

# K»MOBIL

THE KIRCHHOFF GROUP MAGAZINE

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



**The KIRCHHOFF Group goes down under:** KIRCHHOFF Ecotec continues to grow and gets involved with Australian vehicle manufacturer Superior Pak. Grand scenes: A front loader from Superior Pak in front of Sydney's landmarks – the Opera House and the Harbour Bridge, which opened in 1932. Read more on this from page 072 »



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# 2018: Characterised by a Strong Economy



J. Wolfgang Kirchhoff, Managing Partner of the KIRCHHOFF Group and CEO KIRCHHOFF Automotive

Dear customers and friends of our group of companies,  
dear employees,

“ We are all approaching the end of a busy year, which has not only been marked by strong economies in Europe, North America, and Asia, but also by overheated job markets, trade disputes, and impending political and social change. The good economic growth in key regions of the world is however, slowing down in China and Germany, and the trade dispute that began in the United States will no doubt also affect this country too in the near future. We in the KIRCHHOFF Group stand for free and fair trade, as it increases growth and prosperity for all those involved. In recent times,

since China under Deng Xiaoping's leadership, opened to the world in 1978, global value chains have been created—and these must not be destroyed by a major partner. It is to be hoped that, after the midterm elections, the United States will remove the customs barriers again before its own country also suffers economic damage.

In Europe, the impending Brexit has still not been resolved. The time remaining up to the end of March 2019 will scarcely be sufficient to achieve the United Kingdom's desired negotiation outcome and it is questionable whether the recent package of negotiations will pass the British House of Commons. Industrial companies and financial institutions are starting to leave and, if the transition period is not extended, all those concerned will sustain considerable damage. The only benefit to be found is that this example will speed up the necessary renewal process in the European Union.

In Germany, environmental organisations are taking legal action to impose driving bans in cities in accordance with EU emission control limits. The annual mean must not exceed 40 micrograms of nitrogen oxide per cubic metre of ambient air. Some towns have a background level of 35 micrograms as a result of industry, heating, and in some cases shipping—how is road traffic to be maintained in these places? As emission values are becoming even stricter in the EU—with a further reduction of 35% between 2021 and 2030—the automotive industry and the consumer in particular, face significant additional costs. It should be noted first that society and government are no longer acting in consensus towards finding solutions for an integrated approach to the environment, economy, and jobs. Second, debates and concerns in Germany will lead to major uncertainty and spending restraint amongst consumers, something that is already becoming apparent at this late stage of the year. »



In our companies, we have expanded our activities at many locations and pressed ahead with innovations, which we have presented at numerous trade fairs and exhibitions. This year, the KIRCHHOFF Group will generate turnover of 2.15 billion Euro and employ 13,000 people worldwide.

**KIRCHHOFF Automotive** is currently developing another press shop location in Pitești, (Romania). Our tool manufacturing in Mielec, (Poland), is being expanded, and we are increasing our press shop capacities in our operations in Gliwice, (Poland); Ovar, (Portugal); Aurora, (Canada); Queretaro, (Mexico); and Tecumseh and Manchester, (both USA).

We have implemented comprehensive product start-ups at almost all locations this year. A particular highlight is without doubt the start-up of the GM T1XX platform in Tecumseh, USA. Start-ups were also established for electric vehicles for Audi and Tesla; further start-ups for BEVs (battery electric vehicles) will take place next year. With 9,300 employees, KIRCHHOFF Automotive will achieve a turnover of 1,550 million Euro in this fiscal year.

This year, we have picked up speed in the digitalisation process, developed a road map, and are currently implementing 24 projects from various business processes. We have provided the necessary capacities and set up employee teams for this purpose.

**KIRCHHOFF Ecotec** welcomed another important brand into the portfolio this year, with the majority holding in Superior Pak, Australia. We are now represented with a complete programme in numerous subsidiaries across the entire continent.

Our presence at the IFAT trade fair in Munich, Germany, once again convinced our customers of the technological leadership and competitiveness of our products. Both the FAUN Bluepower and the Clean Option Series from ZOELLER were awarded first prize in their respective categories in the VAK Innovation Award.

In the Ecotec business unit, we are driving forward innovations in two particular areas: zero emission alternative drives for waste collection vehicles and sweepers as well as digitised solutions to support our customers in waste collection and vehicle fleet management.

One of the highlights presented by **KIRCHHOFF Mobility** at this year's REHACARE trade fair in Düsseldorf, Germany, was the New Line 85—a vehicle conversion for the Caddy Maxi, rear-entry vehicles, or all-wheel drive minibuses, for example. This conversion stands out on account of its spaciousness, offering taxi firms and transport services great flexibility and efficiency when transporting wheelchair users. We have further expanded our team in sales

and marketing, enabling us to build on our activities in B2B business operations.

Over the past year, **WITTE Tools** presented a newly developed BITDRIVE, also available as a ratchet or torque-limited version, and our new S-line for private label customers at the in-house exhibitions of our customers and at the International Hardware Fair Cologne in Germany. New laser marking systems were commissioned in production and linked to upstream processes.

**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 active teamwork. We look forward to continuing our strong and successful cooperation in the coming year.

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

With warm wishes,  
Sincerely,

J. Wolfgang Kirchhoff





## Series: From research and development—we make progress visible

Our claim is that we are able to offer the latest technologies and designs for our vehicles. But how are refuse disposal vehicles and road sweepers created at KIRCHHOFF Ecotec? With an idea, with a test, with numerous calculations? We want to get to the heart of the matter.



Unbeatable in operation. The ZOELLER SLF XL for 80 – 1,100 litres MGB.



The experts are talking shop. The side loader team Frank Stephan, Eckhard Silvan and Mirco Hoedt. (from left)

Research and development are two of the most important elements which allow us to further develop our technology and our vehicles on an ongoing basis. Our wish is to be ahead of our time in this respect. In the Research & Development division of KIRCHHOFF Ecotec, we collaborate with various engineering firms. The engineering firm Seltin from Breslau is one of our long-standing partners. We have always created great vehicles together. In order to get these vehicles ready for production and on the road quickly, and also because the collaboration with Seltin works exceptionally well, FAUN took over 100% ownership of Seltin in October 2018.

Seltin was founded by Andrzej Sygiel, who is now the Head of the TEC Center. The company's headquarters are located in the Polish university city of Breslau and, as the ideas workshop of the TEC Center, it will co-create KIRCHHOFF Ecotec products and make them visible. Seltin has taken on the task of developing technical solutions and comprehensive constructions for our products. Following a brainstorming process, the ideas take their initial shape through a

visualisation and design process. Calculations are then carried out, the technical documentation is produced and then finally the development of the physical prototype and the installation takes place. The fruits of the previous collaboration: the co-development of the hydrogen fuel cell vehicle BLUEPOWER, the new FRONTPRESS and the side loader for ZOELLER and FAUN. Topics such as lightweight construction and fuel efficiency are right of the top of the agenda when it comes to relevance.



The ZOELLER SLF XL Heavy DU side loader. Displayed in Madrid by our partner ZOELLER EQUIPOS URBANOS.



The ZOELLER SLF Heavy was specially developed for refuse disposal in South America. The vehicle was constructed without any elaborate sensor technology or electronics equipment. ZOELLER delivers ten SLF Heavy and 1,000 containers to COVELIA, one of the largest private disposal companies in Argentina. The large side loaders are used for commercial removal purposes and replace 200 rear loaders.

**“Our mission is to provide specialist products and modern services to our customers. Tailor-made and industrially produced using the latest technologies.”**

**Andrzej Sygiel, Head of TEC Center**

The new generation of side loaders are being showcased at this year's IFAT in Munich. The superstructure and lifter have been given a new, stylish and functional design. Thanks to the protected external controls, this vehicle can also be operated from the outside. The new vehicle is 500 kg lighter than its predecessor. The new pendulum compactor has an improved immersion depth and increased close-in mounting allows better coverage of the loading zone. The various types of lifter mean that they can be used for special tasks, both above and below ground depending on the area of operation.

Authors: Sonja Grässle, Claudia Schaeue



The companies Seltin, FAUN and ZOELLER have been working together for more than four years. Now they are a team. 55 projects have come to fruition so far, and there are many more still to come. We would like to wish the team a warm welcome and we are delighted that this partnership is being taken to the next level.



# Digitalisation and Finances

— Digitalisation in the companies of the KIRCHHOFF Group is mainly aimed at increasing efficiency. Tanja Dreilich, CFO of KIRCHHOFF Automotive Holding, and Dr Michael Diederich, Spokesman of the Management Board of UniCredit Bank AG, discussed its significance and financing.



The FAUN support technician views the working area of the customer technician on the display console and assists with service operations. All the information received can be evaluated, documented, and transferred. The web-based user interface enables support from any desired location.

Modern technical support is part of KIRCHHOFF Ecotec. FAUN provides its customers with premium support. The customer technician at the vehicle can communicate hands-free with a FAUN technician via the HMT (head-mounted tablet). Video live-streaming enables repairs, maintenance, and even service operations to be carried out anywhere in the world with the assistance of FAUN support. The high-resolution camera (16 MP) records the user's working area and transmits this in real time to the FAUN technician. The display (7 inch) enables specific information in formats including PDFs, photos, and videos to be transmitted to the customer technician. The operation is carried out securely using voice control.





Marion Nagl, Head of Identity & Communications UniCredit Bank AG, interviews Tanja Dreilich, CFO of KIRCHHOFF Automotive Holding, (centre) and Dr Michael Diederich, Spokesman of the Management Board of UniCredit Bank AG, (right).

**Ms Dreilich, you have recently set up a company with KOCO solutions that enables web-based vehicle fleet management. How important is digitalisation in your business, and what do you expect to achieve by setting up this company?**

**Tanja Dreilich:** For us, digitalisation is an interdisciplinary function that truly permeates all the functional areas of the company. Its one and only purpose is to improve efficiency. KOCO solutions is a pure software company. This shows how we have moved from being a pure hardware company to being a hybrid company that also integrates pure software companies under its roof. KOCO solutions is also all about increasing efficiency. This is because KOCO solutions uses intelligent fleet management to reduce exhaust emissions from disposal vehicles—the core business of KIRCHHOFF Ecotec. The waste containers are equipped with sensors that report the current quantity of waste directly to the disposal vehicle and only

send the vehicle to those places where it is needed. This produces an optimised route plan with a significant reduction in exhaust emissions.

**Dr Diederich, have you seen from your discussions with numerous medium-sized companies that there is already a trend for digitalisation to bring about big changes in the business model?**

**Dr Michael Diederich:** In recent months, it has become apparent that digitalisation has primarily helped to improve the efficiency of business models and processes. Looking forward, we will notice that the overall business model will change. This will apply to businesses of all sizes. It relates to small companies, medium-sized companies, large companies, and to us as a bank. Due to the pace of development, the momentum will continue to increase over the next few years. As a group, we have worked with many of these companies for generations, so we have a good



Tanja Dreilich, CFO of KIRCHHOFF Automotive Holding, being interviewed.

insight into what is changing, and we are involved in close consultation with the customers to support them along this path.

**Digitalisation generally involves a very high level of investment. Can you give us a rough idea of what proportion of total costs are attributed to the investment costs for digitalisation?**

**Tanja Dreilich:** Because digitalisation is an interdisciplinary function for us, it is not easy to quantify these costs. We have made investments in a great deal of functions that increase efficiency and benefit the customer. These could be assigned to digitalisation. In KIRCHHOFF Ecotec, this is definitely a figure in the upper single-digit millions, which we are currently investing in the development of a new data platform—a data hub. In KIRCHHOFF Automotive, there are various investments in process optimisation, production, and logistics.



Dr Michael Diederich, Spokesman of the Management Board of UniCredit Bank AG

**Dr Diederich, is this leading to changes in the financing structure?**

**Dr Michael Diederich:** Yes, this is changing. We are currently witnessing investments from cash flow in around three quarters of our customers. Following on from what Ms Dreilich says, however, the investments are relatively high. They cannot all be met from cash flow alone. All forms of corporate financing are therefore needed, such as loan capital, equity, and funding programmes.

The interview was carried out by Marion Nagl, head of Identity & Communications at UniCredit Bank AG.



# Dr Kirchhoff Foundation— Commitment to education, culture, sports, and social causes

— Once again, the Dr Kirchhoff Foundation has been involved in a large number of activities for the region in 2018. Funds from the foundation totalling around EUR 58,000 were donated to social and charitable causes.

## **ERGI Erste Rollhockey Gemeinschaft Iserlohn e.V. (first roller hockey club in Iserlohn)—roller hockey for kids**

Under the motto “Kids for kids”, the society runs tester courses for children from day-care centres and primary schools to give them an opportunity to try out roller skating. The Dr Kirchhoff Foundation helped to fund the necessary equipment for the roller skating school.

