS machines, processes can be analyzed energy wise, through which then actions can be taken to increase energy efficiency. That way all systems and the essential components can be tracked with regards to energy consumption. For example, looking at a laser welding system in Iserlohn, the components are: the laser cell with the rotating table, the conveyor belt, aspiration and lighting as well as cooling unit and laser. For the duration of a work shift we measure the quantity of processed parts and then determine the energy consumption. That way the energy consumption per part can be calculated—on the laser welding system it is 0.27 kWh or 0,04 € per part.

By means of the regular analysis of systems and processes as well as the continuous examination of the energy and efficiency figures, saving potential can already be detected. Through these energy management systems the Company is certified with DIN EN ISO 50001 since 2013.

With the aid of the Energy Control System KIRCHHOFF Automotive was able to save up to 60,000 Euros in Attendorn in 2015, and 95,000 Euros on average in Iserlohn between 2013 and 2015.

Author: Uwe Suchland



**Top:** By means of a highly modern technology and the use of the Energy Control System the energy consumption per part can be determined on the laser welding system in Iserlohn. **Bottom:** The German locations of KIRCHHOFF Automotive are certified with DIN EN ISO 50001.



# Good perspectives for the future of our third plant in China

Three years after the foundation of the KIRCHHOFF Automotive plant in Shenyang new customer orders demanded for the extension of the plant. In the beginning mainly single parts like battery trays and cross car beams were produced there for General Motors.

Now the plant has been extended, specifically for the production of six new assemblies for a customer order. The plant extension is comprised of two areas which are located in the East and in the North of the original plant. A new press hall in the Eastern area resulted in 4,500 square meters extension of our third plant in China earlier in the spring. In the fall of 2016, the installation of two presses, on which aluminum parts will be pressed in the future, was finished. For May 2017, the production of new vehicle parts is planned. Right now 43 employees work in our most northern Chinese

plant. With the start of production in 2017 the team will grow to 50 employees.

Enlargement and extension of the plant's competencies in Shenyang form a perfect base for the engagement in further new projects.

Author: Ivy Han



01

01 In future aluminum parts will be stamped on two newly installed presses. 02 The appearance of the plant in Shenyang after the expansion.

02



# Up-to-date with new technology

The new CJLR (Chery Jaguar Land Rover Automotive Co., Ltd.) XF 260 is an aluminum premiere for CJLR as it is the first vehicle to be produced in their aluminum body shop. To KIRCHHOFF Automotive, this project also symbolizes a premiere with the introduction of a new technology—the SPR (self-piercing riveting) manufacturing process.

In total, KIRCHHOFF Automotive produces 34 parts for the Jaguar XF260. Among these are stamped body parts, car body assemblies and brake disc covers. The production process includes steel forming, aluminum forming, riveting of assemblies and punch riveting. SPR is a completely new technology not only for KIRCHHOFF Automotive but also for the market. The Suzhou plant started to invest in the SPR technology in 2015.

The technology of self-piercing riveting is applicable to many different materials, material mixes, thicknesses and even coated materials. We use it to link aluminum to aluminum or to steel sheet metal. It offers many benefits. For instance this technology uses a cold forming application technique, which means that there is no thermal influence on the material. This also reduces distortion on the components. Equipped with a highly dynamic strength the process is very reliable.

Looking ahead, this technology will be used on more aluminum parts at KIRCHHOFF Automotive.

Authors: Veronica Gao, Raphael Rui

**Top:** Self-piercing riveting is a totally new technology, which is applied at KIRCHHOFF Automotive to link aluminum with aluminum or steel plates. **Bottom:** The new CJLR (Chery Jaguar Land Rover Automotive Co., Ltd.) XF260 is an aluminum premiere





# Prestigious awards for four plants

— This year, our customer General Motors has simultaneously awarded our plants in three countries: Richmond Hill in Canada, Figueruelas in Spain, and Ovar and Cucujães in Portugal. »





“We rarely give the Supplier Quality Excellence Award to the same supplier four times in a row”, said Joerge Ittgen from General Motors, as he presented Plant Manager Deepak Prasher with the award at the ceremony at the **Richmond Hill plant** on the 15<sup>th</sup> of September. “Quality is fundamental to us. It is great to receive recognition for our hard work. As a team, we will continue to strive for excellence in all areas”, stated Deepak Prasher as he thanked his colleagues. The plant in Richmond Hill was founded in 1992 and is one of our oldest in North America.



This is the second consecutive year in which our **Spanish plant in Figueruelas** has received the GM Supplier Quality Excellence Award. For many years, the plant has supplied high-quality products, but—according to the customer, General Motors—it has achieved peak performance in the last two years. This means that we are fulfilling our company goal of satisfying our customers in terms of quality, cost, and service.

Along with the Figueruelas plant, **the Portuguese plants in Ovar and Cucujães** also received the Supplier Quality Excellence Award. For Ovar, this is the second time it has received the award—the first was in 2012; a first time though for Cucujães. At GM’s European headquarters in Rüsselsheim, Dr Miguel A.



**Top:** Paul Van Rooij (left) and Dr Miguel A. Tena (right) with the Supplier Quality Excellence Awards. **Bottom:** The KIRCHHOFF Van-Rob plant in Richmond Hill has received its fourth GM Supplier Quality Excellence Award in a row.

Tena, Managing Director at Figueruelas, and Paul Van Rooij, Managing Director of KIRCHHOFF Automotive in Portugal, accepted the awards from Lars Sonntag, Team Leader Supplier Quality & Development Body at GM Europe.

“We would like to thank all of you for your hard work and your commitment to being a top supplier for General Motors. Without suppliers like you, GM would not be in a position to deliver award-winning vehicles and therefore making our customers safe and happy. Carry on the good work and win again in 2018!” Joerge Ittgen said in conclusion to his speech at Richmond Hill. We have heard—and taken up—the challenge.

Authors: Nathalia Abreu, Paul Van Rooij, Dr Miguel A. Tena

# Our best suppliers in Europe

For the first time, the “Supplier of the Year” award was presented to all of Europe. The winners came from Germany and Poland.



Congratulations to Tata Steel Service Center Gelsenkirchen (right picture) for being awarded in the category steel and to the Polish company Bimex-Böllhoff Sp. z o.o (left picture) for being awarded in the bought parts category.



Also in this year KIRCHHOFF Automotive awarded its best suppliers of the previous year. But still this awarding ceremony was special: For the first time the purchasing, quality and logistics department selected the best suppliers for the whole of Europe. Previously the awards took place on a national basis.

The festive tribute took place at our plant in Ovar, Portugal. Klaus Lawory, Director Corporate Purchasing, and Amindo Jales, Director Finance and Member of the Board, welcomes the representatives of the awarded companies saying: “This award symbolizes our recognition for your achievements. We would like to thank you for your commitment to support the growth of KIRCHHOFF Automotive.” Our two best suppliers in Europe are Tata Steel and Bimex-Böllhoff who showed excellent supplier performance in the categories steel and bought parts.

Michael Rank, Executive Vice President of Global Purchasing, highlighted the importance of being an outstanding supplier to KIRCHHOFF Automotive: “We have evolved in recent years to become a global automotive supplier with more than 30 locations worldwide. To continue being successful, we need first-class suppliers such as Tata Steel and Bimex-Böllhoff.” “For we are only as strong as the weakest link in our supply chain”, concluded Tomasz Marczuk, Leader Supplier Development Engineer.

Authors: Klaus Lawory, Tomasz Marczuk



# There from the word go

**T**he issue of lightweight construction is becoming increasingly critical in current and future automotive development. As a result, materials and production processes for purchased parts and larger components are becoming more and more complex. To act on these trends at the earliest opportunity, KIRCHHOFF Automotive established the Advanced Purchasing, or Innovation Sourcing, function at the end of 2015. With this concept, permanent networking between purchasing and the Advance Product Development departments is put into effect.

The Innovation Sourcing expert is responsible for integrating potential development and production suppliers into the product creation process at the earliest opportunity.

— Identifying trends early—an important factor not just in the development of new products, but also in procurement. KIRCHHOFF Automotive has developed a concept that allows innovative production suppliers to be involved in the Advance Product Development phase.

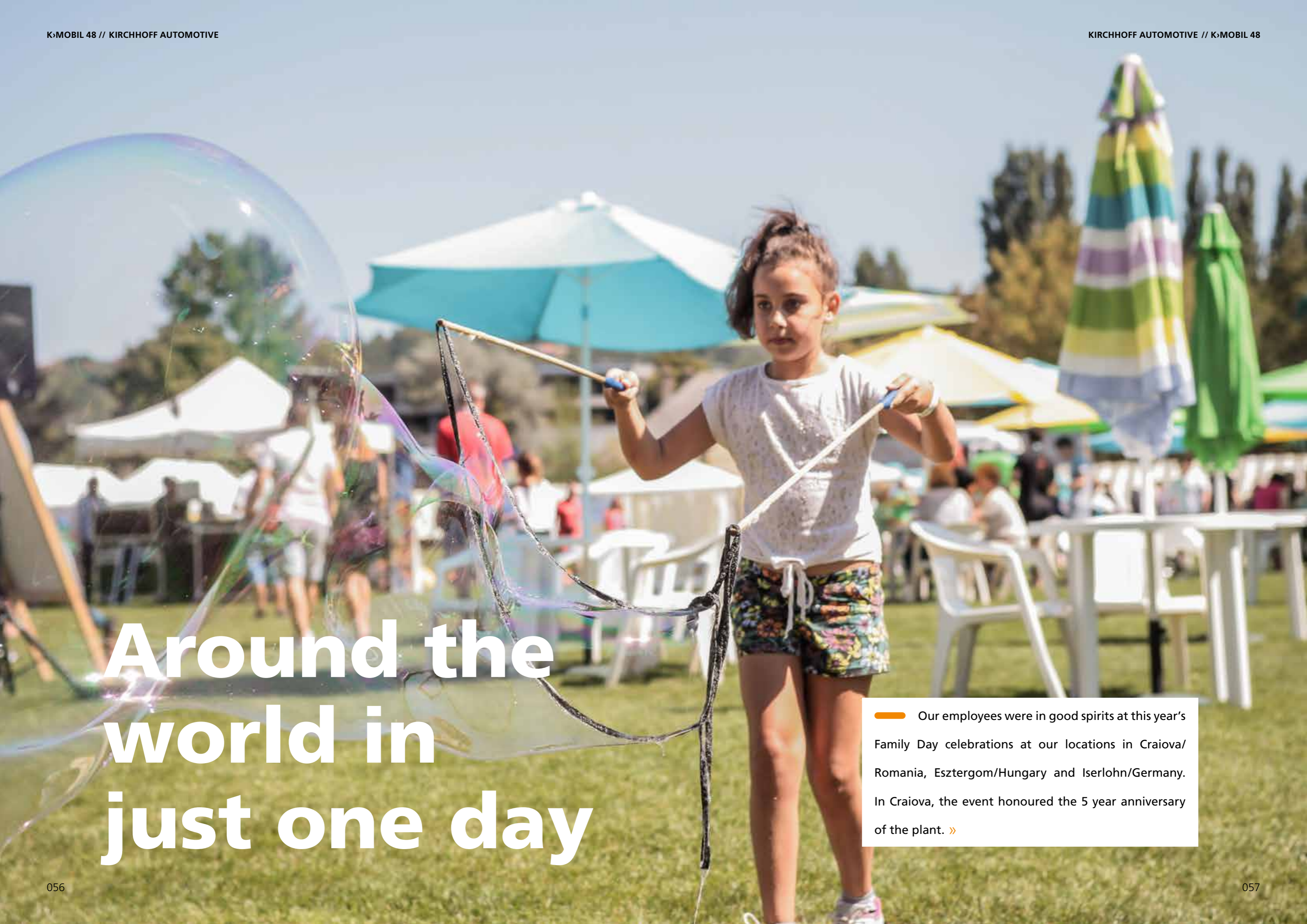
The potential has been identified: suppliers often have unrecognised innovative expertise, which can be used in a beneficial way. With targeted scouting, knowledge related to markets, technology, and production can be incorporated into development and change projects. "It is just as important to us that we approach potential suppliers respectfully as it is to present our experts with perspectives. The primary objective is to identify suitable suppliers at as early a stage as possible, involve them in the development process, and carry their potential for innovation forward from preliminary development to series production," explains Andreas Dannheisig, Innovation Sourcing expert at KIRCHHOFF Automotive.

Projects are currently running with selected suppliers in areas including forming and joining profile-intensive assemblies, ultra-high-strength materials, aluminium die-casting, and structural plastics.

Our innovation sourcing methods also include "concept challenges" in which potential suppliers are set "challenges" around five years ahead of a possible series production launch in order to find the ideal partner for the series. This way, useful suggestions for new concepts can be collected and their maturity tested at a very early stage of development. They can then be realised to the benefit of the customer.

Authors: Andreas Dannheisig, Klaus Lawory





# Around the world in just one day

— Our employees were in good spirits at this year's Family Day celebrations at our locations in Craiova/Romania, Esztergom/Hungary and Iserlohn/Germany. In Craiova, the event honoured the 5 year anniversary of the plant. »





**Top:** Craiova **Left:** Iserlohn, table football tournament **Bottom:** Iserlohn, shoot hoops with the basket ball team of the Iserlohn Kangaroos

hired. Already one year after that the serial production started with parts for the Ford B-Max. This was one of the greatest start-up projects the Company has realized so far.

The Family Day in Iserlohn/Germany was also well-attended. Around 1,200 employees and their family members came to our plant in Sümmern on September 17<sup>th</sup>. Everyone was kept entertained by a varied agenda. A large part of the crowd visited the stand with WITTE Werkzeuge screw drivers and bits.

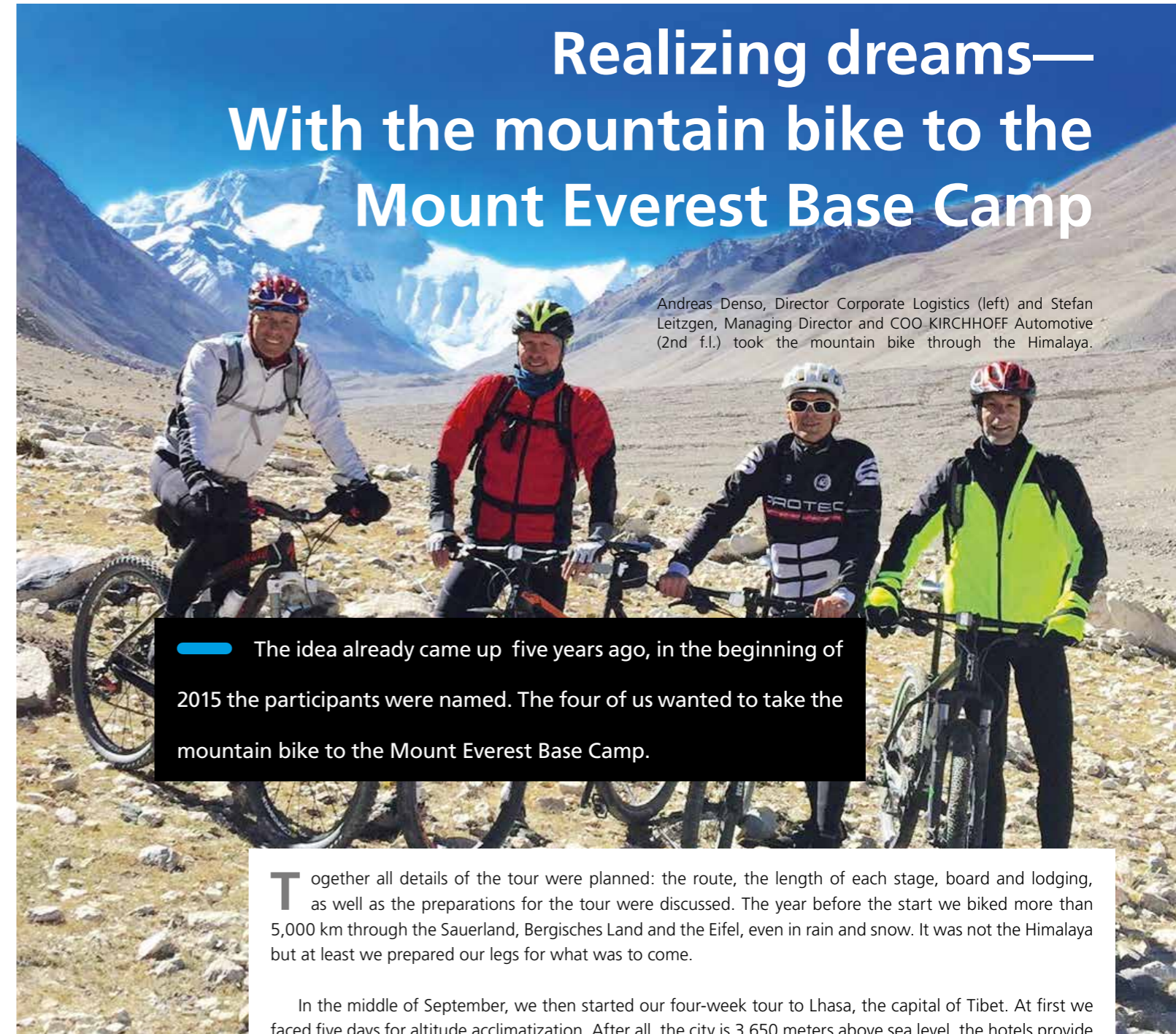
All those who organized the Family Days deserve a big thank you for their efforts. We will continue this wonderful tradition and arrange more family celebrations at our plants in the future.

Authors: Ákos Jagudits, Olaf Krage, Cristina Ursu



It was a sunny day on August 26<sup>th</sup> where more than 1,800 visitors attended the Family Day at our plant in Esztergom/Hungary—more than ever before. The theme of the event was “Around the world in just one day”, with reference to the international nature of our Company. During the Family Day, the guests were able to take part in various fun games on five imaginary continents. The best received a prize at the end. A live band and a DJ made sure that young and old alike enjoyed a good atmosphere throughout the day. Nine employees were honored for their 10 year anniversary with a certificate.

The plant in Craiova/Romania already exists for five years. As a special thanks for their effort and great commitment a celebration for all employees was organized in September. “I want to thank every single one of you. Through your commitment KIRCHHOFF Automotive in Romania has developed as a reliable partner to our customers and a role model for other plants”, emphasized the Managing Director of the plant in Romania, Gabriel Porojan. Five years ago, on September 1st 2011, the first employees were



# Realizing dreams— With the mountain bike to the Mount Everest Base Camp

Andreas Denso, Director Corporate Logistics (left) and Stefan Leitzgen, Managing Director and COO KIRCHHOFF Automotive (2nd f.l.) took the mountain bike through the Himalaya.

The idea already came up five years ago, in the beginning of 2015 the participants were named. The four of us wanted to take the mountain bike to the Mount Everest Base Camp.

Together all details of the tour were planned: the route, the length of each stage, board and lodging, as well as the preparations for the tour were discussed. The year before the start we biked more than 5,000 km through the Sauerland, Bergisches Land and the Eifel, even in rain and snow. It was not the Himalaya but at least we prepared our legs for what was to come.

In the middle of September, we then started our four-week tour to Lhasa, the capital of Tibet. At first we faced five days for altitude acclimatization. After all, the city is 3,650 meters above sea level, the hotels provide oxygen bottles for the tourists. Short tours on the bike offered first impressions of the daily lives of the Tibetans and interesting insights behind the omnipresent monastery walls.

Finally we started. Within 16 day's stages between 60 and 95 km each, we passed six mountain passes above 5,000 meters and covered a distance of more than 1,100 km in total. Most of the time we biked between 4,000 and 5,000 meters in height, the highest pass reached 5,250 meters height. Now we were glad about every single training kilometer. And fortunately, nobody suffered from the symptoms of the altitude sickness.

On the eleventh day the time has finally come. After a cold and restless night in our tents we set out for the Mount Everest Base Camp. At about noon, a breathtaking view of the highest mountain on earth was offered to us. Even though pretty exhausted and stricken by the low-oxygen and dry air these hours at the foot of this mountain will stay as an unforgettable moment

Authors: Andreas Denso, Stefan Leitzgen



# Internal talents successfully trained

“In my position in Purchasing, I am in constant contact with suppliers from various countries. To prevent misunderstandings, it is really important for me to understand cultural differences”, says Patrick T., Team Leader for Purchased Parts Europe in Attendorf. Like the other participants from the KATE program, he has sharpened his observation skills and has learned to be more open-minded and more resilient in challenging situations in intercultural contexts.

Marta H. from Purchasing in Gliwice, Poland, adds: “The training sessions have taught me more about patterns of behavior and, consequently, I feel prepared for new professional challenges.”

Over a three-year period, the 16 employees have undergone training on various topics including self-management, change management, communication, and conflict management. They were also given challenges through various projects, such as involvement in assisting refugees. Through the acquisition of comprehensive knowledge about the individual departments, they gained a better understanding of what makes the Company successful.

The final meeting, which took place over three days, included a training session on intercultural sensitivity and exercises relating to practices specific to our Company. The students learned how to best conduct themselves around people of different nationalities, the most important realization being not to assume that everyone is the same.

Gabriel Porojan, Managing Director of the Craiova plant, and Paul Dilworth, Executive Vice President

Global HR, presented the participants with their certificates. “KATE is one of our most important Company programs as we support our internal talent and prepare them for future challenges”, said Paul Dilworth.

After completing the KATE program, some of the students have progressed onto new positions with more responsibility or special projects. By participating in KATE, all of the other students also feel better equipped for future career opportunities. Plans are already under way to continue the program with new KATE participants in other countries.

Author: Lisa Kitterer



— The first 16 candidates from Poland, Portugal, and Germany have successfully completed the three-year KATE (KIRCHHOFF Automotive Talent Education) program. In September, they got together for the last KATE meeting at the KIRCHHOFF Automotive plant in Craiova/Romania.



**Top:** Various tasks relating to the Company values were on the agenda at the last KATE meeting. **Left:** The international team also took part in a tour through the Craiova plant. **Right:** The first candidates have successfully completed the KATE program.





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**KIRCHHOFF**  
MOBILITY

Custom-made cars



# A classic at the REHACARE 2016



**KIRCHHOFF MOBILITY**

6 C 71

**+**

**REHACARE 2016**

The REHACARE 2016 took place from the 28<sup>th</sup> September to the 1st October in Düsseldorf. Almost 50,000 international experts from the industry and attendees concerned visited Europe's leading trade fair for rehabilitation and care. 916 exhibitors from 36 countries displayed new aids and insights that enable people with handicap, with special care requirements and in old age to live a self-determined life. The next REHACARE takes places in Düsseldorf from the 4<sup>th</sup> to the 7<sup>th</sup> of October 2017.

Vehicle modifications are possible for almost every vehicle—a very good example is the major attraction of the KIRCHHOFF Mobility booth, a 67er Ford Mustang Fastback.

During the international fair for rehabilitation, prevention, inclusion and care in Düsseldorf, Germany KIRCHHOFF Mobility convinced with the modification of a 67 Ford Mustang Fastback and showed that there is hardly any limit to modifications. »



**A**lso this year KIRCHHOFF Mobility participated as a leading attachment manufacturer for vehicle modifications suitable for the needs of disabled in the REHACARE in Düsseldorf. However, this year was not like the others. The company unit exhibited for instance a classic at the international fair for rehabilitation, prevention, inclusion and care, which one does not see every day: A Ford Mustang Fastback was the center of attention and became the major attraction. With the 200 PS strong V8 classic back from the year 1967, KIRCHHOFF Mobility could demonstrate that modifications are not exclusively possible for later vehicles and that there are hardly any limits to modification possibilities. The Mustang was equipped with the by KIRCHHOFF Mobility developed "EasySpeed" manual control for acceleration and breaks. A Multicommander in a wooden look ensures furthermore, to operate the most important electric functions of the vehicle without having to let go of the steering wheel.