## **LebensWERT Iserlohn e.V. (WORTH living in Iserlohn)—citizens get involved**

The citizens’ association was established in December 2015 with the aim of promoting citizens’ involvement in Iserlohn. The main recipients of support are the initiatives Jugendbewegung Checkpoint (Youth Movement Checkpoint), Sozialzentrum Lichtblick (Social Centre Lichtblick), and the FlüchtlingsNetzwerk Iserlohn (Refugee Network Iserlohn). These are three organisations that have benefited from a special donation thanks to the Dr Kirchhoff Foundation initiative. A charity basketball match between the Iserlohn Kangaroos and the German champion FC Bayern Munich was a particular highlight, not just for the good cause but also for basketball in Iserlohn.

## **Flaschen Kinder Iserlohn e.V. (children of alcoholic parents in Iserlohn)—help for children of alcoholic parents**

The association provides help for children from families with addiction problems. There are currently 21 volunteers who look after the children, providing help and advice. The children are shown ways of coping better with their parents’ illnesses.

## **Jugendkunstschule Iserlohn e.V. (youth art school in Iserlohn)—drawing, painting, wood-working, experimenting**

The Jugendkunstschule Iserlohn welcomes children, young people, and adults for practical artistic activities. Artistic, innovative, and creative forces are discovered, fostered, and developed through painting and printing using various techniques and sculpturing using wood, stone, and clay.

Author: Kerstin Garmatter





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# New products on the Road

Authors: Nadine Bartzik, Vanessa Wilkniß

— KIRCHHOFF Automotive is also represented with a wide range of products in the latest vehicle models. The company proves its development and manufacturing competence not only in the field of lightweight construction but also in the conception of innovative structural parts for e-mobility.



**Audi A1 A-pillar, hinge reinforcements, C-pillar reinforcement, mudguard bracket, lock reinforcement**

**Technologies:**

Forming, projection welding

**Production plant:**

Ovar/Portugal

**Capacity/Year:**

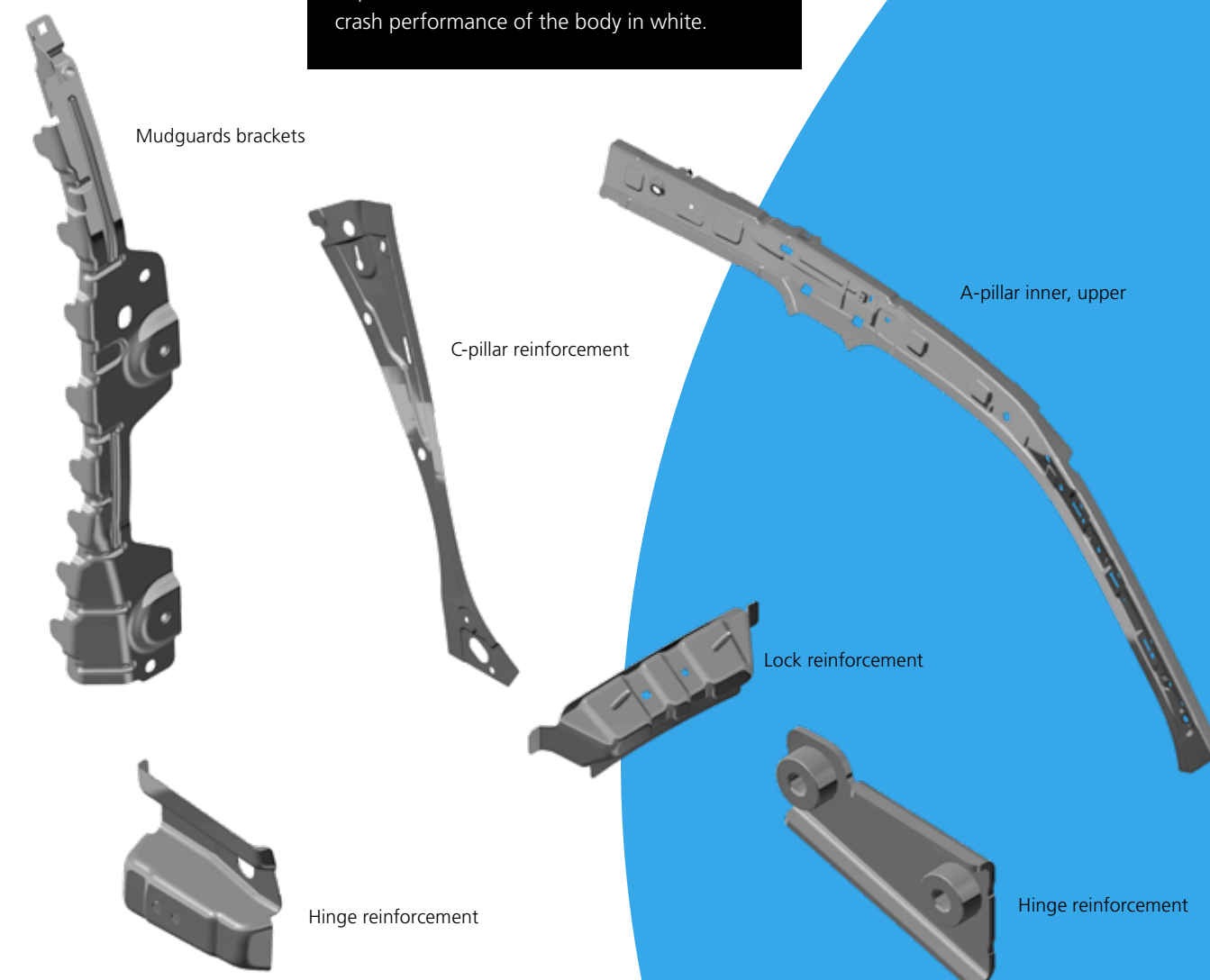
120,000 vehicles

**Customer/Model:**

Audi A1

**Structural parts for the new Audi A1**

**A**t our Portuguese location in Ovar we produce a package of steel structural parts for the new Audi A1. The newest edition of the successful "little" Audi is assembled in Spain. The package includes high-strength parts and very complex car body parts which make an important contribution to the stiffness and crash performance of the body in white.







### KIA Ceed rail roof front, middle, rear

#### Technologies:

Forming, spot welding, MAG welding

#### Production plant:

Esztergom/Hungary

#### Capacity/Year:

155,000 vehicles

#### Customer/Model:

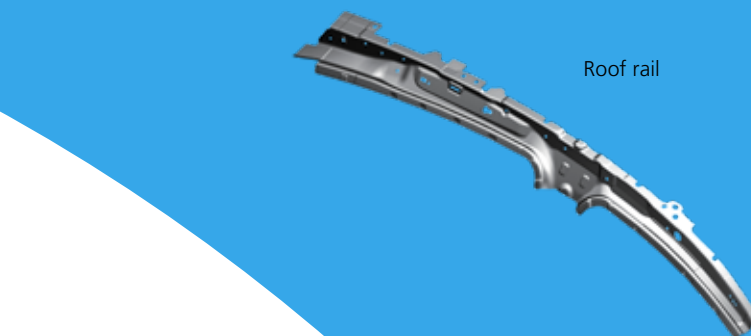
KIA Ceed (Five-door car, Sportwagon, Proceed)



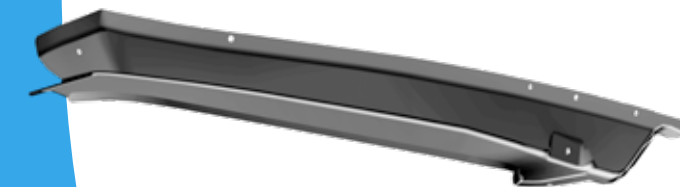
### Complex assembly for KIA

With the production of various rear roof assemblies for the KIA Ceed series, our Company has won the first complex orders for KIA Motors. In the Hungarian KIRCHHOFF Automotive plant in Esztergom different variants of the rail roof for the normal and panoramic roof version of the five-door car, the Sportwagon and the Proceed are manufactured.

The rail roof assemblies in the rear of the vehicle include, amongst others, the holes for the bonnet hinges, making it an important structural part of the car body. In order to increase the mass of the component, 10 mm steel plates are welded onto special areas of the 0.8 mm basic material. No defined customer requirements were given for the material combination of this welding, which is why KIRCHHOFF Automotive has specified these within process validation.



Roof rail



Connecting plate



D-pillar



### Mercedes-Benz AMG GT roof frame, D-pillar, connecting plate

#### Technologies:

Forming, spot welding, projection welding

#### Production plants:

Mielec/Poland, Esztergom/Hungary

#### Capacity/Year:

15,000 vehicles

#### Customer/Model:

Mercedes-Benz AMG GT



### Structural parts for the Mercedes-Benz AMG GT

Contributing three different car body structural parts, KIRCHHOFF Automotive is now also represented in the latest version of the Mercedes-Benz AMG GT. The exclusive sports car is assembled in the Sindelfingen plant and receives roof components from our locations in Mielec/Poland and Esztergom/Hungary. The quality requirements of our products, defined in close cooperation with our customer, are ensured amongst others by a high degree of process monitoring. A particular challenge in the forming process is the construction of the roof frame assembly due to its length of approx. 1.60 m and high-strength steel made of DP 800.



### BMW X5 frontend

#### Technologies:

Forming of aluminum coil material, processing of aluminum profiles, heat treatment, aluminum-MIG-welding, assembly and integration of various connecting elements, e-coating

#### Production plant:

Manchester, Tennessee/USA

#### Capacity/Year:

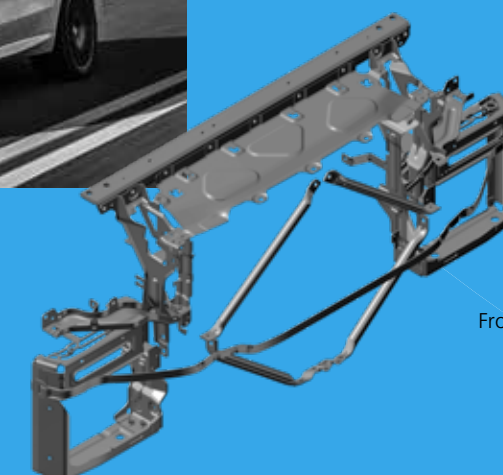
320,000

#### Customer/Model:

BMW X5, X6, X7

### BMW frontend for the X5 in Spartanburg

This past August, the series production for the fourth generation BMW X5 started in Spartanburg/USA. Developed by KIRCHHOFF Automotive, the lightweight BMW construction with sophisticated joint patterns in the whole front section is equipped with a uniform frontend for the X5, X6 and X7. The frontend made of solid aluminum, in shell as well as profile design, is now produced in our plant in Manchester, Tennessee/USA. Due to an optimized geometrical design of the components, we have contributed to an easy assembly at the BMW plant and have also reached the best possible stiffness for the driving dynamics. By integrating additional aluminum components to the BMW off-road package, the performance was further increased.



Frontend





**Audi e-tron A-pillar with rocker panels, front wall, rear end part, wheel house rear inner and outer**

**Technologies:**  
Hot forming, spot welding, glueing arc projection welding, MAG- and spot welding

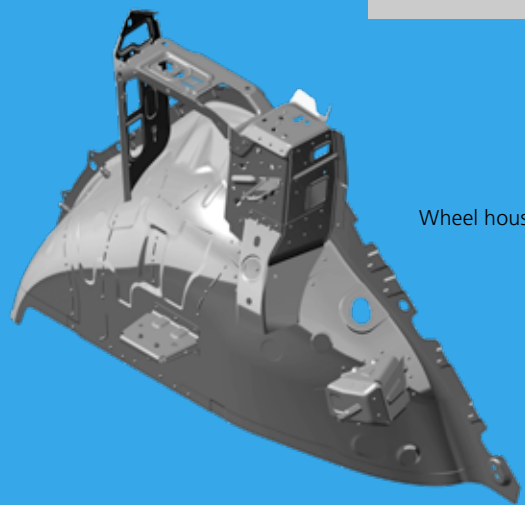
**Production plants:**  
Iserlohn, Attendorn/Germany

**Capacity/Year:**  
300,000 vehicles

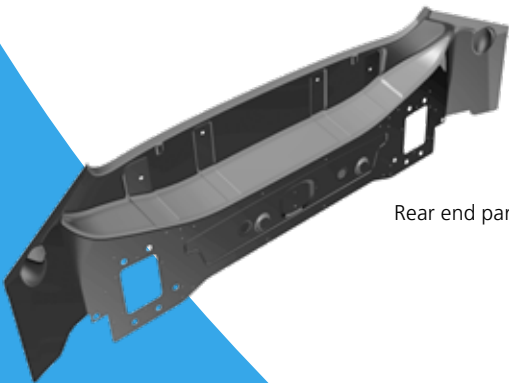
**Customer/Model:**  
Audi e-tron

**Milestone for Audi and KIRCHHOFF Automotive**

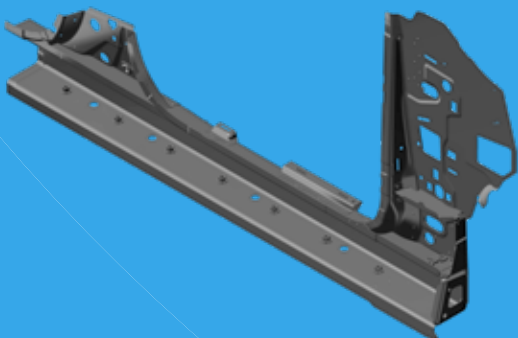
The e-tron is the first all-electric SUV by Audi and therefore, plays a leading role in the upcoming model variety of this brand's purely battery electric vehicles. In the course of e-tron industrialization, the high scope of complex car body structures which were initially produced by Audi itself, have been awarded to a few strategic suppliers. Our company has received an especially large package of sophisticated assemblies which we manufacture at our locations in Attendorn and Iserlohn. The e-tron is then assembled in the Belgian Audi plant in Brussels. Read more about the production technologies in the article on page 30.



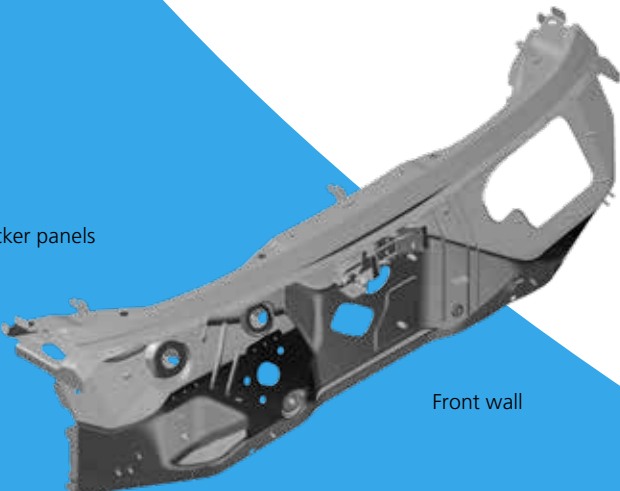
Wheel house rear inner



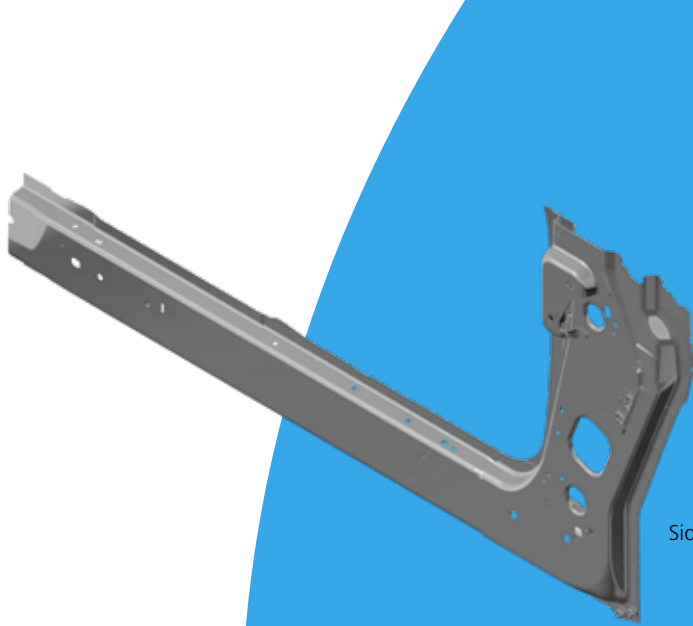
Rear end part



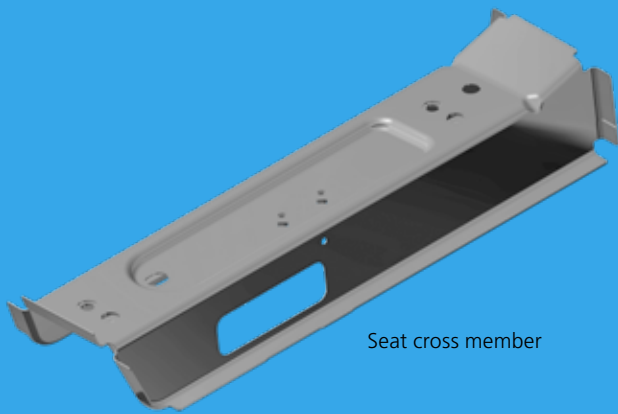
A-pillar with rocker panels



Front wall



Side floor rail



Seat cross member



**Ford Focus side floor rail and seat cross member**

**Technologies:**  
Spot welding, sealer application, projection welding

**Production plant:**  
Saarwellingen/Germany

**Capacity/Year:**  
330,000 vehicles

**Customer/Model:**  
Ford Focus

**Crash relevant components for the Ford Focus**

At our plant in Saarwellingen, KIRCHHOFF Automotive is now welding the third generation of the side floor rail and the seat cross member for the new Ford Focus. The new model just recently had its production start at the nearby Ford production site in Saarlouis. All of the joining processes of the hot and high strength cold formed materials, take place now in a one-piece-flow. This also includes the sealer application and an automated de-stacking system. The side floor rail is a crash relevant component which serves the side impact protection in the vehicle's underbody. Furthermore, it works as a connecting point for the A-pillar, belt attachment and the cross car beam.



# We were there—IAA Commercial Vehicles in Hanover and IZB in Wolfsburg

KIRCHHOFF Automotive demonstrated its expertise in the field of e-mobility, optimum material combinations for lightweight construction as well as variant diversity with modular production and high flexibility at its trade fair appearances at the IAA Commercial Vehicles in Hanover and the IZB in Wolfsburg, Germany.

On the opening day, the internationally active automotive supplier received, among others, Transport Minister Andreas Scheuer (2.f.l.), Deputy Prime Minister of Lower Saxony, Dr. Bernd Althusmann (l.) and VDA President Bernhard Mattes (3.f.l.). The focus of the visit: a battery housing developed by KIRCHHOFF Automotive for e-mobility and an electric drive developed by FAUN, which combines hydrogen fuel cell and battery technology to increase the range.

**Bottom:** Dr. Norbert Müller, Head of Supply Chain and Supplier Management at Daimler AG (center), was explained the latest product innovations by Dr. Thorsten Gaitzsch, CTO KIRCHHOFF Automotive.



## 67. IAA Commercial Vehicles

The **IAA Commercial Vehicles**—a showcase for the commercial vehicle mobility of tomorrow. Looking around at this year's IAA Commercial Vehicles, three trends became very clear: e-mobility, vans for the "last mile" and automated driving. KIRCHHOFF Automotive also had a lot to offer.

For the first time, KIRCHHOFF Automotive and KIRCHHOFF Ecotec, the second largest business unit of the KIRCHHOFF Group, jointly demonstrated their expertise in the field of electric mobility. The highlight at the KIRCHHOFF Automotive stand was a scalable battery housing in lightweight construction (combination of steel and aluminum), which ensures the safe accommodation of high-voltage battery modules in electrically powered vehicles.

FAUN, a company belonging to KIRCHHOFF Ecotec, has impressively further developed this approach. FAUN is one of Europe's leading manufacturers of waste collection vehicles, lift systems and sweepers and has set itself the goal of "zero emission during disposal". The cross-divisional know-how has resulted in an electric drive developed in-house that combines hydrogen fuel cell and battery technology to increase the range. With the hydrogen fuel cell vehicle BLUEPOWER, FAUN offers modularly configurable, alternative drive systems for environmentally friendly disposal logistics.

KIRCHHOFF Automotive proved its competence in modular production at the VW Crafter and impressively demonstrated this at the exhibition stand. Essential parts of the floor assembly of the Crafter – a total of 67 assemblies—come from the KIRCHHOFF Automotive plant in Gniezno, Poland. An ingenious fixture concept offers the flexibility to map all variants of an assembly. »

The trade fair stand at the IAA Commercial Vehicles show.





**Left:** J. Wolfgang Kirchhoff (l.), CEO KIRCHHOFF Automotive, explains the special features and advantages of the battery housing to the NRW Minister of Transport, Hendrik Wüst: cost-optimised design, corrosion and underbody protection, integrated cooling system, optimised crash behaviour as well as a scalable housing design that makes it possible to use it in different vehicle models and derivatives.

**Bottom:** Dr. Thorsten Gaitzsch receives Maik Pörksen (2.f.r.) and Alfonso Sancha Garcia (r.), Head of VW Group Procurement Metal.

The 10<sup>th</sup> International Suppliers Fair (IZB) in Wolfsburg from 16 to 18 October provided a comprehensive picture of the automotive value chain. This year again, many automotive suppliers presented their innovations at the IZB—including KIRCHHOFF Automotive.

In view of the challenge of reducing CO<sup>2</sup> emissions, which will be necessary in the future, intelligent and sustainable lightweight construction concepts met with particular interest among the trade visitors. KIRCHHOFF Automotive also presented innovative solutions for electric mobility and lightweight construction as well as new approaches to process optimization at its booth. Alfonso Sancha Garcia, Head of Group Procurement VW, took this opportunity to visit the stand with his department heads. The joint discussion focused on current projects for electric mobility.

As a development supplier, KIRCHHOFF Automotive offers its customers everything from a single source—from design development to feasibility studies, from globally standardized project management and innovative manufacturing processes to customer-specific individual solutions. For example, KIRCHHOFF Automotive and Volkswagen AG are working together in the materials pre-evaluation process for various new steel grades and are investigating the possible series use of these new materials. The use of materials with press hardness grades of 1,900 MPa saves weight and increases safety. This was just one of the topics that KIRCHHOFF Automotive's sales and development teams discussed with representatives of the VW Group.

Author: Sabine Boehle

## 67. IAA Commercial Vehicles



**Top:** Claudia Schae, Head of Communication & Marketing at FAUN, and Raphael Florath, Key Account Manager Trucks at KIRCHHOFF Automotive (centre), informed about the latest innovations for e-mobility and the electric drive developed by FAUN, which combines hydrogen fuel cell and battery technology to increase the range. Damien Armand-Bonnet (l.) and Fredrik Ransjö, both Project Manager Purchasing, Project Vehicle Europe VOLVO Trucks, were very interested in the new technology. Volvo exhibited the electric FAUN Rotopress (left) at the IAA Commercial Vehicles.



**Top:** Jörn Hasenfuß, Executive Vice President Purchasing Volkswagen Nutzfahrzeuge AG (2.f.l.) and Jörn Ulrich (2.f.r.) in conversation with KIRCHHOFF Automotive CEO J. Wolfgang Kirchhoff (l.) and CTO, Dr. Thorsten Gaitzsch.

## 10. International Suppliers Fair (IZB)



**Top:** An "extra shift"—this was the first time that KIRCHHOFF Automotive had done this at the IZB. The stand party was well received by customers and friends of the company.



### Facts and Figures

**IAA Commercial Vehicles:** On an area of 282,000 m<sup>2</sup> 2,174 exhibitors from 48 countries presented 435 world premieres. 250,000 people visited the fair on 9 exhibition days. In one year, the 68<sup>th</sup> IAA Cars will begin in Frankfurt/Main, Germany (12.09-22.09.2019) and in 2020, the 68<sup>th</sup> IAA Commercial Vehicles will take place in Hanover, Germany (24.09.-01.10.2020).

**IZB:** Three exhibition days, 838 exhibitors from 34 nations, 38 world premieres and a good 50,000 visitors. The 11<sup>th</sup> IZB will take place in Wolfsburg, Germany, from 6 to 8 October 2020.





The new plant with new technology will be built in the marked area.

The increasingly demanding crash performance requirements, associated with the need to reduce emissions by reducing vehicles' weight, finds its perfect match in hot formed products. In fact, this solution allows for a reduction in part weight of up to 35% compared to a typical B-pillar made of dual-phase steel with 600 Mpa pressforce and a potential cost reduction of up to 17%. The combination of these two key factors explains the rise in popularity that this technology has gained in recent years.

The joint effects of growing customer demands for hot formed products, plant awareness, and a dynamic sales force, finally resulted in the acquisition of a project that without a doubt marks the decade's most important project for the Portuguese plants of KIRCHHOFF Automotive. It involves an investment of more than 25 million euros, which includes a new production hall plant expansion, the installation of one hot forming line, two spot welding cells, and up to three laser cutting cells.

The customer project includes the production of four hot formed components, including one medium complexity part (B-pillar), and one high complexity part (A-pillar upper). In addition, a patch welding hot formed part will be a complete premiere for the Company.

To complete the project on time—SOP is scheduled for September 2020—the plant in Ovar works in close cooperation with the ME Central and ME Central Hot Forming competence teams. The most experienced plants that already use the hot forming technology have assured their support and assistance in the extensive training stages.

With this important step, KIRCHHOFF Automotive reinforces its presence and competitiveness in the Iberian and Mediterranean region that has gained relevance in a number of produced cars in recent years.