KIRCHHOFF Mobility showed further individual automobile modifications using the Ford Grand Tourneo Connect as an example for a NIVO vehicle. A wheelchair user can enter at the rear with a "SLF ramp" and can take his driver's position without great effort for re-seating. The "SFL ramp" is a "weightless flexible ramp". That means it is very light, thus easy to fold-out and can be used flexibly. If the ramp is not needed, it can be laid flat on a slot in the inner floor of the vehicle offering additional storage space. A solution, which is also offered to taxi companies, which don't often transport wheelchair users.

Vehicle modifications are possible for almost every vehicle—a very good example is the major attraction of the KIRCHHOFF Mobility booth, a 67er Ford Mustang Fastback.

The Mustang from 1967 got modified in proper style. The Multicommander in a wooden look ensures to operate the main important electric functions of the vehicle without having to let go of the steering wheel.



The Ford Grand Tourneo Connect was equipped with a "SLF ramp". That way the wheelchair user can enter the rear of the vehicle and take his driver's position without great effort re-seating.

Additionally the vehicle was equipped with a turn-swivel seat including a Carony system. This is a seat powered by an electrical motor which swivels out of the vehicle and then shifts down via a remote control. Afterwards one can move the passenger seat via a transfer rail from the vehicle onto the wheelchair base frame, the "Carony" so that the re-seating of the wheelchair user from the passenger seat to the wheelchair cancels itself out completely.



In the also exhibited Volkswagen T6 Multivan Colorado KIRCHHOFF Mobility displayed further modification possibilities for active and passive drivers: a floor lowered by 130 mm from the A- to the C-pillar, a entering through a wheelchair lift, a checked special wheelchair which can be used as a driver and passenger seat. In the rear also a lift was installed to easily load a scooter or something similar.

In the also exhibited Volkswagen T6 Multivan Colorado KIRCHHOFF Mobility displayed further modification possibilities for active and passive drivers. This includes: a floor lowered by 130 mm from the A- to the C-pillar, creating more room for a wheelchair lift, also a special wheelchair that can be used in the driver and passenger seats. Alternatively, the wheelchair user can also change to an optional transfer seat with an electric 6-way adjustment in order to comfortably drive the vehicle from that position with the aid of all kinds of driving and controlling systems. In the rear also a lift was installed to easily load a scooter or something similar.

Vehicle modifications are customized and possible for almost every vehicle—there is hardly anything that is not available. KIRCHHOFF Automotive showed that impressively at the REHACARE 2016.

Authors: Dr Axel Panne, Dominik Schiller



**KIRCHHOFF Mobility**

To the broad product and services portfolio of KIRCHHOFF Mobility belong: all kinds of driving, control, loading, and access aids as well as seating, steering and breaking systems, culminating in rear loaders and busses for the transportation of people with handicaps. Every modification is adjusted to the individual needs and wishes of the customer. That is why KIRCHHOFF Mobility stands for: "Custom-made cars—moving differently!"



# Developed by experts

The subsidy of KIRCHHOFF Mobility in Kronau is not specialized in individualized vehicle modifications but engages in the development, construction and production of driving aids and wheel chair loading systems.

The list of self-developed and marketed products is long. The manual control "EasySpeed", the electronic gas-brake-servo system "DUO" and the wheel chair loading system "RolliFix" and "RolliButler" are coming from the development center in Kronau.

Knowing exactly which challenges a handicapped person has is the basic requirement for developing technological solutions for good products. The subsidy Manager Claus Haag had to switch to the wheel chair after an involuntary accident with his moped and has intensively concentrated on the personal mobility of handicapped drivers ever since.

The manual control EasySpeed belongs to the extremely slim manual controls and due to that offers more legroom. Through an optimal leverage effect and an ergonomic handling only a little effort is needed to use the system while accelerating and braking.

**Right:** The RolliButler is an electrohydraulic single-arm platform lift with which one can easily load electronic wheel chairs and scooters into LAVs or vans. For that the electronic wheel chair is simply driven onto the platform and then secured with the integrated belt system.

**Bottom:** The gas-brake-servo-system DUO offers support and minimal effort due to an electronic motor, especially to those with muscle weakness.



KIRCHHOFF Mobility cooperates with numerous well-known automobile manufacturers and also supplies them exclusively. That way the driving aids can sometimes be ordered directly during the vehicle purchase. Thereby, KIRCHHOFF Mobility also benefits from suggestions resulted from the passing on of customer requests or the technical cooperation with the vehicle manufacturer.

Future vehicle generations—in this case electric vehicles and modular design—require advanced solutions during the vehicle modifications. Already today, KIRCHHOFF Mobility uses state-of-the-art modification techniques and applies the latest technologies for the construction.

Author: Michael Gaebel

The wheel chair loading system RolliFix is used in combination with the modification of the rear side door into a swing-sliding door. That way the driver can re-seat himself from the wheel chair to the passenger seat and then load his wheel chair into the vehicle at the side.





# Where there is a will,

— Special modification: A tractor with an integrated passenger lift.

Custom-made cars is the slogan of KIRCHHOFF Mobility. But it does not always have to be cars, we also modify other vehicles, always very specifically tailored to the personal needs of the customer.

In this case, a customer who is dependent on a wheel chair did not want to forgo driving his work device on his own. The subsidy in Schlitz made this possible for him. A special and individually modified passenger lift safely carries our customer up to his tractor and down again.

In the tractor there was also a wheel knob installed, an Easy Speed manual control, a multi commander Mini, pedal covers as well as hand levers for the foot release of the steering wheel adjuster.

The respective video can be watched on Youtube: <https://youtu.be/FBiy9SdHLfUHLfU>.



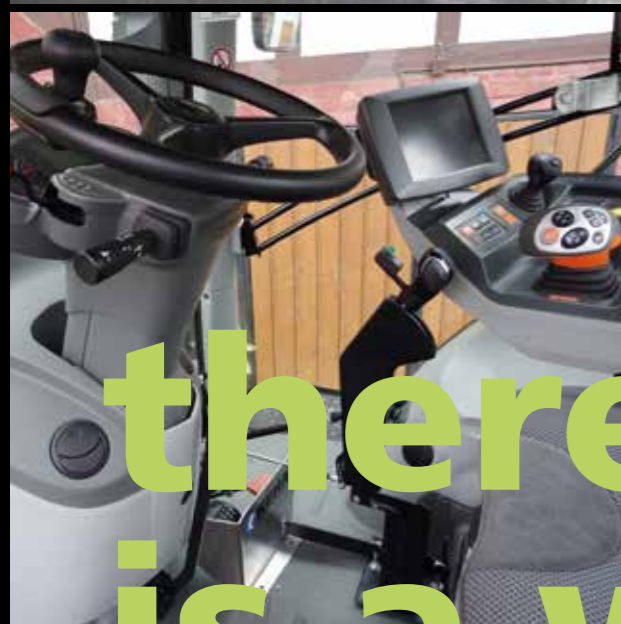
**Right:** A special and individually modified passenger lift safely carries our customer up to his tractor and down again. **Left:** Despite his handicap our customer can control his tractor on his own. Helping are: a wheel knob, an Easy Speed manual control, a Multicommander Mini, pedal covers as well as hand levers for the foot release of the steering wheel adjuster.



It starts...



Accomplished.



# there is a way

Author: Angela Tucker



Abassia Rahmani is a successful top athlete sponsored by KIRCHHOFF Mobility. In the summer issue of K>MOBIL, page 78/79, we introduced the Swiss woman. Due to her outstanding performance she was able to take part in the Paralympic Games in Rio. The participation was the highlight of her athletic career so far—definitely an experience.

# Rio 2016 Paralympic Games—an unforgettable experience



As of July 21st it was clear: I will take part in Rio! My anticipation was huge especially since in the beginning of the year nobody had expected that. With full enthusiasm my journey started in the beginning of September. My first impression was very positive, a pleasant atmosphere, nice people and an Olympic village which resembled a huge holiday resort.

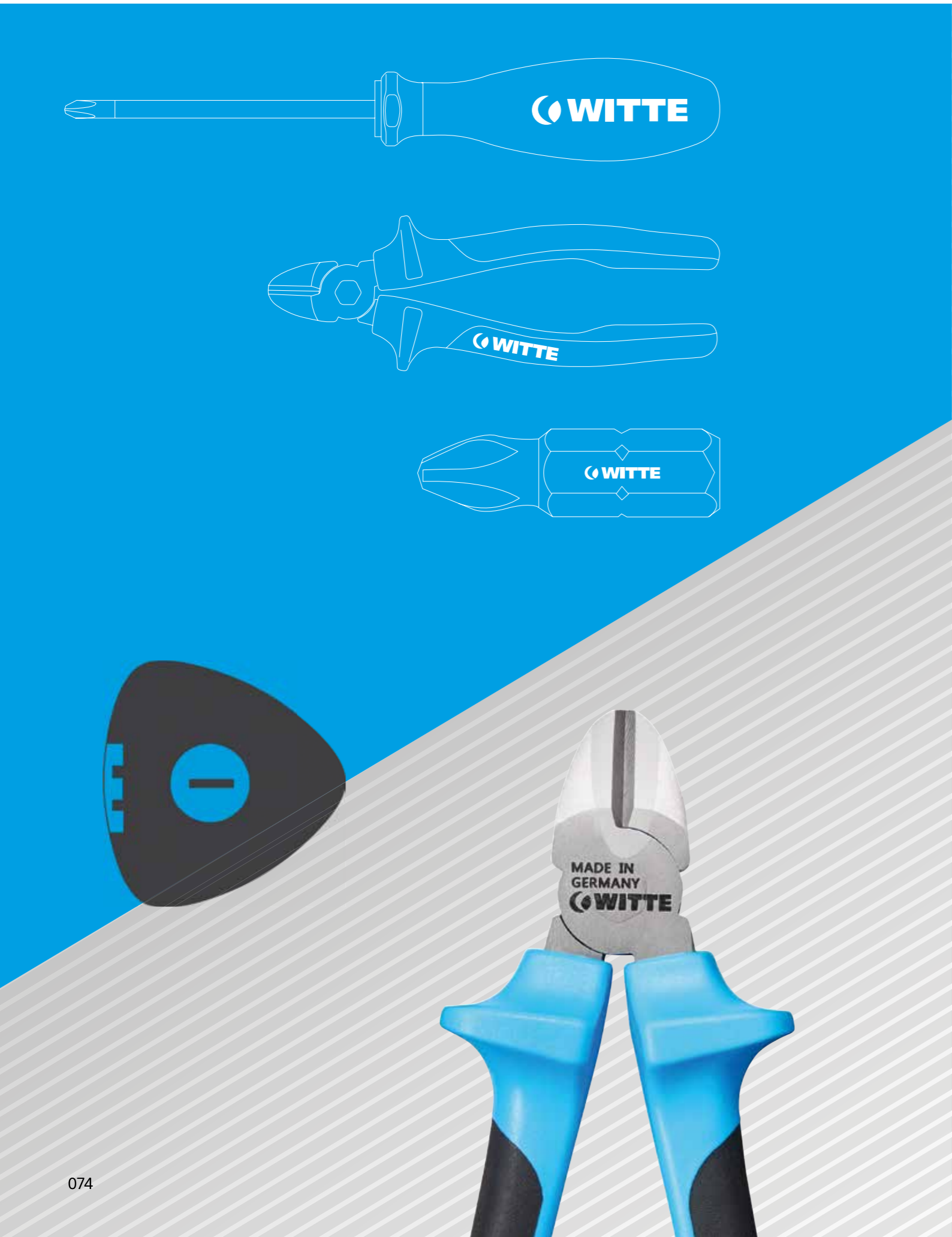
As my competitions were rather at the end of the Paralympic Games, I was able to get used to the stadium and the training venues before others. The buses were almost as punctual as a Swiss clock and the good mood and helpfulness of the Brazilian volunteers could be felt everywhere. Quickly I discovered familiar faces and made new friends. It was so exciting to meet so many nations at one place. With weight training and running time flew by to the beginning of the Paralympics. On the day of the opening ceremony joyful expectations were in the air. For me it was a very special moment to be able to experience the impressive opening ceremony in the breathtaking atmosphere of the Maracanã Stadium. **Now the games could begin!**

With the first competitions my excitement began to grow. In the morning on competition day however, I was relatively relaxed and calm, I even slept well. Only when I sat in the bus towards the stadium that my stage fright started. I was not able to think straight any more. In fact, I have never felt so extremely nervous before. Somehow I managed to get through the callroom to the start line. From there, things happened very quickly and I was able to qualify with my run in second for the finale. It turned out that in the finale I was not that far away from the global leaders over the 200m distance—I came in fourth and was over the moon. Two days later the 100m forerun was scheduled and here I was also able to show a new personal best like in the two previous runs and ranked eleventh. What was even more important to me was that I had control over my nerves to some extent this time.