Author: Ricardo Castelbranco

## 25-Million-Euro Investment Planned in Ovar

— The demand for hot formed products has increased continuously in recent years. Based on comprehensive customer projects a new hot forming line will be established in the Portuguese KIRCHHOFF Automotive plant in Ovar in 2019. Thus the plant in Portugal is the fourth location with this progressive technology.

PORTUGAL

KIRCHHOFF Automotive  
Plant in Ovar



# Safely On Our Way: New Products for Electric Vehicles

Some production facilities at the Iserlohn plant need to be converted in preparation for start-ups for various components for electric vehicles over the next few years. Total investments of around 1.5 million (EUR) are planned for 2018 and 2019.

The various products and assemblies make a significant contribution to the vehicles' crash performance. KIRCHHOFF Automotive will manufacture rear and front seat cross-members for around 300,000 vehicles per year with its pressing and hot forming technologies, and these will be used in a number of different platforms. KIRCHHOFF Automotive worked with the customer and a material supplier to develop an innovative 2.0 mm thin material for these products. The material will be used for the first time worldwide in our hot forming process. Holes will also be introduced in the hot forming process, after the customer obtained a patent.

From 2019, we will manufacture the front bumper of another electric vehicle using an arc welding process. Extensive conversion measures are required for

reuse of our MAG welding stations: these will be converted for interconnected production with a handling robot and additional cooling station. In addition, a hydraulic unit will be upgraded in order to allow optimal clamping of the individual components during the multi-step welding process. Water cooling ensures that the components do not become warped as they cool down.

"Thanks to these tailored production concepts, we will be able to produce series components in Iserlohn in the future," explains Timo Müller, head of Production Engineering at the Iserlohn plant.

Authors: Timo Müller, Jens Römer



## Our parts for the Audi e-tron

In Attendorn and Iserlohn, we are manufacturing five sophisticated assemblies for the Audi e-tron, Audi's first purely electric SUV, which is assembled in Audi's plant in Brussels. The rear outer wheelhouse is produced entirely in Iserlohn on a 12,500 kN transfer press. In upstream processes, connecting elements will be welded onto the component and a sound deadening mat affixed. Another connecting part will then be attached to the side via a spot welding process. The Iserlohn location has converted the welding cell specifically for this product so that it can be manufactured in a one-piece flow. This optimises travel paths and ensures ergonomic component handling.

The rear inner wheelhouse and the rocker panel—which is hot-formed and 3D laser-cut in Iserlohn—then undergo further processing in Attendorn with several welding stages and an adhesive process. The bulkhead and rear end part assemblies for the Audi e-tron are produced entirely in the Attendorn plant. The rear end part consists of two components and four punching screws made of a high-strength material, which are attached at 34 weld spots using spot welding technology.





# Our Formula for Success

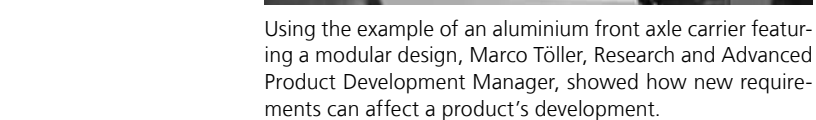
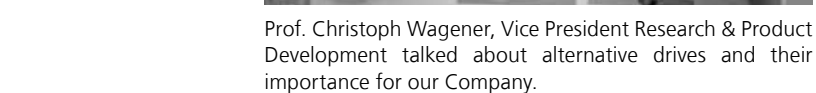
— KIRCHHOFF Automotive has been successful for more than 230 years. How do we do it? With the right strategies! To give our employees a better idea of what predicates this success, the first strategy days took place in the autumn, initially at the Attendorn and Iserlohn locations.





CTO Dr Thorsten Gaitzsch gave a talk on the development of the global markets in the automotive industry.

Keen interest at the strategy day: visitors were particularly fascinated by the insights into the future of the automotive industry and the resulting opportunities for their companies.







Stefan Leitzen, Global COO KIRCHHOFF Automotive (center) praised the training initiative for tool mechanics in Mielec. Here together with the trainees, Vice President of Operations Ryszard Muzyczka (right) and Anna Butryn (3.f.r. front), Deputy Head of the Centre for Practical Training and Advanced Education of Teachers in Mielec.



Future toolmakers at a practical lesson in the Mielec plant workshop.

## Toolmaker—A Profession in High Demand

— The production and maintenance of stamping tools for steel and aluminium sheets are part of the core competences at the KIRCHHOFF Automotive plant in Mielec, Poland. To ensure that the site will continue to have the necessary specialists for this in the future, they have instilled a training program, which is based on the German vocational training system model.

Currently, there are twelve apprentices completing their first year of education in the school for future toolmakers that is based on a tailored training program. For this purpose, in 2017, a special cooperation agreement was established with a regional training centre.

**“We need experienced and ambitious toolmakers who will improve their practical skills in the future, based on the experience of their qualified colleagues,” explains Waław Strzelczyk, Deputy Tool Shop Manager and Training Leader.**

In the past, Mielec was well known for a large tool shop that operated within a local aviation plant, employing a few hundred toolmakers at that time. This was a determining factor in 1998 for situating a manufacturing plant in Mielec.

In 2007, a modern tool shop with its own design office was opened in Mielec in order to tap further development potential with the development and production of new stamping tools.

As part of the training, the plant cooperates with two educational institutions: the Centre of Innovative Technologies (INNOAGH)—a prestigious educational institution from Krakow—and the Centre for Practical Training and Advanced Education of Teachers in Mielec, which focuses on modern technical training equipment.

The major focus of this training program will include practicing in our tool shop under the supervision of experienced specialists. In November 2019, the first toolmakers are expected to finish their training.

Authors: Janusz Sobón, Bogusław Wytoszyński



## Plant expansion: New technology—new facility in Gliwice

8.000 m<sup>2</sup> additional built-up area with a new 1,250 t transfer press, two additional loading ramps and a modern technical and social building—these are the key data of the recently extended second factory hall of the KIRCHHOFF Automotive plant in Gliwice, Poland.

In 2017 it was decided to expand the Gliwice plant by one press shop as part of the infrastructure expansion for new projects. A core team of Specialists from several areas such as Logistics, Development and Production systematically monitored the project.

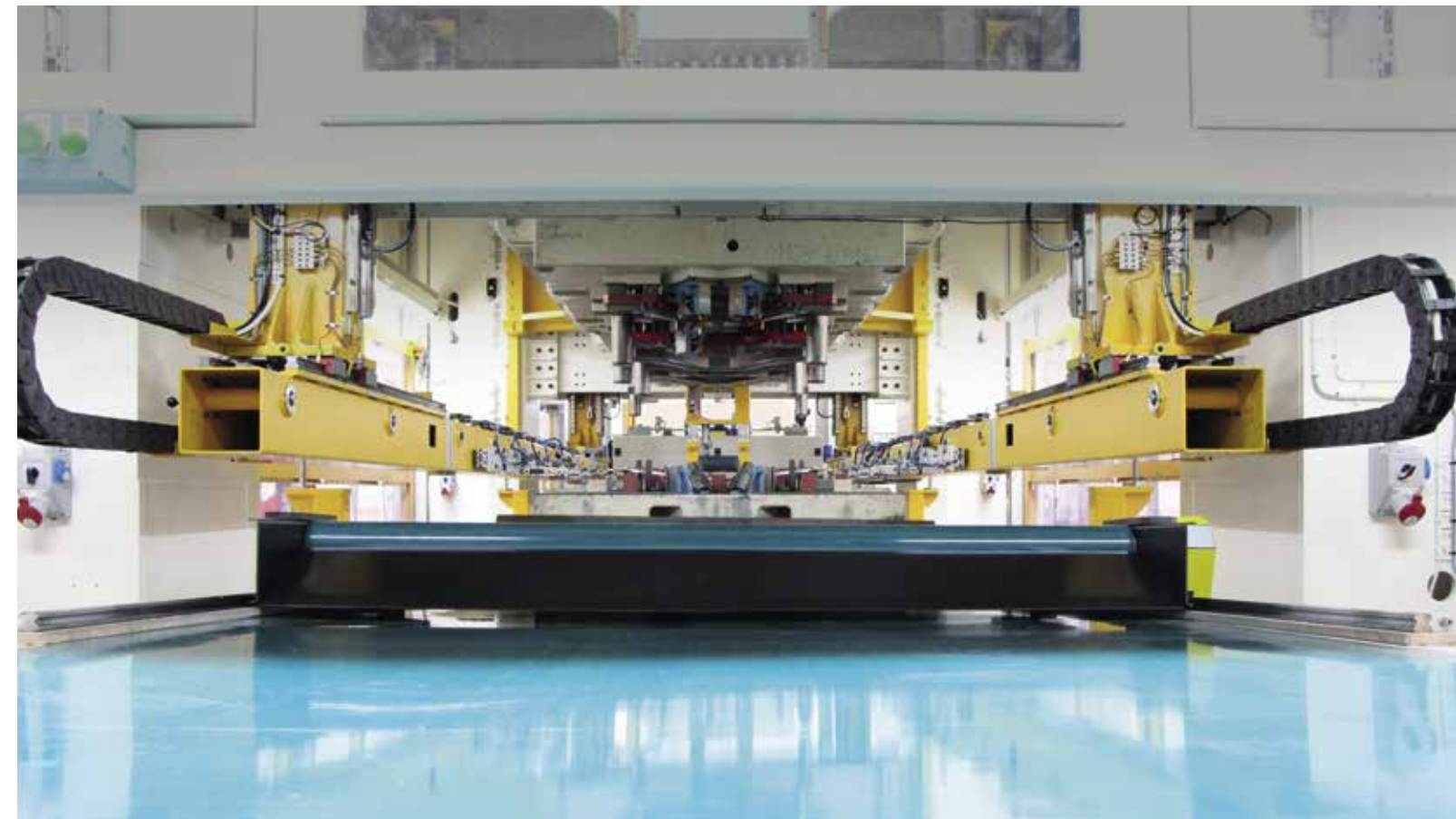
First, the production area had to be enlarged and additional welding cells had to be installed for future projects. In addition, further technical and social facilities were created for the growing workforce. The expansion has been designed to be barrier-free and is therefore also accessible to visitors with disabilities. Furthermore, the new building is equipped with an energy-efficient, modern lighting control system that automatically determines the current lighting requirements taking into account the prevailing weather conditions.

Colleagues from the KIRCHHOFF Automotive plant in Mielec provided special support in the familiarization and training of machine setters, tool mechanics and engineers in the new technology.

Currently, customer approvals for the first parts stamped in Gliwice are well underway. Thanks to new projects with a high order volume, the modern press will soon reach its full production capacity.

On behalf of the project team, we would like to thank all the employees involved—particularly our colleagues from Mielec for their support and openness to share their knowledge.

Authors: Grzegorz Sochacki, Krystian Pobuta



**Top:** View into the new 1,250 t transfer press **01** The project team in front of the new press. **02** Employees put their signatures on the first formed part produced with the new press in Gliwice. In Poland it has been a tradition for several years to sign the first part produced with a new machine.







Plant expansion at the North American KIRCHHOFF Automotive plant in Tecumseh/Michigan.

Plant expansion at the Mexican KIRCHHOFF Automotive plant in Querétaro.

## Extensive Plant Expansions across North America

— New orders from GM and BMW have resulted in substantial investments in production facilities and necessary building structures. These investments were also used as an opportunity to introduce the existing standard equipment for machines and plants in Europe and Asia into North America.



Plant expansion at the North American KIRCHHOFF Automotive plant in Manchester/Tennessee.

At four KIRCHHOFF Automotive locations in the USA and Mexico, these extensive plant extensions were implemented in less than two years.

In **Tecumseh / Michigan USA**, the shipping and storage area was expanded by a total of 4,850 m<sup>2</sup> and a 12,500 kN servo transfer press was put into operation. The modern servo technology of this press improves the productivity and quality of our products. One challenge was the transfer of existing dies to the new press. "In order to avoid complex and expensive tool conversion costs, we have equipped this press so that it is also compatible with older tools," says Tim Schneider, Manufacturing Engineer. In 2019, KIRCHHOFF Automotive will continue to invest in the modernization of its Tecumseh site. The press hall will be enlarged by 1,200 m<sup>2</sup>, creating space for three new servo presses.

At the site in **Manchester / Tennessee USA**, the production and logistics areas were expanded by 3,450 m<sup>2</sup>. Extensive modernization work is currently being carried out on the existing production halls and offices. The construction of a modern pressing plant and the installation of a new 12,500 kN servo transfer press has already been commissioned for the coming year. In addition, two 4,000 kN servo presses will be integrated into the existing pressing plant.

The expansion of the plant in **Dallas / Texas USA** is currently also being implemented. In April 2019, all necessary production facilities will be set up and put into operation on an area of around 10,600 m<sup>2</sup>. For

the first time, the facilities will comply with the "Global Technical Standard" of KIRCHHOFF Automotive.

In **Querétaro / Mexico**, the press shop was enlarged by approx. 2,000 m<sup>2</sup> and now offers space for two new large presses. The first 12,500 kN servo transfer press is already in production. A new 5,500 kN servo transfer press was put into operation in the existing pressing plant. For this purpose, the existing press trench had to be extensively rebuilt during ongoing production. The 3,470 m<sup>2</sup> extension of the welding shop was also completed so that the approx. 100 welding and handling robots for GM's T1XX program could be put into operation. A further 16,000 kN servo transfer press has been ordered and will be installed at the beginning of 2020.

All of these plants faced a variety of challenges: adverse weather conditions, various soil conditions, adherence to schedules, parallel construction phases, and finally ensuring operation during construction. Jorge Morillo, Lean Production Manager at the Querétaro plant in Mexico, comments, "We accomplished the construction phase and the installation of new plants together as a team and are proud that the expansions were completed on schedule and successfully". This sentiment is reflected in all the plants. 2018 was an exciting year for the North American plants and we are now looking forward to the New Year.

Authors: Nathalia Abreu, Sherry Lay



# A Friend in Need is a Friend Indeed

— When a fire broke out in the empty container area outside of our plant in Manchester, Tennessee/US, all hands were on deck in an effort to mitigate risk, and maintain employee safety.

Fire, heat and water damaged parts of the production hall at our site in Manchester. However, the plant was evacuated in less than six minutes without casualties or injuries.

Fire, heat and water damage affected parts of the production hall at our facility in Manchester, as a result of a fire that broke out on the afternoon of June 6th 2018. The plant was evacuated in under 6 minutes with no injuries or casualties. Personnel from the KAPS, Maintenance, Materials, Sales and Program Management departments in Waverly, Dallas, Lansing, Troy and Aurora were providing on-site support within a moment's notice. Equipment and spares were also shipped to Manchester from our plant in Aurora/Canada within hours of learning about the fire.

Similarly, overwhelming support was displayed by our plant in Shenyang/China: No efforts were spared to ensure that parts were delivered to Manchester in time. Employees in Production, Maintenance and Process Engineering worked around the clock to ensure that production was on schedule, and colleagues from the Logistics department were on standby to guarantee adequate supply of raw materials and effective packaging. Fortunately, and due to all combined efforts there was no downtime for BMW.

We would like to take this opportunity to express our special thanks to our customers, who have supported us and helped us to survive this exceptional situation. Thanks to these joint efforts we were able to complete all orders on time.

The plant has since undergone repairs to the building and the lines affected by the fire: "This will not be a quick fix, our goal is to rebuild the plant to be a better one—this will also include building a new press shop with new presses" shared Stefan Leitzgen, Global COO, and emphasized: "Thanks to all for your support. Your efforts and sacrifice—including the forfeiture of sleep – have not gone unnoticed. Even in the face of adversity, we have proven that WE.ARE.ONE."

Manchester will move forward with a plant expansion that had been planned before the fire struck, renovations to the inside of the plant are also currently underway.

Author: Nathalia Abreu



Employees in production, maintenance and process engineering worked around the clock to meet all delivery deadlines.



In the meantime, work is being carried out on repairing the affected building parts and production lines. This also includes the construction of a new pressing plant with new presses.



# A Future of Partnership

KIRCHHOFF Automotive honors its best suppliers of 2018 in Europe, Asia and North America, with the award "Supplier of the Year". The ceremony took place in Iserlohn/Germany, Aurora/Canada and Suzhou/China.

**"The market will change. We are not only prepared, we are a part of it,"** said J. Wolfgang Kirchhoff, Chairman of the managing board KIRCHHOFF Automotive, during Europe's 2018 Supplier of the Year ceremony that took place on June 13th in Iserlohn/Germany.

He discussed pending trade conflicts, the consequences of alternative drives on materials, and future strategies. Facing this development, both J. Wolfgang Kirchhoff and Klaus Lawory (Vice President of Procurement) emphasized how important excellent cooperation with our suppliers is. On behalf of the KIRCHHOFF Automotive team—including Procurement, Quality, Logistics, Operations, and Manufacturing Engineering—Klaus Lawory led the Supplier of the Year award ceremony.

Among them, the best raw material suppliers, Lilai (China), Riverview Steel (USA) and SSAB (Sweden). The three outstanding suppliers of purchased parts are HuYu (China), N.E.S. Limited (Taiwan) and Tom Ferr (Hungary). In the Capital & Tooling category, Pyper Tool (USA) and Dongguan Vision Tool & Mould (China) can look forward to receiving the Supplier of the Year award.

In response, the suppliers made the following statements on further cooperation, market trends and future challenges in the automotive industry:

Author: Tomasz Marczuk



The Hungarian company Tom-Ferr Zrt., represented here by CEO Oszkár Laczkó (2nd from left) and Nóra Laczkó (Deputy Director Tom-Ferr), received the Award for Europe in the category purchased parts: **"Our long-term development strategy provides for the safeguarding and control of steel pipe production. To this end, we will invest in a steel pipe mill geared to industry 4.0 standards."**



Riverview Steel was recognized as the best steel supplier for the North American market: **"The market for automotive and non-automotive products continues to grow steadily—especially in the USA. The steel tariffs recently introduced on both sides of the US and Canadian borders play an important role in this market development, as they threaten to hamper potential growth. Our top management is committed to minimizing risk and maintaining our competitive advantage."**



Lilai Steel is one of the best raw material suppliers for our Chinese market: **"The development of the Chinese economy is both a challenge and an opportunity for the large Chinese steel mills, which will continue to grow over the next five years."**



Awarded in the Capital & Tooling category: Eric Yao, President & General Manager and Jerome Lu, Vice President & Partner Dongguan Vision Tool & Mould: **"We expect the market to contract slightly over the next two to three years, but to recover in the second half of the next five years. Advanced technology, cost reduction and strong management are critical to a successful market position."**



N.E.S. Limited was awarded as one of the best suppliers in the purchased parts category: **"In the global fastener market, we see JIT service for our customers as a key element for success and for increasing our competitiveness."**



In the Capital & Tooling category, Pyper Tool (USA) was awarded Supplier of the Year: **"Finding the most cost-effective solutions to meet our customers' needs plays a major role in the growth of our business."**



SSAB's Managing Directors Arnaud Guerendel (Global Automotive Director), Robert Lewandowski (Sales Manager Automotive) and Soren Madsen (Global Key Account Manager (second, third and fourth from the right) accepted the award for the European market in the raw material category: **"SSAB is participating in a very ambitious project to produce carbon-free steel (HYBRIT). We have about 40 new steel grades in development for the automotive industry, from research and development to the near-available solution. In addition, we are pushing the use of cold forming from 1000 to 1500-1700 MPa, which is a better solution in the medium term."**



## "Culture Attack"— A Cultural Event Goes on Tour

With KIRCHHOFF Culture Life, our company launched a new cultural initiative more than a year ago that is inspiring more and more employees worldwide. Many small activities now enrich the evening with joint activities among colleagues.

The big afternoon event "Culture Attack" is yet another completely different dimension and challenge for cultural representation. With a lot of commitment and passion, Prof. Thomas Kirchhoff has put together an incredibly multi-faceted program and sent it on a European tour across the KIRCHHOFF Automotive locations in Gliwice/Poland, and Esztergom/Hungary. He engaged top-class artists, mixed them with local acts, and adapted the event with the help of the personnel responsible to the customs of the country and the people. The goal was high. They were to be large, culturally rich rooms, allotting for at least 300 spectators to fit in.

"Cultural events are not self-propelled"—Thomas Kirchhoff and the local teams came to this conclusion quite quickly and had to significantly strengthen the advertising measures in order to get the staff enthusiastic about the event and thus actually get the halls full. "I wasn't at all convinced by the idea of „Culture Attack” at first," says Piotr Ryndak, IT manager at the Polish site in Gliwice. "Less than five minutes after the start of the performance, my opinion turned 180 degrees. Now I know that the idea was a hit! My wife and I can hardly wait to be at the next KIRCHHOFF Culture Life events—especially the cooking event."

The tour continues. In January 2019 „Culture Attack" comes to Iserlohn/Germany, in May it goes to Ovar/Portugal.

Author: Stefanie Schauerte



"I really enjoyed the event, the venue was marvellous. I'd like to participate in similar events in the future."

Szilvia Gere, Payroll Specialist  
in our plant Esztergom/Hungary.





Delicious recipes, musical accompaniment and fun with colleagues—"Cooking with Jochen" was more than just a feast for the palette. "That was great! A very round thing, with heart and soul. It was really, really fun", Sabine Montbruck reports enthusiastically about the cooking action. The approx. 20 participants in the VHS Iserlohn kitchen cooked a three-course menu with seasonal food under the guidance of professional chef Jochen Brandt. "The event was well organized and it was very tasty. Dale Kavanagh's guitar music in the background created a very special atmosphere".



"The Paradox of Our Time", "I Am Malala" or "The Fault in our Stars" are just a few of the favourite books from which employees read short passages from on two evenings. Surrounded by wonderful music from the Aria duo, delicious snacks and drinks, the participants were able to listen to stories, switch off and immerse themselves in new worlds. Overall, two varied evening experiences, from cheerful to funny, from silly to serious, and in between dramatic and poetic.



Around 30 participants experienced a true alternating bath of colours, impressions, and moods during two live painting workshops in Attendorn and Iserlohn. Artist Katja Ölmann inspired our employees with various techniques. Building great momentum, every five minutes a completely new impression was created, and the results are impressive. The works of art on 2.5 x 1.8 m canvases have now been professionally reproduced, and hung in our own KIRCHHOFF Automotive spaces. The originals will soon be auctioned off with the proceeds going to a good cause.



The two opening events could hardly have been more different. In August 2017, a group visited documenta 14 in Kassel. Shortly afterwards, a concert visit to the Fantastischen Vier took place. These opening events already showed what we want to achieve with KIRCHHOFF Culture Life: Culture in its broadest form, from avant-garde art to hip hop! "But we don't just want to present culture to enjoy and lean back, we also want to actively invite our staff to participate in shaping it," says Prof. Thomas Kirchhoff, cultural representative (left in picture).



#### Outline of KIRCHHOFF Culture Life 2019

Exciting new ideas are already on the program for 2019. You will read in the next issues about:

- Business Yoga
- Taekwondo—posture, self-defense, self-confidence
- Ukulele—learn 3 songs in 2 hours (no previous knowledge required)
- Cooking with Jochen (follow-up event)
- Day Trip—Variety Theatre Visit GOP Essen
- Photography workshop—creation of an annual calendar



# Creating Perspectives, Helping People

— Six refugees are undertaking employment training at the Attendorn and Iserlohn locations of KIRCHHOFF Automotive. The Company hired two members after the training, through a project it initiated. K>MOBIL presents the new colleagues.

**Nemat Asqari** has two wishes, “First, I want to do my apprenticeship and be taken on as an employee. The second thing I want is for the war in my country to end.” Nemat Asqari is from the country Afghanistan, where he attended school until about the age of 13 when war and an unsure future forced him to flee. He has now been in Germany for almost three years. In August of 2018, he began an apprenticeship at KIRCHHOFF Automotive in Attendorn to become an industrial mechanic. “He is open and has integrated well into the group of new apprentices”, says trainer Michael Isphording.

After just one day of trial in the metalworking shop, they decided to offer Nemat Asqari the

apprenticeship place. “We were really surprised at how focused and eager to learn he was and by his technical aptitude,” said master metalworker Edgar Ackerschott and his colleagues at the time.

**Majid Dehsangi** has already completed over a year of his apprenticeship to become an industrial clerk. Before that, he worked eight months as an intern in the Company’s Procurement Department. Prior to coming to Germany, he was an engineer and worked for Siemens in his home country Iran. At the vocational college, the young family man is now returning to his studies. For some people this may sound like a step backwards, but for Majid Dehsangi it is a step forward. “We have to begin a completely

Nemat Asqari would like to be an industrial mechanic.

new life here. I don’t have access to my documents in Iran. That’s why I do this apprenticeship, to get certificates here. For me this is an additional qualification,” he says. Majid Dehsangi proves that despite all difficulties, integration can be successful. “Feedback has been consistently positive—both from the different departments and from the vocational college. But it’s also clear how hard Majid is working to achieve this and how much effort it takes to learn a foreign language in such a short time. It is great to see that he feels good here in the Company and that he has fun in his apprenticeship,” says trainer Gudrun Hoffmeier. Bianca Bock from Sales adds, “Regarding the topics Majid is currently working on, we cannot recognize any differences compared to other apprentices.”

**“First, I want to do my apprenticeship and be taken on as an employee. The second thing I want is for the war in my country to end.”**

Nemat Asqari





"We feel morally and humanly obliged to give appropriate refugees a change, and therefore we have initiated this project," Kuno Jakob, Human Resources Manager at KIRCHHOFF Automotive in Iserlohn, explains. "The important thing above all, is the integration into the team. Therefore, a high degree of sensitivity is required from all involved. Other cultures and mentalities, the life experiences during the flight, and the expectations combined with this, have to be harmonized with our values. We consider the diversity of people and cultures within our company as enrichment. That's why we like to pose this challenge with great commitment."