Rio 2016 was an unbelievably enriching experience for me. I am very happy with my results. I take along many unforgettable moments and especially much motivation for the world championship in London 2017 and of course for the next Paralympic Games in Tokyo 2020. **I don't mind continuing on like this!**

Author: Abassia Rahmani





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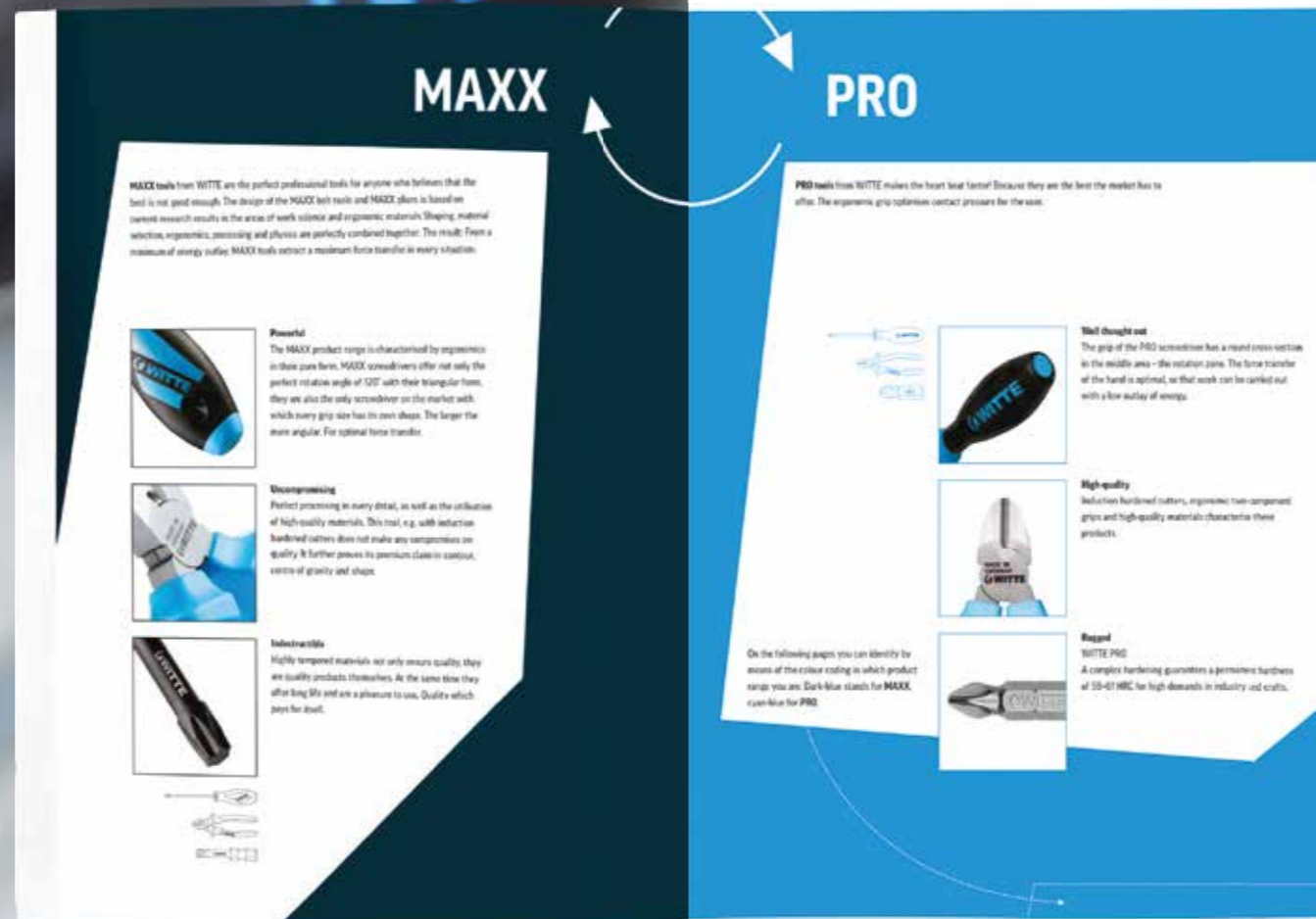
**WITTE**  
WERKZEUGE

When function and  
effect are in line.



# Powerful portfolio of 200 pages

 The new WITTE Tools catalogue is here.







The new catalogue offers an overview of the portfolio and clearly shows why WITTE Tools have a unique place in the market. On about 200 pages, it displays more than 1,700 items—screwdrivers, tongs and bits as well as new tool sets, in practical and robust tool bags which are now available for the first time.

The modern catalogue design offers clarity and orientation on the product range. The catalogue is divided by product types and within each chapter sorted by the segments PRO and MAXX. PRO—for the ambitious do-it-yourselfer and the MAXX edition for the professional who is looking for the best in every aspect.

Through schematic representations and easy to understand short texts, the introductory page explains our most important innovations and special WITTE features on individual product series.

Author: Christian Piccari

**A** long company history, tradition and more than 200 years of experience is one side of the success at WITTE Tools. The other side: continuous evolvement and a contemporary and innovative portfolio—are the reference in the new catalogue of the Company.

WITTE Tools have trend-setting design properties and offer the user a well-structured, market-oriented and customer-friendly product range that keeps up with the times. Tools from WITTE have the ergonomic advantage that makes work easier and more time efficient.





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**FAUN Group**

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**KIRCHHOFF**  
ECOTEC

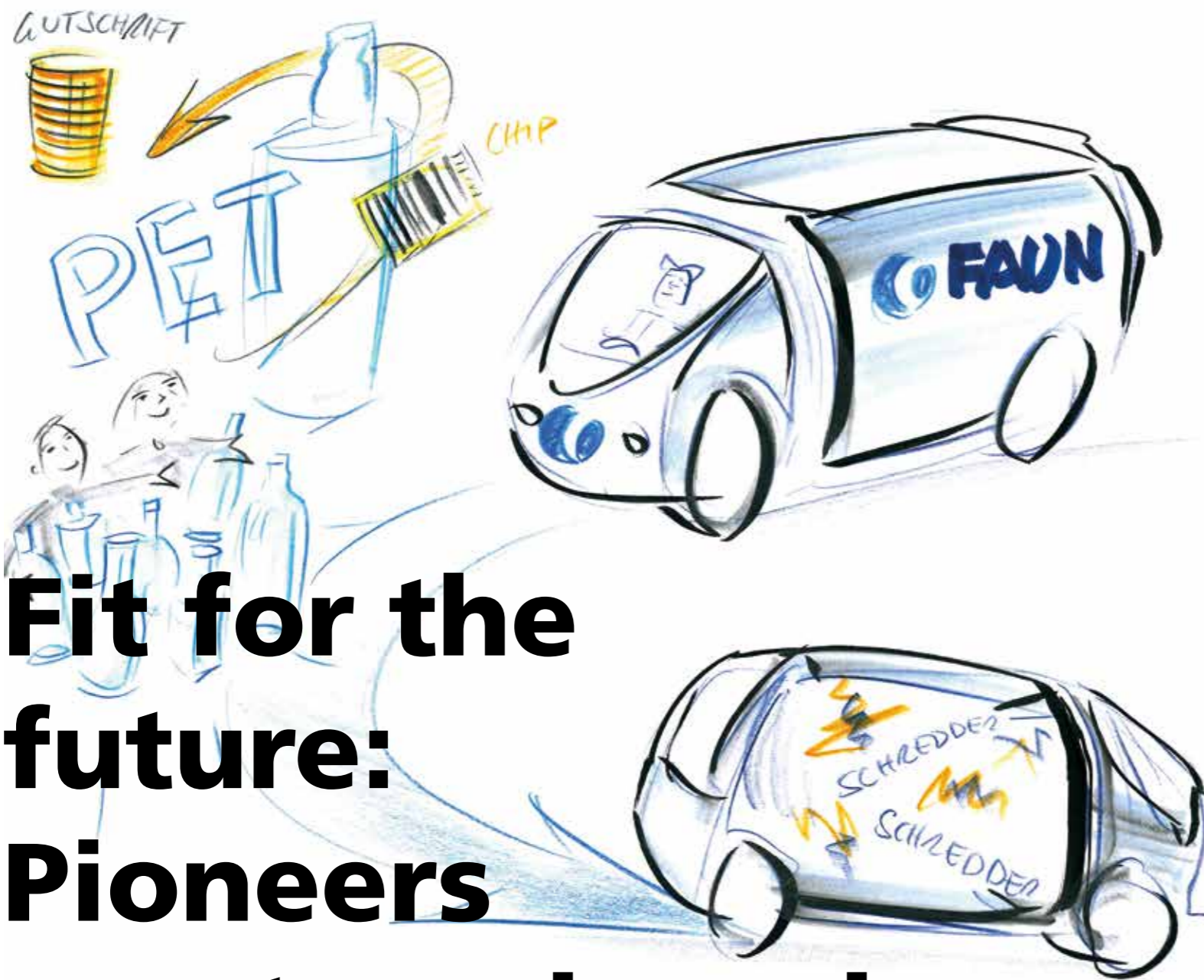
**FAUN**  
KIRCHHOFF GROUP  
**RELIABLE**  
**PROGRESSIVE**

**ZOELLER**  
KIRCHHOFF GROUP  
**Technik entscheidet**

**HIDRO-MAK**  
KIRCHHOFF GROUP

**SMART**  
**PRICE**  
**SMART**  
**CHOICE**





# Fit for the future: Pioneers meet engineering professionals

Innovative pioneers from the fields of refuse disposal, sensor technology, smart grid solutions and Industry 4.0 in the machine engineering and automotive sectors convened in September for a two-day workshop aimed at developing new applications based on the digitalisation of the refuse disposal industry.



Disruptive innovations, which can displace or replace entire industries through new technology, have been present throughout history. The car replaced the horse as a means of transport, taking over the transport sector and leading to the almost complete demise of associated industries, such as saddle makers and carriage builders. In modern times, new products and services are generally developed by ambitious start-ups, who are prepared to take a risk with new technologies or innovative business models. These start-ups create new markets and drive established companies, who react with caution in the face of new technologies and market developments, out of the market. The online retailer Amazon is one example of this process in action: The listed US company and Seattle-based market leader has driven lasting change in the book market and has triggered the shift from paperback to e-book. The list of young, innovative companies goes on – and established suppliers will see radical changes in their markets as a result of the threat posed by these pioneers. This movement prompted FAUN to take a closer look at its own industry and see which positive aspects of the trend it can take away for the refuse disposal sector.

In a two-day workshop, the 20 participants considered the possibility of new players entering the refuse disposal market and completed an interesting innovation project based on the theoretical scenario of Amazon delivering packages and collecting refuse at the same time. The aim of the conference was to make the FAUN business model fit for the future. With the increasing digitalisation of the refuse disposal industry in mind, the LEAD users discussed innovative business models, with the overall aim of increasing

the revenue-generating capacity of the customer and the entire value creation chain. The LEAD user method was applied to generate innovative new business models. With the support of partner LEAD Innovation from Vienna, innovative pioneers from the refuse disposal industry discussed new ideas with engineering professionals from related industries, including areas such as sensor manufacture, smart grid technology and Industry 4.0 in the machine engineering and automotive sectors, all of which use the same technologies as the refuse disposal industry, or are faced with the same challenges and issues. Using a range of creative Tools, the participants were asked to break away from existing patterns of thought and develop innovative concepts for new business models.

The two-day event generated some great ideas and approaches, including new roles for refuse collection vehicles, waste containers that report themselves as full, and refuse collection vehicles attending a property only on demand. We will have to wait and see what the near future holds for our sector.