"Eelaventhana has integrated well and is very popular with other employees in the shop floor. His formerly poor knowledge of German has improved significantly."

Martin Kleine,  
Trainer from Eelaventhana Kuddy

Eelaventhana Kuddy

When it comes to integration, **Eelaventhana Kuddy** is an old hand. A refugee from Sri Lanka, he has been working at KIRCHHOFF Automotive for two years. After completing a development program to prepare for entry into vocational training (TVFAF), he began an apprenticeship as a machinery and plant operator in August 2017. He has already passed his intermediate exam and gets on well with the other apprentices. "Eelaventhana is really dedicated, and he's a good team player," comment Robin Koschitz and Robin Damm, who are both already in the fourth year of their apprenticeships. Also trainer Martin Kleine confirms, "Eelaventhana has integrated well and is very popular with other employees in the shop floor. His formerly poor knowledge of German has improved significantly." Eelaventhana Kuddy regularly participates in German language courses.

At the Iserlohn location, KIRCHHOFF Automotive has hired two fled men as apprentices through the model project "Betriebliche Integration von Flüchtlingen", which the Company launched in June 2017. After a first visit to the plant in May 2017, profession-related language courses were then offered with integration accompaniment and an eight-week practical phase of professional qualifications at different companies from Iserlohn. At that time, five men went through this practical phase at KIRCHHOFF Automotive in Iserlohn in the following departments: electrical workshop, processing/hot forming, dispatch and new tool shop. As a result, **Ali Al-Nahar** and **Mohammad Mousa** completed entry qualifications as a preparation to an apprenticeship they began in August 2018. Now, Ali Al-Nahar learns tool mechanics and Mohammad Mousa is under industrial mechanic production engineering.

**Malik Faizal Nikzad** completed a week's voluntary work experience in the training workshop of KIRCHHOFF Automotive back in February 2018. "He made such a positive impression on us that we hired him as a temporary employee in the further processing section from May until the start of his apprenticeship," says Personnel Officer Daniela Deutscher. Malik is now doing an apprenticeship to become an industrial maintenance mechanic.

The refugees feel they have integrated well into the Company. "My colleagues are happy to help me if I need something," says Ali Al-Nahar. He came to Germany from Syria in 2015. "I was 18 years old at the time and single. So, the Syrian government and IS wanted to make me become a soldier," he explains. He now works in the training workshop and so far, has produced several parts in accordance with drawings.

Mohammad Mousa believes he is in good hands as an apprentice at KIRCHHOFF Automotive, "The welcome days at lake Sorpe have helped me a lot, and my first weeks as an apprentice were good. My superiors are very nice." He arrived in Germany from Syria in 2015, where he had completed the grade 9.

Malik Faizal Nikzad from Afghanistan has been in Germany since 2016. In his home country, he went to school until grade 10 and afterwards supported his father in a grocery store.



Meinolf Schulte, Master Automats, and apprentice Eelaventhana Kuddy at a press in the Attendorf plant.



Majid Dehsangi is in the second year of his apprenticeship to become an industrial clerk.

The feedback from colleagues and supervisors have been good. "They are hard-working and careful. Now and then, even trainees in the same apprenticeship year ask them for help," say trainers Lars Preisner and Stefan Jeziorski.

The German language is still a challenge for the new members. Especially special words that are sometimes difficult. Nevertheless, the young men are optimistic in tackling this hurdle. "I will make it!" says Ali Al-Nahar confidently.

With the apprenticeship, the refugees have taken an important step, not only towards integration, but also for their own future. What follows depends on their particular case.

Author: Eva Rademacher



# Staying Informed

With the new KIRCHHOFF app, all KIRCHHOFF Automotive employees worldwide can access information easily and quickly, whether they're working in administration or production. They no longer need a computer or a connection to the Company network.



Talking to employees: Andreas Heine, responsible for Global Communication at KIRCHHOFF Automotive



KIRCHHOFF Automotive's app is also useful in external communication, providing information for anyone who is interested in the Company. In the K>MOBIL app, you'll find the latest information about the companies of the KIRCHHOFF Group, which you can view by topic or business unit. In addition, you can look at all the articles from this printed edition of K>MOBIL, converted into digital format. You can even share them via the major social media platforms such as Facebook and Twitter. Of course, the K>MOBIL app is available to download from the App Store or from Google Play. **Check it out!**



Modern communication at KIRCHHOFF Automotive: an app with info and features for all employees worldwide

**"For the time being, this is the final stage in the expansion of our internal communication. Even if employees don't have a computer at their workstation, they can now read articles and watch videos at any time—in their own national language, of course," enthuses Andreas Heine, responsible for Global Communication at KIRCHHOFF Automotive.** Transparency is particularly important to the trained journalists in the internal communication team. "All employees should be well-informed about the Company and the economic environment, whether they work in an office or in production."

Heine emphasises the special role of timeliness and speed, "Family-managed companies are often rather reserved in terms of news coverage, and unfortunately that also includes internal reporting. It can be catastrophic in terms of identification with the Company if employees have to find out through the newspaper that their employer is opening a new plant in Romania." Poor communication results in a feeling of being underappreciated: "Since I'm not told anything, I'm obviously not important enough to the company." But if the reverse is true, and the company makes sure that the employees feel well-informed and valued, this reinforces identification and solidarity.

With the K>App, KIRCHHOFF Automotive is following the worldwide trend of using smartphones to obtain information and interact with others. But that's not all, it also provides access to image galleries—e.g. of the latest family celebration or the company presence at IAA. The app also allows employees to take part in competitions or register quickly and easily for events. And it is proving popular with employees, "I like the fact that the K>App is in my national language. We don't have to worry about our English skills because we can read everything in Chinese," said Meng Xiangduan, a driver in Suzhou/China. "I use the app every day. It gives me precisely the information I need," said Stanislaw Podkowa, a forklift driver in Gliwice/Poland.

The new app can be downloaded from the major app stores on employees' personal smartphones. Employees can access the internal section via personal accounts and passwords. The new app connects 9,000 people worldwide, in line with the Company motto:

**WE.MOVE.FUTURE.**

Author: Andreas Heine





- 058 Mobility for all at REHACARE and the European Taxi Fair
- 060 Universal mounting bracket for middle truck seats



**KIRCHHOFF**  
MOBILITY

Custom-made cars



# Mobility for all at REHACARE and the European Taxi Fair

This autumn, KIRCHHOFF Mobility presented the latest mobility and conversion solutions for various vehicle models at Germany's REHACARE trade fair in Düsseldorf and European Taxi Fair in Cologne.



01



02



03



04



**01** Detailed advice about all the options for customised vehicle adaption from KIRCHHOFF Mobility's customer advisers. **02** The KIRCHHOFF Mobility stand at REHACARE 2018. **03** At REHACARE, the new Opel Combo Life edition with KIRCHHOFF Mobility rear entry celebrates its debut. **04** Using a Volkswagen T5 as an example, KIRCHHOFF Mobility showcased a range of mobility aids, including the side-entry wheelchair lifting platform SF 350 III and the super-slim EasySpeed hand controls for acceleration and braking.

**05** KIRCHHOFF Mobility presented the new disabled-access taxi NIVO 85 at REHACARE in Düsseldorf and at the European Taxi Fair in Cologne. **06** The Caddy Maxi NIVO 85 offers a great deal of flexibility and efficiency when transporting wheelchair users and impressed visitors at the European Taxi Fair.



05



## Product information: The new, rear-entry NIVO 85

- Ample space for wheelchairs (W x L: 85 x 150 cm): ideal for larger wheelchairs or electric wheelchairs
- High level of comfort: greater headroom and a longer, flat floor
- Optimal use of space: straps integrated in the trough structure allow for unobstructed legroom
- Wide ramp for safe entry and exit
- Ideal for taxi firms and transport companies: the third row of seats can continue to be used as an alternative to the wheelchair space
- Numerous optional extras include a folding flex ramp, LED lighting strips, etc.

The product highlights on show included the new Opel Combo Life edition NIVO and our latest disabled-access taxi: the VW Caddy Maxi NIVO 85. The new **Opel Combo Life edition** with NIVO rear entry, ramp, and wheelchair space was very well received by visitors. Thanks to its many standard comfort and safety features, the new Opel Combo Life edition NIVO offers passengers and drivers a wheelchair-friendly vehicle with a large amount of space and a high level of comfort.

The **VW Caddy Maxi NIVO 85** stands out on account of its spaciousness. With a width of 85 cm and a length of 150 cm in the wheelchair space alone, taxi firms and transport services benefit from a great deal of flexibility and efficiency when transporting wheelchair users. Moreover, the third row of seats can continue to be used on journeys without a wheelchair, meaning the NIVO 85 has an alternative use as a seven-seater vehicle. There is also an option to choose a flex ramp instead of a standard fixed ramp. This not only guarantees a clear rear view on journeys without a wheelchair, but it can also be folded forwards so that the vehicle retains its flat luggage space.

Using a **Volkswagen T5** as an example, KIRCHHOFF Mobility showcased a range of mobility aids for passengers and drivers, including the side-entry wheelchair lifting platform SF 350 III and the super-slim EasySpeed hand controls for acceleration and braking.

Flexibility and individuality—that's what KIRCHHOFF's conversions are all about. The new disabled-access taxi, Caddy Maxi NIVO 85, was also presented at the European Taxi Fair in Cologne, Germany—where it impressed representatives from taxi firms and transport companies.



## Technical details

- Entry height approx. 140 cm
- Internal height approx. 145 cm
- Ramp length approx. 121 cm
- Internal ramp width approx. 895 cm
- Load-bearing capacity (ramp) approx. 300 kg



06

Author: Souscha Nettekoven-Verlinda



# Universal mounting bracket for middle truck seats

— As part of a cooperation with the commercial vehicle manufacturer Scania AB, KIRCHHOFF Mobility has developed a mounting bracket for the installation of middle seats in trucks.

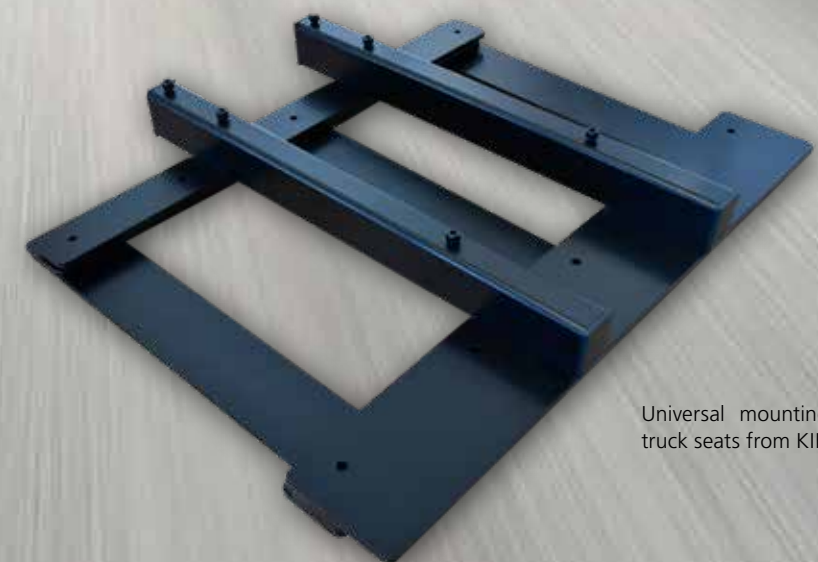
**T**he leading supplier of customised automobile conversions is able to draw on many years of experience in the conversion of large commercial vehicles and the installation of various seating solutions for people with reduced mobility. KIRCHHOFF Mobility's development department employed this knowledge, coupled with its technical expertise, to construct a reliable mounting bracket solution.

Halfway through this year, KIRCHHOFF Mobility presented the first prototype of the bracket and successfully installed it in one of the manufacturer's trucks. The mounting bracket has since gone into series production at Scania and has already been built into many vehicles.

The bracket is flexible in terms of applications and meets the high standards to which German armed forces vehicles must comply. Installation of the bracket is quick and straightforward, and it fits almost every type of middle truck seat.

Jens Hocke, subsidiary manager at KIRCHHOFF Mobility in Berlin, led the project and was delighted with the successful cooperation and its outcome. **"It's normally our job to get people with limited mobility mobile again. The specialist knowledge and experience that we need to do this—and that we have, thanks to our customers—have helped us to bring this project to a successful conclusion and develop a suitable solution for our partners in the truck sector."**

Author: Souscha Nettekoven-Verlinde



Universal mounting bracket for middle truck seats from KIRCHHOFF Mobility





- 064 MAXX Plus on tour – the professional screw driver visits the ice hockey professionals
- 068 Intelligent handle design with innovative surface properties



**WITTE**  
TOOLS

When function and  
effect are in line.