Author: Patrick Hermanspann



**Dr. Angela Merkel meets ROTOPRESS DUALPOWER**

An innovative technology is for sure the hybrid refuse truck ROTOPRESS DUALPOWER. The vehicle can, therefore, be used to help protect the climate and cut CO<sub>2</sub> emissions and fuel consumption by 40 per cent. The German federal chancellor Dr. Angela Merkel made sure about the benefits of this hybrid refuse vehicle during the German Day of Junge Union Deutschland in Paderborn. She has been accompanied by Paul Ziemiak, Bundesvorsitzender Jungen Union (right) as well as FAUN Managing Director Burkard Oppmann (second from right) and R&D Manager Georg Sandkühler (left).



# Bonjour to

At the end of July, FAUN acquired French manufacturer PB Environnement from Lambesc in southern France. The acquisition will expand the FAUN product portfolio and extend our international service network.

# our new addition

Earlier this year, French company Provence Bennes (PB) Environnement joined the FAUN Group. PB is a leading manufacturer of light aluminium refuse collection vehicles in the French market, and is now a 100% subsidiary of FAUN.

#### A win-win situation

Both companies stand to benefit from this move – FAUN can add lightweight, high-quality refuse collection vehicles and compact vehicles to its range, and the French manufacturer will be able to strengthen its local market position and increase its potential in export markets. PB Environnement will be able to access the existing sales and customer service network established by FAUN and intensify its presence in the market in northern France.



The companies share some common values in the way they do business:

- Innovation
- Product quality
- User-friendliness

The geographical proximity of both sites in France will facilitate the rapid realisation of synergies in areas such as procurement, IT management and research and development. There is also scope for the companies to assist one another with aspects of the production sequence or continuous improvement process.

Founded in 1989 and headquartered in Lambesc, near Aix-en-Provence, PB Environnement possesses unique expertise in the manufacture of aluminium-bodied waste disposal vehicles. With 48 employees, the company generates approximately 10 million euros in turnover and delivers over 100 vehicles each year.

The core specialism of PB Environnement lies in small, lightweight refuse collection vehicles.

Author: Etienne Blaise





— Since the technical overhaul and facelift, more than 100 new side loaders have been delivered to refuse disposal companies. In addition to the SIDEPRESS C1100, FAUN now also offers other lifter variants for a range of applications. The success story continues.



The SIDEPRESS C1100, with a proven C1100 arc lifter designed for the collection of 60 to 1,100 l containers via double-comb or double-diamond attachments, is the classic model in the SIDEPRESS series. Both attachments are available as removable solutions. The C1100 vertical variant provides customers with the first ever lifter with true 'close attachment'. Containers are lifted and emptied vertically, close to the vehicle, meaning that little space is required at the side.

In southern European countries, high temperatures and a lack of space for waste receptacles on or close to properties has resulted in the use of depot containers that are emptied daily. Residents take their waste to the containers, which are located just a few steps away from their property. These kinds of systems are common on the Iberian Peninsula, in Italy and in South America. With the new SIDEPRESS F3000, 2.2 m<sup>3</sup> or 3.2 m<sup>3</sup> containers can be lifted and emptied in around 30 seconds with 1.5 t of lifting force. To save space, the containers are positioned crossways to the direction of travel and are picked up on the narrower face. The SIDEPRESS also requires less space thanks to its significantly shorter wheelbase, which results in significantly increased manoeuvrability compared to collection vehicles for classic stationary containers.



With the SUBWAVE model, a prototype currently tested in the field, most of the container is underground, which improves the appearance of urban areas. Controlled remotely, the SIDEPRESS FC1100 securely removes containers from their underground or above-ground recesses and precisely returns them to their positions once emptied. This system is a single investment for two applications: In classic below-ground systems, containers are opened from the base and are therefore not leak-proof. In addition, this solution also requires a large, manually operated crane superstructure to lift the container out of the ground. This takes up a lot of space and creates a great deal of work. This new system for underground containers is a world-first and represents a perfect solution in terms of design, cleanliness and logistics.

Left: SIDEPRESS C1100 Top: SIDEPRESS F3000  
Bottom: Prototype SIDEPRESS FC1100

Author: Claudia Schae

# A one-armed success story



# Seven in one go

— The AWISTA fleet in Düsseldorf will soon include seven new VIAJET 5H Streamline sweepers.

**B**ack in 2015 the communal service provider from Düsseldorf acquired five 5m<sup>3</sup> sweepers. The machines were convincing, and in everyday use the drivers quickly realized their potential.

Colleagues at AWISTA therefore teamed up with the Viatec team to consider how to make the vehicles even more efficient and fit for municipal use. Along with software updates, the VIAJET 5 was put through intensive field tests by MAN, ZF and FAUN. The result is a sweeper which is ideally suited for city and municipal sweeping. The combination of automatic Transmission and hydraulic construction of the VIAJET 5 makes sweeping a total pleasure.

#### The VIAJET 5H Streamline in a nutshell:

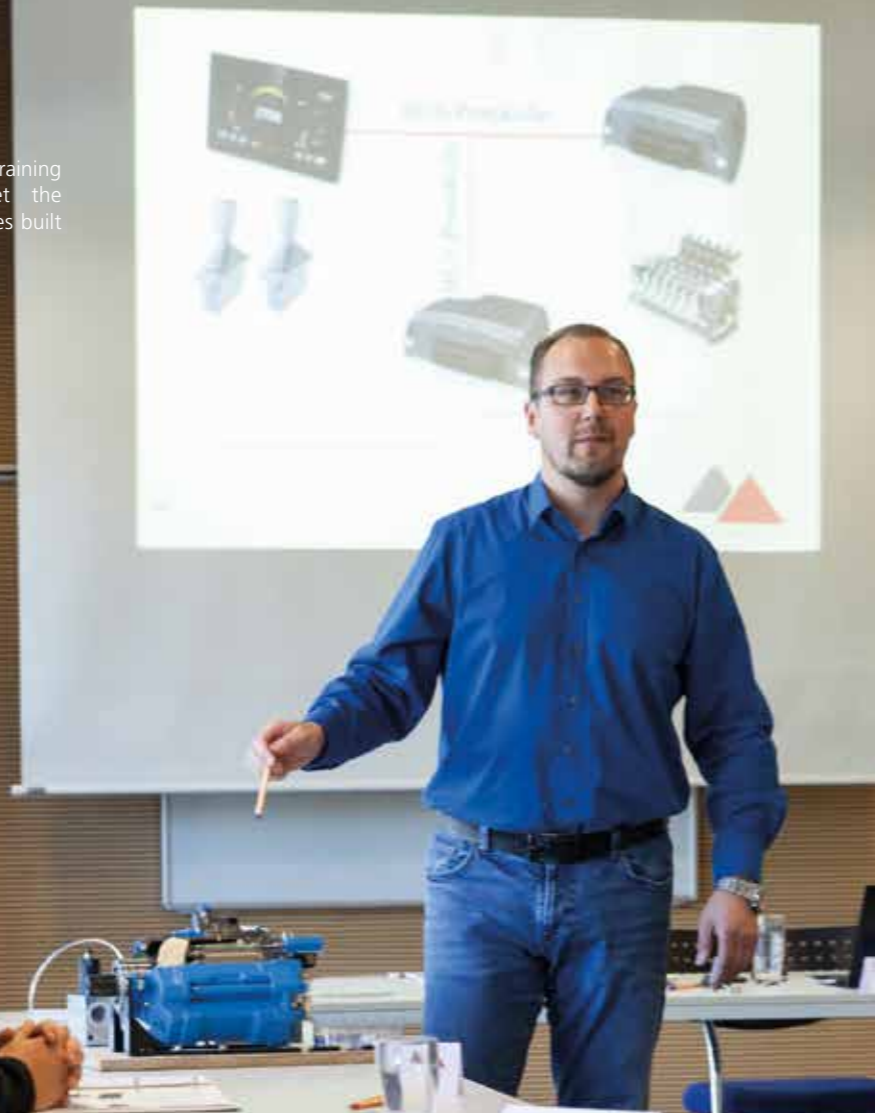
- MAN TGL 12-250 chassis with tippet
- Short-built EURO 6 vehicles
- Small turning radius
- Short wheelbase

AWISTA opted for four right-handed sweepers and three left-handed and right-handed sweepers. These sweepers are fitted with a warning light so that the machines can clean two-lane main roads and bypasses, as well as motorways, without the need for additional rear fuse protection. In November and January, the VIAJET will arrive in the Rhine and sweep the regional capital, as well as country roads and the city motorway.

Author: Claudia Schae



Maik Groß always makes sure that his training sessions are practical. Participants get the chance to test their skills on superstructures built especially for training purposes.



**T**raining is becoming an increasingly important topic in the workplace. Operating staff are expected to meet a continuously expanding set of requirements in their roles, and the vehicles they use are expected to be robust while performing an ever-growing range of functions. We pass on our specialist manufacturer knowledge to vehicle operators – the people who work in our vehicles day in, day out – in seminars organised by our training centre. Our trainers are Maik Groß for refuse collection vehicles and Jens Hofmann for sweepers.

The centre currently offers ten different seminars, the majority of which are delivered in Germany, with around 20 percent taking place abroad. Topics range from basic training on the various superstructure options to the latest updates or technical innovations. At the customer's request, we also offer courses tailored specifically to the participants' needs. Drawing on their experience in the adult education sector, our trainers work with our customers to create optimally tailored concepts that work for the participants. Training theory is put into practice using visual aids, parts and components, or using the vehicle itself to demonstrate concepts.

# Stay curious

— 50 training courses, 30,000 kilometres, 150 days, 500 knowledge-hungry participants and 750 folders: just a few key figures from Maik Groß in 2016.

There are a range of new training topics in the pipeline for 2017, including "Systematic fault analysis in the FCS electrical control system". Companies are informed of all the latest training news via our website or regular newsletter, and we stay in direct contact with our long-term partners to make sure they are fully up to date on our programme.

The team also offers special courses, such as hydraulics training on "Systematic fault analysis in mobile hydraulics" for refuse collection vehicles or sweepers. Seminar participants not only acquire all the basic knowledge they need, but also get the opportunity to learn from the experience of experts and perform systematic fault analysis exercises on specially prepared training vehicles. FAUN offers a diverse range of high-quality and up-to-date training courses.

Health and safety in the workplace is discussed in our current workshop "Competent person for hydraulic line technology". As well as tailoring the content of courses to operators, we also deliver our training at a time and location that suits our customers.

Courses can be provided at the customer's site, in our customer centre or at the manufacturing plants in Osterholz-Scharmbeck, Grimma or Valence.

Our vehicles are fitted with the latest technology, so it's essential that our training team moves with the times too. From mid-2017, FAUN will also offer its courses as multilingual e-learning seminars, including in-depth YouTube-style tutorials. This addition to our offering will enable us to meet the needs of customers both at home and abroad even more effectively. To overcome language barriers, the courses will be available in German and in English, with further languages available on request.

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Author: Claudia Schaeue



## Everyone needs a Pfundskerl next door

— To make sure that the Pfundskerle at FAUN can reach our customers quickly, FAUN now has a total of 11 service support points in Germany. The most recent addition to the network is the recently opened centre in Winzer in the Bavarian Forest.



**Get in touch with our great guys in Winzer:**

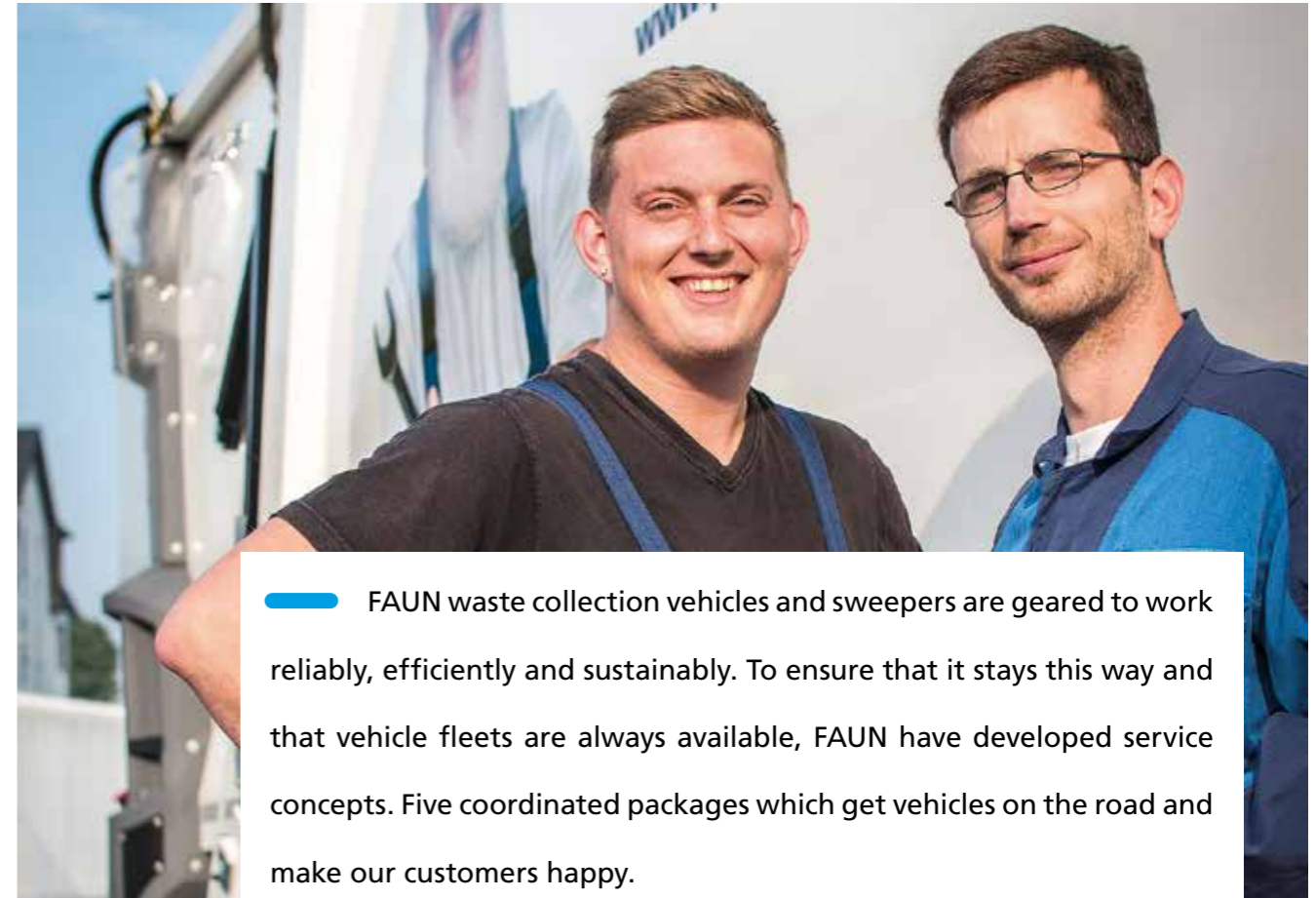
**FAUN Umwelttechnik GmbH & Co. KG**  
Florian Knödseder  
Aupoint 10  
94577 Winzer

**Mobile: +49 162 8239651**

**A** Pfundskerl is the kind of person you can always rely on – someone who rushes to help you just when you need it. These kinds of great guys – and girls – are who make up our team at FAUN. They work in all areas of our business, from production to administration and, of course, in after-sales and customer service. Distributed across Germany, the great guys in our service team are never far away from the refuse collection vehicles and sweepers they look after. We even selected a site in the immediate vicinity of one of our customers for our latest service location.

In Winzer in the Bavarian Forest, Florian Knödseder and his team of three maintain 44 SIDEPRESS side loaders and 11 VARIOPRESS rear loaders for AKU Donau-Wald, the municipal refuse collection company for the Donau-Wald region. The branch is located at the heart of AKU Donau-Wald's area and is responsible for the region of Lower Bavaria, particularly the districts of Regen, Deggendorf, Freyung Grafenau and Straubing Bogen, as well as the town and district of Passau. The 55 vehicles are maintained under a full-service package, which means that AKU Donau-Wald and the great guys at FAUN know at all times which vehicle is next up for inspection and which wear-prevention measures are due. If a vehicle breaks down, the mobility guarantee applies and the great guys at FAUN deliver a replacement vehicle. It's good to have great guys right next door.

Author: Alex Breyer



— FAUN waste collection vehicles and sweepers are geared to work reliably, efficiently and sustainably. To ensure that it stays this way and that vehicle fleets are always available, FAUN have developed service concepts. Five coordinated packages which get vehicles on the road and make our customers happy.

**T**he concept goes on. In 2016 more than 150 waste disposal specialists chose FAUN Full Service contracts. Burkard Oppmann, FAUN Services GmbH Director, is delighted at this development: "Our service concepts are very well received. With these agreed packages, customers have the opportunity to exchange their vehicles old for new after long-term rental contracts, and with financing from FAUN Services GmbH." The company therefore remains flexible, can calculate based on fixed quantities and drive with the newest technology.

All measures help with the maintenance and availability of the vehicle fleet. The practical service and finance concepts enable customers to receive a reduction in expenses and investments. Service packages are available for FAUN waste collection vehicles and sweepers. "We want our customers to be best equipped for every situation and know that smooth and breakdown-free operation is our main goal. Our customers can concentrate on their purchase, and we ensure that the vehicle works," Burkard Oppmann continues.

The concepts should now be adapted for international service providers and personalised for their individual situations. We compile service concepts consistent with the requirements of the country of origin. Perfectly satisfied.

Author: Claudia Schae

**Perfectly  
satisfied!**



**Check out the great guys:**

[www.pfundskerle-fuer-starken-service.de](http://www.pfundskerle-fuer-starken-service.de)  
or

[www.pfundskerle-for-strong-service.com](http://www.pfundskerle-for-strong-service.com)



# Bringing fresh new ideas to the workplace

In January 2016, Lucas-Maximilian Dörr joined FAUN Expotec GmbH as a Sales Export Assistant.



Thrown in "at the deep end", the 29-year-old needed to put his knowledge into action right at the start of his career with FAUN. With enthusiasm and a wealth of ideas, he supported the marketing team with this year's trade fair preparation for IFAT and got to grips with our products and markets in an incredibly short timeframe. This period acted as intense "training" for his actual role.

As the interface between marketing and international sales, Lucas is responsible for competitor monitoring and dealer management, and he supports the globally active Expotec team in their day-to-day sales activity. From January 2017, Lucas will take on responsibility for a number of countries, including Romania and Middle East, and embark on a career in FAUN product sales as an Area Sales Manager.

Lucas studied Business and Administration in Vienna and Berlin, and first got to know FAUN in 2014, when he completed a two-month internship with us. During his dual masters at the Steinbeis University in Berlin, Lucas continuously built on his knowledge of marketing and sales. He can now apply his theoretical knowledge to practical situations and bring fresh new ideas to the workplace.

Author: Claudia Schae



The multifunctional modular cockpit of FAUN sweepers combines high-tech solutions with self-explanatory operation to create a modern working area.

## Everything under control, rather than just in view

The new modular cockpit was first presented to service providers at IFAT in May. Since then, production has commenced and all machines in the VIAJET 5, 6 and 7 series will be delivered with the new operating concept as standard. We are preparing to roll out the modular cockpit in the VIAJET 8 and 12 and the TERRAJET series.

### What can the modular cockpit do?

The modular cockpit from FAUN optimally combines the latest technology with a proven user interface. The new multifunctional display shows drivers all the information they need at a glance, without having to scroll through countless submenus – ensuring that operation of the machine is simple and self-explanatory. The position indicator switch and position and function lights clearly show the operator which functions are currently active and inactive. The "back office" of the cockpit is where the communication channels come together. All the modern communication technology features that service providers need for their day-to-day work are integrated into the system via myFAUN – placing the full functionality of the telematics systems at the fingertips of the sweeper operator.

### Quiet mode at the touch of a button

Alongside the "All off" function, a new function called "Traffic light stop" has been added. When the vehicle stops at a red light, the driver can press a button to stop the brooms, pause the water pump and reduce the blower to minimum speed. This feature protects the environment, minimises exhaust gas and noise emissions, prevents unnecessary broom wear and saves water. When the driver presses the button to deactivate "Traffic light stop", the machine is immediately ready to resume action in the previously set mode, and the sweeping process can continue.

A special service port on the modular cockpit provides access for rapid troubleshooting – so customers receive effective service and the sweeper can be put back to work more swiftly.

Author: Mario Ringl



# Across the pond. Sweepers for suburban America

After more than 80 demonstrations, a year of state-hopping across America and many intense customer meetings, it was decided that a new sweeper vehicle – smaller than the VIAJET 6 – was required for the US market.

The machine needed to fit on an 8 to 10-ton chassis and be simple to operate. Compact dimensions were also important to facilitate street cleaning in residential areas. The driving speed of the chassis was a crucial factor too, as the new machine was to be used in smaller towns and suburban areas, which can be spread over vast swathes of land in the US. For this reason, it was important that the vehicle was capable of moving at speed, yet still slow enough to travel in sweeping mode. And with comfortable, van-style seating, even long overland journeys at high speeds should be comfortable for the driver – with larger compact machines.

The FAUN sweeper team discussed a number of ideas. At the end of 2015, Global – the FAUN general importer and partner in the US – presented the compact VIAJET 4 road sweeper. The team from Global and its dealers were impressed, and the small and robust machine has since established an excellent reputation, particularly in southern European countries, where it effectively cleans the narrow alleys of Mediterranean metropolises.

This year, the team from Grimma sent the first VIAJET 4 Body to America. At the start of August, a container holding the CBB (Completely Built Body) of the VIAJET 4 was unpacked in the Californian state of San Bernadino, home to the headquarters of Global. With assistance from FAUN engineer Mario Schröder, the body was fitted to an ISUZU chassis. The market launch was planned for the upcoming trade fair in Minneapolis. Once the VIAJET 4 had arrived in the Californian sunshine, the team at Global were even more impressed. They had previously only seen photos of the machine – and in real life, the VIAJET 4 was more attractive and looked even more compact than they had imagined.

The enthusiasm of the Global team was catching, and the machine was well received by professional audiences too. The trade fair sparked the interest of many customers and countless demonstrations were arranged as a result – all in all, we have got off to a great start in the land of opportunity.

Author: Mario Ringl



Minneapolis, Minnesota. 28 August, 11:00 local time. The APWA Show opens its doors, and visitors start to flow into the hall. At the centre of the fair is the stand of FAUN partner Global – and at the heart of that stand, a magnet for curious visitors: the VIAJET 4. A sweeper tailor-made for suburban America.



#### The advantages of the VIAJET 4

In addition to its exceptional manoeuvrability, the VIAJET 4 features elevated emptying at a height of over 1500 mm. The debris container has an effective volume of 4.0 m<sup>3</sup> and is made from high-quality V2A. The sweeper mechanism, which has been completely overhauled since its market launch, features a trailing disc broom; the system boasts easy operation and a robust design. The sweeper is equipped with a V-shaped suction shaft and the famous FAUN air circulation system to minimise fine dust emissions. For the European market, the VIAJET 4 is fitted to various chassis. For the American market, the sales team at FAUN Viatec opted for an ISUZU N-Series carrier vehicle with an EPA Tier 4 system in line with the EURO 6 standard.



# Turkey's pioneering refuse collection vehicle company

— HIDRO-MAK, which has scored many firsts in Turkey, is continuing to enrich its output in response to the demand for waste collection equipment which has increased over recent years.

**H**IDRO-MAK entered into a new phase at the end of 2015 as part of KIRCHHOFF Group. It has thus come closer to attaining its ambition of adding to the nearly 40 countries around the globe, from Russia to South Africa, from Azerbaijan to Saudi Arabia and Algeria, in which it is already currently operating. HIDRO-MAK aims to develop its product range in terms of effectiveness, economy and reliability, and also to strengthen its position in foreign markets, by deploying new technologies, and taking advantage of the experience and technical expertise of the FAUN and ZOELLER brands. FAUN and ZOELLER, meanwhile, plan to draw on HIDRO-MAK's special market experience in order to extend their activities in the Middle East, Asia and African markets. Under this process, each of these companies will continue to manufacture their equipment in-House and remain as unique brands.