# MAXX Plus on tour— the professional screw driver visits the ice hockey professionals

— The latest story in the “MAXX Plus goes on tour” series is all about ice hockey. This time we only have a short journey—from our WITTE headquarters in Hagen in the German Sauerland region to the KIRCHHOFF Group headquarters in Iserlohn, where the microfibre-coated MAXX Plus screwdriver is visiting the successful ice hockey club Iserlohn Roosters.

A dangerous situation in front of the team's own goal. The referee needs to blow the whistle.

Preparing the ice with the ice resurfacing machine, which is simply called “Zamboni” after its inventor





The popular mascot ICEY and the fans of Iserlohn Roosters celebrating the goal by swirling their blue and white scarves through the air



In the Roosters workshop: replacing the runner holder on an ice skate using a professional tool for professional ice hockey equipment

**B**ased near the KIRCHHOFF Group plant, the nationally successful Iserlohn Roosters have been an integral part of the German ice hockey league (DEL) since 2000. In their home region, they are the number one sporting event with more than 120,000 spectators each year. Their home games at Seilersee in Iserlohn are renowned for their exceptional atmosphere, fascinating ice hockey performances, and unique fan experiences.

It is not without reason that the slogan of the Iserlohn Roosters is: "One region. One team. One passion". A strong attachment to the region and a passion for life in the blue and white colours—without their very special fans, the Iserlohn Roosters and the Iserlohn ice rink would not be what they embody today.

This tradition-conscious professional team has been playing in Germany's highest league since its formation and always guarantees ice hockey experiences of a special kind. The focus is invariably on the team's character and spirit. For years, the press has described the Iserlohn Roosters' game as Roosters hockey, as it is characterised by a very physical and sacrificial style of play.

To keep it that way, great importance is placed on the training and development of its junior ice hockey team: the Young Roosters. The young players' excellent work has already led the Young Roosters to the Junior Championships and won them league-wide recognition and respect in the youth work sector.

The current 2018/19 season is also a double anniversary season: 60 years of ice hockey in the German Sauerland region and 25 years of Iserlohn Roosters.

**WITTE Tools wishes the Iserlohn Roosters every success and lots of fun along the way.**

Author: Martina Hageböling



MAXX Line at vimeo [www.iserlohn-roosters.de](http://www.iserlohn-roosters.de)

**Wonderfully unique:** individual, personalised goalie masks for protecting the goalie, so-called goalie helmets



Each player has a custom-made stick. The sticks differ in length, blade curve, weight, and material.



### The history of the Roosters

Ice hockey was first introduced to Iserlohn by Canadian soldiers in the neighbouring town of Hemer. The Canadian soldiers stationed there built an ice rink next to the barracks to practice ice hockey, their national sport. Interest in this hitherto rather strange sport grew quickly among German youths, and with the founding of the first ice hockey club in 1959, the cornerstone of ice hockey fever in Sauerland was laid. Iserlohner EC e.V. (IEC) was founded in 1994. It bought the Starbulls Rosenheim's DEL license in 2000 to form its professional team, the Iserlohn Roosters.



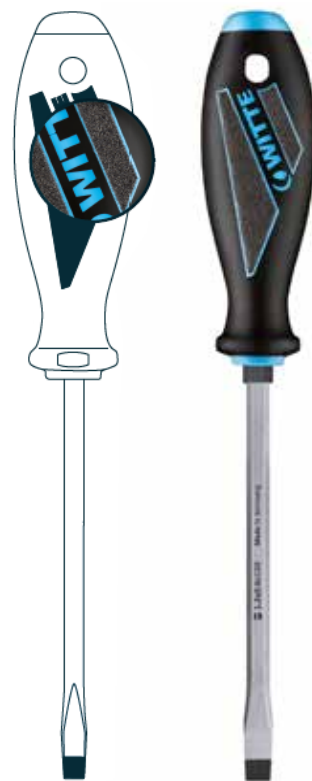




**MAXX Plus in use:** Non-slip even under difficult conditions

The handle design of screwdrivers and their demands on handle shape, feel and materials used, especially surface materials, are all factors that are equally decisive for the efficiency and functionality of the hand tool. This also applies to the two outstanding WITTE product lines MAXX Plus and MAXXPRO Nature. The extraordinary surface materials used for the different haptics of both lines, microfiber and cork, give the products their very special character.

The unique screw driving tool of the MAXX Plus line is equipped with a patented microfiber coating. This line has been specially developed for working in humid or oily conditions. WITTE's MAXX Plus line is designed to meet this challenge: On the one hand, innumerable microfiber hairs, firmly embedded in the handle surface, offer maximum grip and slip resistance during use; on the other hand, the spaces between the microfibers absorb part of the fluid from the hand. This interaction ensures maximum grip despite the difficult working conditions, but also more safety and optimum power transmission during screw application.



MAXX Plus at vimeo



**MAXXPRO Nature in use:** Very popular haptics also with carpenters and joiners

The MAXXPRO Nature screwdriver line with the cork material inlay, which is unique in the market for hand tools, is also an exceptional example of the innovative spirit at WITTE. The particularly handy MAXXPRO Nature line is popular with nature and design lovers, not least because of the naturally renewable cork material used. But carpenters and joiners, who previously chose screwdrivers with traditional wooden handles, are also increasingly using WITTE's MAXXPRO Nature line and enjoying the benefits in terms of feel and the material's own moisture management.

WITTE can afford to process these rather unusual materials for screwdriver handles: on the production side, the company is the only one of its kind with the necessary, challenging manufacturing expertise. The results are impressive: Innovative added value with high user benefits and of course the best quality "Made in Germany".

Author: Martina Hageböling



MAXXPRO Nature at vimeo





KIRCHHOFF ECOTEC

- 072 Down under
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Joint forces: Michael Pronger (Research & Development Manager), Jack Dempsey (Mayor Bundaberg), Mark Hamilton (Production Manager), Dr Johannes F Kirchhoff (KIRCHHOFF Group), Rob Wrigley (CEO Superior Pak), Patrick Hermanspann (CEO FAUN Group), Bill Trevor (Deputy Mayor Bundaberg), Ross Burgess (National Market Support Manager), Keith Clark (National Service & Aftermarket Manager) (from left)

# Down under



Matthias Kohlmann (CFO FAUN Group, left) and Patrick Hermanspann (right) together with Dawid Botha (CFO Superior Pak) during his visit in Germany.

— Superior Pak, Australia's largest manufacturer and servicer of mobile waste equipment, has announced a joint venture with KIRCHHOFF Ecotec back in August. In November Dr Johannes F Kirchhoff and Patrick Hermanspann (CEO FAUN Group) have visited the team im Bundaberg, Queensland.



The Mayor of Bundaberg Jack Dempsey (2nd from right) in discussion with the Managing Team of FAUN and Superior Pak.



Experts among themselves: Patrick Hermanspann, Dr Johannes F Kirchhoff, Michel Pronger and Rob Wrigley (from left) are discussing the electric truck.



"The last quarter has seen a new age in Superior Pak's evolution in line with FAUN becoming our new shareholder. The business continues to grow, with production, sales and after market figures at an all-time high. In November we had the pleasure of welcoming Dr Johannes Kirchhoff and Patrick Hermanspann to the manufacturing plant in Bundaberg and all personnel who attended commented on the benefits of hearing first hand the future partnership with Superior Pak, the benefits and successes of the FAUN Group and in particular the message of commitment to the Superior Pak brand driven through KIRCHHOFF's and FAUN's personable visions and values." Rob Wrigley (CEO Superior Pak) commented the visit.

In his speech Dr Johannes Kirchhoff emphasised that then KIRCHHOFF Group is a family owned business with family values and beliefs and not an "Insurance Company". He took great pleasure in welcoming Superior Pak into the family and to a long and successful partnership.

Superior Pak is the leading Australian manufacturer of waste collection and compaction equipment and works with vehicle suppliers such as IVECO, Dennis Eagle, Mercedes-Benz, Scania, Isuzu Trucks, Hino, Fuso, Volvo and DAF. The company head office is based in Brisbane, with its manufacturing centre based in Bundaberg, Queensland. Announcing the joint venture, a spokesperson for Superior Pak said the current executive management team would remain

unchanged, with Rob Wrigley as Managing Director and Dawid Botha (CFO), Garry Whineray (National Sales & Marketing Manager), Keith Clark (National After Market Manager), Mark Hamilton (National \*Manufacturing Manager) and Michael Pronger (National Engineering Manager). FAUN will join Rob Wrigley (original Superior Pak Shareholder) as joint shareholders of Superior Pak. FAUN will acquire the shareholdings of Rowley Errington (Retired Superior Pak Director) and Anne Barry (Non-executive Director). Patrick Hermanspann, CEO FAUN Group, comments: "We are very pleased to welcome Superior Pak in our Group. It is an honour for us to work closely together and to strengthen our business. All parties can learn from each other and we provide our customers with the best trucks and after sales services."

Commenting on the new shareholding arrangements, which will take effect from the start of September, Rob Wrigley, Superior Pak managing director said the move will provide further depth to the company's business and product range.

"New technologies for vehicle drive systems combined with the expertise of both partners in the production of class leading waste disposal and collection equipment will reinforce the strong future ahead for Australian manufacturing and the abilities of our workforce," Mr. Wrigley added.

Author: Claudia Schaeue



# Travelling around the Baltic sea



The "Old Stars" with their modified ambulance at North Cape. Thorsten Krupp, Christian Peters and Carsten Wedekind (from left)

— Ten countries in 16 days. Christian Peters, Carsten Wedekind and Thorsten Krupp (all working for Mercedes Benz as special truck sales managers for the north region) completed this road trip with their modified ambulance. The three recount in K>MOBIL what united them, what was, quite literally, on the rocks and the role that ZOELLER and FAUN played.

Moose antlers adorned the top of their vehicle, acting as a mascot as well as a symbol of the route. Christian Peters (special vehicle dealer at Mercedes Benz as well as being responsible for ZOELLER) spoke about the idea for the first time at the IFAT trade fair. He and his two colleagues – Thorsten Krupp (responsible for the Hamburg area) and Carsten Wedekind (Mercedes contact for FAUN) – put together a team of people for the famous Baltic Sea Circle Rally organised by the Superlative Adventure Club in Hamburg. The tour of the Baltic Sea started in Hamburg with 250 teams and passed through Denmark, Sweden, Norway, Finland, Russia, Estonia, Latvia, Lithuania and Poland. With "Old Stars" as their team name (more a nod to their employer than their age), the group looked for supporters for their project. The objective of the tour was to 'work for' donations for the Löwenherz Children's and Youth Hospice in Syke. ZOELLER and FAUN took part in the adventure with a donation of EUR 1,000. All in all, the Old Stars handed over EUR 10,550 to the facility in Syke.

The funniest and often most daring ideas come about when beer is involved. This also happened to be the case with these three northerners. The application was submitted in high spirits but it still took a while before the project got some wheels and backing. As their ride (which must neither be older than 20 years nor cost more than EUR 2500), the trio bought a catering vehicle for the blood donation department of the Bavarian Red Cross with a star on the radiator grill – a 709 diesel with 86 hp and 4-litre cubic capacity. The vehicle was converted into a mobile shared flat suitable for the tour: three sleeping areas, a shower and a toilet were integrated into the truck body. The truck had a hot water supply as well as electricity and a utility room. Particularly special features that got lots of the other tour participants together during the evenings at the camp site were the beer pump and barbecue.



A slightly different type of emergency ambulance service. The ZOELLER team got the touring truck back in running order so that the rest of the journey back could be completed successfully.

The trio were delighted by people's readiness to help in Scandinavia, inspired by the landscape of Lofoten in Norway and the modernity of the Baltic states as well as enthused by the football fever in Russia. But they still break out in a sweat when thinking about Russian roads and the way the locals drive. In the countryside in particular, the roads are unsurfaced and there is one pothole after another, which is what the exhaust on the touring truck fell victim to. 500 km before St. Petersburg, the tail pipe disappeared. Thorsten "Mac Gyver" Krupp Wedekind provisionally repaired the exhaust with a sausage tin, but it was clear that the group would not be able to do the rest of the journey back home with the vehicle this way. So what to do? The adventurers did not get far in terms of finding any local workshops. As Poland was part of the route, Christian Peters called Rainer Rohler, Managing Director at ZOELLER, to ask whether he had any time for an unusual service emergency. Rainer did. And so the guys on site in Rekowo Górne got the 709 back in running order and mounted a new exhaust so that the rest of the tour could continue smoothly as far as the vehicle was concerned. At the finish line on 1 July at the Hamburg fish market, the truck had 8140 km on the clock.

All three adventurers say that team spirit was what drove them. They started in Hamburg as colleagues and drove over the finish line together as friends. They received support from their families, friends and colleagues the entire time. Even FAUN and ZOELLER employees who knew about the trip got in touch now and then. The next trip is already taking shape. However, they would like to allow more time for the next tour so that they are able to take everything in better.