HIDRO-MAK began production of vehicle body equipment more than half a century ago and for the past forty years has focussed exclusively on waste collection bodies, specialising in this field. Its strength is that it manufactures to international standards, and exports half of its total output abroad. The company, which was founded in 1961 by Hamdi Beşer when he started out manufacturing tipper bodies, has received

recognition in Turkey as a model for its focussed strategy. In addition to its factory in the Hadımköy district of Istanbul, it operates a second facility as well as a research and development centre in the city.

In the field of waste collection equipment, HIDRO-MAK is among the most well-known brands in Turkey. HIDRO-MAK, one of the first companies in Turkey to manufacture products such as tipper bodies, hydraulic refuse compaction bodies, and hydraulic presses, has production capacity for an annual average of 1,400 waste collection bodies. HIDRO-MAK is working ceaselessly toward its goal of becoming the world's top company in terms of quality/price ratio. It has 175 employees, and 50% of its income is from exports. The fact that Mercedes Turkey, Mitsubishi and Scania all presented their vehicles at commercial vehicle equipped with HIDRO-MAK bodies for their Euro 6 launches at business fairs and other events is an indication of their trust. HIDRO-MAK is fully compliant with the latest EN 1501 standard requirements, holding all the required manufacturing certificates, and is therefore successfully achieving deliveries worldwide. HIDRO-MAK works continuously on innovation in order to ensure a consistent increase in its market share over the coming years, and is also using its comprehensive understanding of the needs of its customer to propose high quality regional solutions which are competitive on price.

In 2016 HIDRO-MAK is expanding production of its Waste Transfer Semitrailer in particular, with new designs, in response to demand from Turkey and surrounding countries, and is continuing to produce top- and rear-loading compaction sliding floor semitrailers.

Authors: Ahmet Bazmanoğlu, Erhan Sun



#### More about HIDRO-MAK:

[www.hidromak.com](http://www.hidromak.com)

[www.youtube.com/HidroMak](https://www.youtube.com/HidroMak)

[www.facebook.com/HidroMak.A.S.](https://www.facebook.com/HidroMak.A.S.)



# Always one step ahead



— This year's in-house exhibition at Contena-Ochsner AG was a great success, with the future as its focus.

The invitation from Renato Heiniger and his team was once again taken up by many Swiss municipalities and businesses this year. Every two years, the team from Contena-Ochsner invites guests to Urdorf for an in-house exhibition, at which it unveils the latest vehicle innovations.

This year, 19 new products were presented, with a clear focus on environmental protection and futuristic technology. Contena-Ochsner Managing Director Renato Heiniger said: "Our in-house exhibition is an opportunity to present our wide product range to customers and focus on specific trends in our industry. Our aim is to always be one step ahead".

**+** In brief:  
Contena-Ochsner @ Suisse Public:  
13. – 16.06.2017, Bern

The solutions on show included a rear loader with an E-POWER drive, hybrid chassis and the container cleaning system ONESTOP, as the issue of ensuring containers are clean after emptying is becoming increasingly important. FAUN sweepers also proved exceptionally popular. The team showed that its solutions were equipped for the future with myFAUN, the telematics application for refuse collection vehicles and sweepers. The live demonstrations of the Doppstadt machines also attracted large audiences.

Renato Heiniger comments on the continued success of the event: "I think our customers value direct contact with us and the private atmosphere of our in-house exhibition. In this setting, we can respond more effectively to needs, customers can try out all the exhibits and there are ample opportunities to chat with people away from your day-to-day work environment".

Author: Claudia Schae





# MICROPRESS...

## Successful exhibition

Now in its 48th year the RWM exhibition at the National Exhibition Centre is the UK's premier event for resource efficiency and waste management solutions. This year the exhibition was held between 13th and 15th September and with over 500 exhibitors and in excess of 13,000 visitors it was going to be a hectic few days.



The FAUN ZOELLER UK team from left: Stewart Gregory, Pat Brown, David Graham, Rebecca Wood, Deborah Hinckesman, Gary Brown, Ben Lord, Joanna Youngs, Angus Gillson, Daniel Riget, Simon Hyde, Richard Horton & Mark Court

The focus and theme this year from the RWM was the circular economy. Currently we have a linear economy but we can see where we need to make changes. We currently take resources use them once and then we destroy them and then buy again. The focus is on changing that to a circular economy where by we capture resources at the end of their life and reuse then. We have the technologies to do this but now as a society we need to join the technologies together to make us more sustainable and effective in the long term. Our parent company in Europe, Europe, the FAUN Group, is already investing heavily in new clean technologies for the engines that power our vehicles from Hybrid to Hydrogen to ensure clean air and low emissions in all areas.

FAUN ZOELLER UK Limited were, as always, very pleased to be exhibiting at the show and this year not only did we have some of the

latest and most innovative vehicles on stand but we also had four vehicles, including the new POWERPRESS and the FRONTPRESS showcasing at the demo area outside the main hall.

'It's a huge event for the UK market', said Simon Hyde, Chief Executive Officer of FAUN ZOELLER UK Limited. 'This is our chance to demonstrate to all of our customers, both private and municipal, old and new just how good our products are, to explain the technological advances that Group invest in and to demonstrate why FAUN Group is Europe's No.1.

On stand this year we had the new VIAJET 4 road sweeper which is the smallest in the VIAJET product range but performs equally as well as its larger siblings and allows more flexibility to the operator to increase efficiencies in street cleansing significant fuel savings and increased and payload has proven the worth of the VIAJET range, with a growing list of new customers. We also had the ever popular MICROPRESS which is ideal for small urban and rural routes but is able to collect all waste streams. Lastly but not least the VARIOPRESS with Rotary XL lifter. The VARIOPRESS is our best-selling FAUN RCV in the whole range and as the name suggests can collect all waste streams. Together with the Rotary XL lifter it is an unbeatable combination as the lift is the full width of the hopper and proved to be of great interest with the visitors on the stand.

Outside in the live demonstration area we showed the agility of the EVOPRESS (based on the best-selling VARIOPRESS) but with a shorter tailgate. We also had the split body SELECTAPRESS for dual waste streams and the latest addition to UK product range was the Rear End Loader, the POWERPRESS. Not only can this accommodate a lift for trade bins it also has additional skip arms for commercial and industrial waste. The new FRONTPRESS was on hand driven by David Graham and again demonstrating the full range of equipment that the group can provide and service in UK and across Europe. The infamous ROTOPRESS made yet another appearance on the stand with unique artwork on the drum, indicating its use in the 'green environment'.

We also had an 'on stand' competition to take the best 'selfie of the show' with our stand and product and this caused much hilarity over the three days of the show – the winning picture was tweeted for all to see and was won by Dawson Vehicle Rentals – well done!

'Everybody worked extremely hard' said Simon, 'to make this event a success and I would like to take the opportunity to thank everyone who joined us for the three days of the event; our staff, suppliers and customers. We thank all those that assisted us, with their technical expertise and knowledge sharing, in making this show one of the most successful and memorable in recent years'.

Author: Simon Hyde



# Brand new sector – access and environment

FAUN TRACKWAY is delighted to announce the launch of our brand new sector, ACCESS AND ENVIRONMENT offering a readily available COTS (Commercially off the Shelf) product range of efficient recovery matting known as TRACKWAY® designed for the civilian market.



01



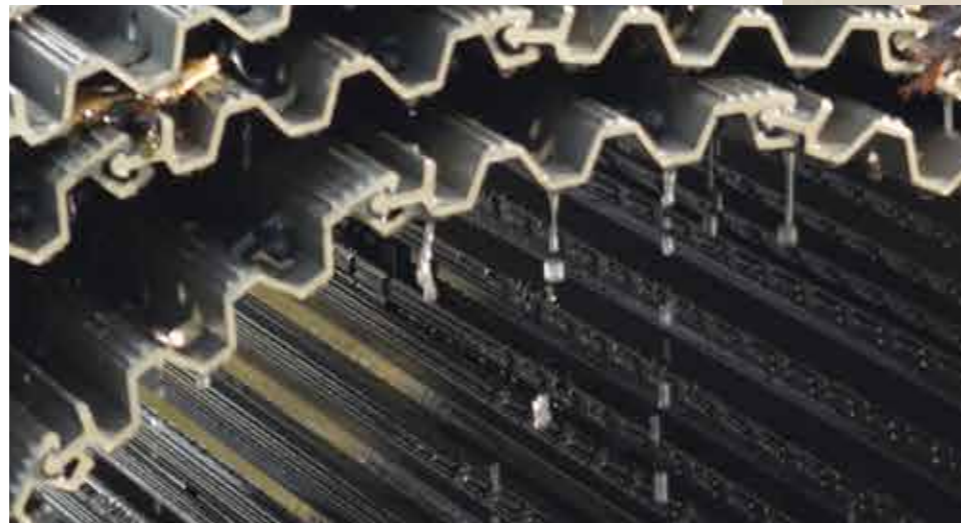
02



03

FAUN TRACKWAY boasts an extensive history of aluminium military product manufacturing capability in the UK spanning over 70 years offering roadway and aviation access solutions worldwide. Our products are unsurpassed in functionality, quality and durability and our TRACKWAY® products are the solution provider of choice for terrain access systems worldwide.

Gareth Williams, Engineering Manager said; "Our new FAUN TRACKWAY ACCESS AND ENVIRONMENT products have been designed specifically for the commercial sector and have been engineered and manufactured with our core product values in mind. Our C40 TRACKWAY product range is manufactured with high-grade materials and are extremely durable in all climates, has a lifespan in excess of 40 years and most importantly offers rapid access and recovery for vehicles and people in rugged, bogged down or otherwise inaccessible terrain."



To ensure we deliver both high quality products and services, FAUN TRACKWAY Ltd. are delighted to confirm that we have successfully achieved a fully integrated management system award. This confirms that we stringently adhere to the principles and regulations set out in the ISO 9001, ISO14001 and OHSAS 18001 NQA Standards.

Author: Danielle Thomas

**01 C40 BOAT RAMP KIT (BRK)** FAUN TRACKWAY's BOAT RAMP KIT is a modular roadway which provides clear access ways to and from water for vehicle loading.

**02 C40 ROADWAY SOLUTIONS** FAUN C40 TRACKWAY is a temporary modular roadway which enables the rapid access for vehicles and people. The commercial specification dispenser facilitates the launch and recovery of the TRACKWAY®. A standard roll of C40 TRACKWAY is 40m long.

**03 C40 MEDIUM GROUND MOBILITY SYSTEM - BEAM DISPENSER (MGMS-BD)** FAUN Trackway's MEDIUM GROUND MOBILITY SYSTEM - BEAM DISPENSER is a deployment, recovery, transportation and storage device for C40 Trackway. C40 TRACKWAY can be deployed and recovered quickly and efficiently from a Fastrack and from the front of a telehandler or host vehicle using FAUN TRACKWAY's Beam Dispenser or Beam Dispenser LITE. Alternatively utilising par-buckling and a laying trolley manual deployment is also an option.

**04 C40 VEHICLE RECOVERY MAT SYSTEM (VRM)** FAUN TRACKWAY's VEHICLE RECOVERY MAT SYSTEM assists in the recovery of bogged down vehicles in sandy, muddy, boggy, icy or otherwise difficult terrain. Suitable for use with vehicles with pneumatic tyres VRM provides a non-slip surface enabling vehicles to gain traction on soft ground avoiding vehicle damage to the ground surface.

04





# A hotbed of talent



Our talent programme aims to develop high-potential, overperforming employees and help them prepare for the next stage of their careers.

The talents are: Daniel Klös, Christian Dost, Ina Westermann, Julian Neuhaus and Nils Speckmann (all in the centre) and nestled in by the Managing Board. From left to right: Burkard Oppmann, Matthias Kohlmann, Behnam Balooty, Patrick Hermanspann and Marc Grube.



Seminar topics include:

#### Core seminars:

- Presentation and communication techniques
- Self-management and time management
- Change management
- Leadership skills
- Team development
- Conflict management
- Project management

The first five talents in our programme successfully passed all the core seminars and received their certificate from the management team. K>MOBIL spoke to HR Manager Marc Grube and Ina Westermann, Management Assistant and one of the young professionals on the programme, about the talent programme.

*Ms Westermann, you're one of the first five people to graduate from our talent programme. What's your impression of the scheme?*

**Ina Westermann:** I was really pleased to be selected to take part in the programme. It is a great opportunity to undertake further training – which is becoming increasingly important these days. Of course, it was also great to get this kind of recognition from my manager.

*Have you been able to implement what you learnt in your day-to-day role?*

**Ina Westermann:** Some of the topics covered on the programme, such as leadership or change management, are areas that I am not yet involved in. But the tips and tricks on time management and self-management, as well as the presentation and communication techniques, come in handy all the time.

*Mr Grube, what motivated the company to develop this programme?*

**Marc Grube:** We want to help prepare high-potential, high-performing employees for the potential next steps in their career in a targeted way. This approach gives us the chance to fill vacancies in key roles at FAUN with our own employees, who are well-prepared and ready to tackle a new challenge thanks to the talent programme. With the shortage of skilled staff in the current labour market, this is an important step; it fits with our "homegrown talent" approach and also motivates our employees.

*Ms Westermann, what did you gain from the programme, aside from theoretical knowledge?*

**Ina Westermann:** The way the group of seminar participants was put together was really good. Getting to know colleagues from a wide range of departments and areas, and learning to understand them better, is very useful in my day-to-day work. Taking part in a programme like this also opens your eyes to what's going on beyond the confines of your own working area.

*What are the next steps for the programme? How many people are involved in the programme right now?*

**Marc Grube:** Some of the 16 participants are still working on the programme, so we will continue to offer these seminars in 2017. At the same time, we're constantly on the lookout for new talent within our organisation so that we can add these people to our pool. The seven modules of the talent programme must be completed within a maximum period of three years.

*Ms Westermann, Mr Grube, many thanks for talking to us, and I hope that you continue to enjoy working on this programme.*

The interview was conducted by Claudia Schae, Marketing Manager, on behalf of K>MOBIL.



ZOELLER MEDIUM XL with integrated bin washer for 120-1100 litres DIN containers



# More tracks in the hot desert sand

— Stummer municipal vehicles supplied to Sharjah and Ajman



SLF side loader with a container volume of 22 cbm

High quality vehicles and a customer-centric range of services are characteristic of all companies in the ZOELLER Group. As a result, in 2014, municipal vehicles from the Stummer brand made a successful market appearance in Abu Dhabi. Over the course of 2015, other significant customers from the Middle East followed, strengthening the company's market position.

With the support of local sales and service partner Viking Gulf, five ZOELLER SLF side loaders with a container volume of 22 m<sup>3</sup>, and a combined waste collection vehicle with washing device for refuse containers with a capacity of between 80-1100 litres, were sold and delivered to the Emirate of Ajman. With a total area of 250 km<sup>2</sup> and 300,000 inhabitants, Ajman is the smallest of the seven Emirates.

The 240 and 360 litre refuse containers are lifted by the gripper arm, then automatically emptied and replaced. In this way, up to 1,000 containers are emptied per day, per vehicle. The new ZOELLER SLF SIDE LOADERS are mainly utilised in the residential areas of Ajman. In addition to all of its other appealing characteristics, ZOELLER together with the brand Stummer provides above all a winning solution with its technological concept, characterised by speed and efficiency. These are not insignificant criteria when you consider the climatic conditions during the summer months. In temperatures of up to 55 degrees, bins must be emptied on a daily basis, meaning that a high operational capacity of waste collection vehicles is vital. Here, the need for loading personnel on the vehicle is eliminated, and the driver can control the process from within the air-conditioned cab.

In addition, a new STUMMER refuse collection superstructure with an attached washing device is being tested in parallel.

ZOELLER has also been successfully operating waste collection vehicles with Stummer in the Emirate of Sharjah, 20 minutes away from Dubai. Here, five ZOELLER MEDIUM XLs with type 256 emptying lifters were sold for commercial and industrial waste disposal to the disposal company BEEAH, as well as two gas-powered SCANIA CNG chassis with ZOELLER MEDIUM XLs for household waste collection and two STUMMER MEDIUM XLs with integrated container washing devices.

In the case of BEEAH too, the company employs proven ZOELLER technology to offer improved future disposal services that are more efficient and more cost-effective. It is not only acquisition costs that are a decisive factor. It is particularly important to consider the operational capacity of the vehicles, and to reduce the fleet and maintenance costs associated with this.

In order to build on this sales success in the future, we need to offer our customers the appropriate range of services and customer support. Here, our partner Viking Gulf provides crucial support with its wealth of experience in the region. "The collaborative effort is an example of successful cooperation. We bring together the market expertise of our partner Viking Gulf and our knowledge in the fields of technology and service," explains Stummer Managing Director Johannes Streif.

Author: Johannes Streif



# New employee at the Southern region service centre

ZOELLER restructures its team to strengthen sales and service strategy



**Top:** Southern region service centre team **Right:** From left Marcus Lemke (Southern region workshop manager) and Ingo Strasser (Southern region service centre manager) **Bottom:** Jürgen Rupsch (Sales)



At the central branch in Augsburg and two further service support points at Ebelsbach and Wörnitz, customer service in the Bavaria region is being rocketed to the top of the agenda.

Heading up this customer service drive is branch manager Ingo Strasser, who is working with his sales team Dirk Mahlmann and Jürgen Rupsch to achieve maximum customer satisfaction by providing a full service network. Together with his 18-strong team, customer service manager Thomas Scholz, who is responsible for the three workshops in the region, is right at the heart of customer service in Bavaria. Since January 2016, the Southern region service centre has been in the capable hands of workshop manager Marcus Lemke. He is responsible for coordinating a team of 10, comprising three mobile engineers and seven workshop technicians.

Thanks to the commitment and flexibility of his strong team, the course has already been set for future expansion: Extensions to expand workshop capacity are planned for 2017.

Author: Sven Walter



## Training perspectives: "I love working here."

Sometimes, life offers you a chance to look at things from a new perspective — and when these opportunities arise, you just have to seize them and try your luck. In Christoph Brück's case, such an opportunity arose when he was offered the chance to train at ZÖLLER-KIPPER in Mainz. And he has now completed his studies, achieving grades that were among the best in his cohort.

Initially, Christoph embarked on training for a career in administration. "I soon realised that office life wasn't for me", explains the 29-year-old. He quit his course and started looking for temporary work through agencies. It was through this work that he was given a glimpse into the diverse roles on offer in the fields of warehousing and logistics, and ended up working at ZÖLLER-KIPPER. "I enjoyed the work immensely from the beginning. My role was varied and there's always plenty to do here". Management at ZÖLLER-KIPPER soon recognised the potential of their new team member—born and bred in Mainz—and offered him the opportunity to train as a warehousing specialist. He completed the two-year course with top grades and then launched into a further year of study to become a qualified logistics technician. Now, one year later, Christoph has a first-class qualification under his belt, a permanent employment contract, and the honour of being one of the best

graduates in his cohort at the Chamber of Commerce and Industry of Rheinhessen. But is Christoph himself surprised at how his career path developed? "If you're enjoying yourself and you know that the field you're working in suits you, you can achieve anything". Now employed by specialist lifter company ZÖLLER-KIPPER, Christoph works in the warehouse and in the logistics department, where his duties include picking orders and processing incoming goods — and where he always takes an interest in the far-flung destinations of the packages he prepares for dispatch. "I love working here. It's great to be part of the bigger picture and to see the company grow. When we send spare parts to places like Malaysia or Australia, I think it's really cool to be a part of that".

Author: Claudia Schaeue





# ZOELLER TECH Poland starts training the next generation

— The introduction of the dual training system is designed to provide targeted training for the next generation of professionals

Current ZOELLER Tech trainees (class of 2015) From left to right, top: Łukasz Szreder, Jarosław Kraśnicki, Wojciech Koss, Michał Baran, Piotr Jeszke, Mariusz Czerwionka, Tomasz Pliński, Szymon Kamiński, Radosław Szomburg, Damian Radtke, Seweryn Kuc, Jakub Cinkiel. From left to right, bottom: Fabian Dudek, Tomasz Witkowski (training manager), Paweł Kreft, Marek Szaturski, Mateusz Schiefelbein

Signing the agreement between the vocational college, the Foreign Chamber of Commerce and ZOELLER Tech.



From left to right: Ms Maria Montowska (board member, vocational training and further training, Polish Foreign Chamber of Commerce), Ms Anna Wilk (director of the vocational school in Wejherowo), Mr Rainer Rohler (CEO of ZOELLER Tech)

The effects of increasingly demanding job requirements, demographic change and globalisation are forcing companies to look more closely than ever before at training and further training within their organisations.

Professional training and further training are high-priority topics in all ECOTEC Group companies.

From June this year, vocational students training to become construction mechanics at the Zespół Szkół Ponadgimnazjalnych nr 4 vocational college in the town of Wejherowo will be able to apply for one of 15 places in the newly founded ZOELLER Tech patronage class. This apprenticeship-based training is part of a dual course that allows participants not only to gain the Polish vocational qualifications, but to also simultaneously work towards a German DIHK/AHK-standard qualification (based on the standards set by the German Chambers of Commerce and Industry/German Foreign Chamber of Commerce). As this is a "dual" programme, the students learn theory in a classroom environment and also gain knowledge of the practical aspects of the profession within a suitable training company.

The idea and basic concept for introducing an additional training programme based on a dual system came about following discussions with Ms Maria Montowska from the Polish Foreign Chamber of Commerce. As a board member of the German/Polish Chamber for Industry and Trade, Ms Montowska's remit includes professional training and further training to the German DIHK/AHK standards. Thanks to the positive experiences of the AHK team in successful patronage classes with companies such as Häring, Steico, Phoenix, Sitech, Solaris, MAN and Volkswagen Poznań, our company was able to join this list and provide considerable support to the project.

Author: Rainer Rohler



# ZOELLER Systems extends manufacturing capacities

## New assembly hall for lifters put into operation

With the new assembly hall for ZOELLER lifter systems, a further step in the planned plant expansion at ZOELLER Systems in the Czech Republic has been completed. The plant has extended to a total area of 27,800 m<sup>2</sup>, including

- 10.000 m<sup>2</sup> Production and storage areas
- 1.300 m<sup>2</sup> for Administration.

The new factory hall, including the associated facilities, is about 2,470 m<sup>2</sup> and was designed exclusively for the final assembly of ZOELLER lifters.



View of the new assembly hall

In order to optimally cover the entire width of the product range and to implement the different assembly steps in a product-specific manner, flexible assembly units have been set up. This means that every type of lifter can be mounted at any mounting location - even special types in small numbers are economically assembled. Thus ZOELLER Systems is always in a position to react flexibly to current customer demands. A prerequisite for this is our coordinated, comprehensive logistics. The internal processes in the production of parts and the supply of materials as well as the cooperation with external suppliers are closely interlinked. The material is delivered directly to the individual assembly stations and is individually picked.

At the end of the assembly process, the lifters and their functions are adjusted and tested on the test bench. Then they are transferred to a line. At the first station, the painting preparation is carried out. Afterwards a primer is added. After drying, the lifter is fed back to the painting booth for the final coloration via the line and passes through the drying booth again, in order to be finished with all attachments for delivery.

All divisions are designed in such a way that up to 15 lifters can be mounted, painted and finalized in a 3-shift operation. In order to ensure this flexibility and at the same time guarantee a high quality level for ZOELLER products, a highly motivated and comprehensively trained workforce is required. With our internal training and further education program, ZOELLER Systems has created a suitable tool to keep the training levels high and to develop them permanently. In this way, new employees are safely introduced to their tasks and encouraged in a targeted way.

Author: Karl-Heinz Wider



**Top:** Assembly stations **Middle:** Assembly of a lifter system **Bottom:** Lifter systems in the delivery state



**Merry Christmas  
and a Happy New Year!**