Author: Claudia Schaeue



Nothing could hold them back. Tour driver Christian Peters (left) and the emergency helper Rainer Rohler in front of the ZOELLER facility in the Polish village of Rekowo Górne





## In the end, hydrogen is what remains

Jules Verne already came to this conclusion in his novel "The Mysterious Island". Today, 144 years later, this vision has become a reality which can be driven. Specifically, in the BLUEPOWER drive system for refuse collection vehicles and road sweepers manufactured by FAUN and ZOELLER. That's because hydrogen is the future.



For years, we have been aware that raw materials are limited and customary drive systems emit too many noxious substances. That's why ideas are required which can be put into practice, which are effective in daily operations and function under the challenging disposal conditions. Refuse disposal vehicles, with their frequent stop-and-go trips, are predestined for electromobility.

Since 2006, the engineering experts at KIRCHHOFF Ecotec have been working on alternative drive technologies to keep the vehicles clean when in operation in the future too. In 2008, FAUN brought the first alternative drive system into circulation with the diesel-electric hybrid vehicle DUALOPOWER. A small production run of 20 vehicles then followed, then in 2011 came the superstructure for BSR Berlin powered by FUELCELL. In recent years, battery-operated electric chassis were developed in order to quickly respond to the environmental regulations and driving bans in the inner cities. The latest example from this year is the JOAB or FAUN superstructure on the VOLVO FE electric chassis or the ZOELLER MEDIUM superstructures on Scania and Futuricum chassis. These are fantastic, environmentally-friendly projects, but at KIRCHHOFF we want more. A larger range, higher performance. And we will get there with hydrogen. It's easy, safe and simple to produce. Burkard Oppmann, Head of Sales at FAUN, is a passionate advocate of the hydrogen idea: "For more than ten years now, we have been carrying out research in the field of alternative drive technologies. The knowledge and data we have gleaned since then have been applied to the new BLUEPOWER project."

In May 2018, FAUN BLUEPOWER presented its own drive train it developed itself for refuse disposal vehicles and road sweepers at IFAT. A fully electric chassis with battery modules which use hydrogen fuel cells to increase its range. The reaction from the company's customers was huge. In 2019, two vehicles were constructed which will be tested out by clients who are interested. The plan is for hydrogen drive systems to go into production at ZOELLER and FAUN at the start of 2021.

### WHAT CAN BLUEPOWER DO?

- The basic BLUEPOWER package comprises battery modules with 85 kWh
- Collection volume: 2 x 10 t refuse
- Range: 20 km transportation journey
- Charging time: 30 min. quick charging

### THE PLUS POINT OF HYDROGEN

- If increased performance is required, additional hydrogen fuel cells can be added at any point.
- Equipped from 30 - 90 kWh
- Potential range of up to 560 km
- Hydrogen is light and the tanks are secure
- Modular construction

At the beginning of the new year, a purely electric vehicle with a ROTOPRESS superstructure will be deployed at the BEG in Bremerhaven. The vehicle works with 85 kWh battery energy content and can be recharged within 30 minutes. In Bremerhaven, they also produce their own electricity. A pioneering project on the model of BLUEPOWER. That's because hydrogen is the alternative fuel of choice when a wider range and more time on the road are required.

Author: Claudia Schaeue

"I am certain that by 2030 we will only be supplying hybrid vehicles."

Dr. Johannes F Kirchhoff





# Along the Adriatic Sea

— Taking a road sweeper along the Adriatic coast in Croatia for two weeks as part of a demonstration tour? An absolute dream. A dream made true with the tour conducted by long-time FAUN dealer KOMOP d.o.o. with the aim of introducing a new, ideal road sweeper to popular tourist hotspots.

The ever-increasing number of tourists in Croatia (with popular series "Games of Thrones" playing a part) is also reflected in the increased volume of waste being generated and is giving rise to the desire for more cleanliness in the cities.

It is for this reason that the country's and municipalities' attitude towards urban hygiene has changed significantly in recent years. For several years now, rubbish has been collected separately and as such, there is a great demand for new vehicles and collection bins. However, the need for highly professional street cleaning is not valued as highly as in other EU countries. There is still no local tax specifically designated for street cleaning, for example. Budgets for purchasing road sweepers for cities and municipalities therefore largely depend on how aware and understanding local politicians are of the situation. Cities and municipalities that predominantly make a living out of tourism are consequently investing more money into street cleaning than others. Usually, a compact road sweeper with a capacity of 4 m<sup>3</sup> is used in coastal cities as well as in town centres and on wider streets. The small, compact road sweepers are certainly highly manoeuvrable but there are trade-offs: poor driver comfort and high operating costs. Something the operators are aware of too, which is why FAUN sent a VIAJET 5 R/L H on a MAN TGL 12.250 chassis with Tipmatic into action – specifically the demonstration tour.

Customers who primarily use their compact road sweepers on wide roads will highly likely be impressed with the VIAJET 5. The objective was for the VIAJET 5 to demonstrate how operations can be carried out more quickly, more effectively and in a more cost-efficient way with a road sweeper with a 5-m<sup>3</sup> capacity and the body of a heavy goods vehicle, since compact road sweepers are not suited for more substantial dirt and quick transfers due to their design. Although they are able to carry out this work in the correct way,



regular operations of this kind shorten the life cycle of the vehicles and increase service costs. A VIAJET 5 was specifically developed for these tasks and operations. On the narrow streets of residential areas, the design feels just as much at home as on the large roads of the outer areas of towns and cities. Thanks to the hydrostatic single-motor drive, the vehicle can work very quickly in a very efficient manner and saves up to 45% of fuel and operation costs compared to an equivalent machine with an auxiliary engine. Drivers' backs are well supported as a result of the comfortable driver's cab and the suspension afforded by a mass-produced chassis. Drivers feel less tired and are safer and more alert on the roads due to the comfortable seating position and the comprehensive suspension system.

Another advantage of the VIAJET 5: the road sweeper was awarded four stars in accordance with the EUnited test procedure for PM 10 and PM 2.5 emissions and is built on a chassis that meets the strictest EU emission standards. This further reduces environmental pollution and makes the Adriatic coast of Croatia, which is wonderful in any case, even more beautiful.

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Author: Mario Ringl



# A family

No Swiss waste disposal company can pass up an invite from the Contena-Ochsner AG team to their in-house trade fair. In September, the Heiniger family and its team invited companies to join them in their renovated halls – and everyone came.

Family is what guides Contena-Ochsner – an approach equally coveted by Managing Director Renato Heiniger, his parents and sibling, for Contena-Ochsner is a family company. His father Kurt passed on his understanding of customer's needs and the Swiss market to his son who embodies this together with his team. Everyone pitches in with the preparations and throughout the two-day exhibition. Lots is 'home made' but nevertheless highly professional – an approach on which the company relies. The customers are happy and many stay late into the evening.

Over the two days, the visitors are shown the latest products and special applications for waste disposal vehicles and road sweepers, as well as crane solutions and the solar-powered waste bin "SOLARPRESS". Doppstadt demonstrated its machines and shredders for shredding waste wood and a sorting unit into which it was possible to look from above. The first company involved in the in-house trade fair was KOCO Solutions AG. The team exhibited its solutions for vehicle fleet management. What makes KOCO products so special are the ways in which they make it possible to analyse superstructure data. During discussions, it became clear that underfloor containers are particularly popular. The collection points are clean and disposal companies can plan

**Right:** The Contena-Ochsner AG team.  
**Below right:** new to the range, the products from PB Environnement with a lightweight aluminium body and the crane solution.

ahead more easily without being restricted by specific times. The corresponding waste disposal vehicles came from STUMMER and FAUN, such as the vehicle from Gevisier Transports Sàrl on a four-axle chassis with a STUMMER body and a Hiab crane with remote control functionality. The crane can be positioned in the idle position on the roof so that it does not significantly impact on the height of the vehicle. Another important topic discussed at the trade fair was alternative drives, with visitors being given the opportunity to test two vehicles with electric drives.

Author: Jennifer Grisoni



You can find more information on Contena-Ochsner AG at [www.contena-ochsner.ch](http://www.contena-ochsner.ch) or register for the newsletter.







— Our French company FAUN Environnement delivered 30 TASSÉO and four VIAJET 6 to Cameroon at the end of November.

# From France to Cameroon

The refuse collection vehicles and road sweepers will be used in the cities of Douala and Yaoundé.

FAUN Environnement has always been committed to the environment and its culture of innovation focuses on the quality of materials and processes. Both are guarantees of the durability, robustness and safety of the products. Thanks to these advantages, FAUN Environnement has been able to reinforce its reputation as an expert for high-performance refuse collection vehicles internationally too. This Ardèche-based company therefore signed a contract for 30 TASSÉO rear loaders and four VIAJET 6 road sweepers with the CFAO (one of the main distribution groups in Africa working in the field of vehicles, metallurgy, medicines, supermarkets, shopping centres, telecommunications etc.) and HYSACAM (a company from Cameroon which monitors the public tendering procedures for refuse disposal and road cleaning in Douala and Yaoundé). The 30 TASSÉO vehicles, which have 16 m<sup>3</sup> superstructure volumes, are mounted on 4x4 Renault chassis. These rear loaders are specially designed for use in extreme conditions. Thanks to the latest technology, their compression potential is six times higher and they benefit from better manoeuvrability thanks to their short wheelbase. The optimal weight distribution ensures high levels of safety, even on journeys on difficult terrain.

The road sweepers are VIAJET 6 models with double suction and sweeping units on both sides of the vehicle. There are two hydraulic models (mechanical feed with chassis gearbox) and two hydrostatic models (feed without coupling).

From the middle of November onward, two to three TASSÉO will be leaving the factory in France to begin their long journey to Africa by ship from the port of Antwerp in Belgium. CFAO and HYSACAM are long-standing customers of FAUN Environnement. In 2010 and 2016 they ordered refuse disposal vehicles from France. There is a strong chance that additional orders will follow soon.

Author: Helene Campens







# In the service Of her majesty

— The mighty VIAJET 12 is the largest sweeper in Europe - maybe on the planet. And is certainly very noticeable in its green livery. The same like Hulk.



**T**hey are green. They are mighty. They are large. Kelly Plant Hire Ltd, based in Feckenham, have taken delivery of their five VIAJET sweepers. The VIAJET 12 is mounted on a 32 t GVW Mercedes Arocs chassis. With a focus on the 'Back to Black' part of the Highway Construction industry, two of Kelly Plant's VIAJET 7s are equipped with 'Rear Surface Cleaning' equipment, which is designed to carry out Ultra High Pressure cleaning of a newly laid road surface and have earned great reviews from Kelly Plant's customers. Shaun Kelly recently told Austin Anderson, our FAUN Business Development Manager, that his customers are now asking directly for the 'Green Machines' as they're doing a fantastic job.

The VIAJET 12 also the ability to carry a front mounted Magnet Bar for collecting metal from runways and race circuits. Some of the places that they've worked at so far are a Military Air Base working on a runway extension, Oxford Airport, Silverstone Race Circuit, the A38 extension in Cornwall and one of the Airbus factories. It's fair to say that they're getting about and even cleaned a site just a couple of hours before it was opened by HM Queen Elizabeth II. It seems, they are getting to be more famous than Hulk.

Author: Catherine Kings







# Marking the Cart



**01** Simon Hyde (CEO of FAUN ZOELLER UK Ltd., left) and Austin Anderson (Business Development Manager) are very proud about the Cart Marking **02** "Branding" of the VARIOPRESS

On an unusually bright and warm day for the UK in July, FAUN ZOELLER UK Ltd took part in the ancient Cart Marking Ceremony at the historic Guildhall in the City of London, attended by the Lord Mayor of the City.

The history of Cart Marking is long and distinguished. A Carman Fellowship has existed since before 1277 which became the Fraternite of Seynt Katryne (or the Fraternity of St Katherine in modern day English) the Virgin and Master of Carters in 1517 which then agreed to serve the City of London in various ways and to carry goods at reasonable rates. After falling out with the City, control of Carts passed to Christ's Hospital, back to the City and then back to Christ's again in 1665. It was at this time that it was decided that each Cart licensed to ply for hire in the City should be marked on the shafts with a City Coat of Arms and a number on a brass plate. Interestingly, it is generally accepted that Cart Marking historically represents the first ever form of vehicle licensing.

FAUN ZOELLER UK Ltd were invited to display by Carman Vince Dignam. A VARIOPRESS with an originally to give a debut to the VIAJET 6 mounted on a Mercedes Econic chassis, which is a first for the UK. However, a late replacement of the new Demonstrator for London, a VARIOPRESS with an EVO tailgate and the new clean air system, with ZOELLER Rotary 3 lifter was organised. Attended by Simon Hyde, CEO of FAUN ZOELLER UK and Austin Anderson, Business Development Manager, they witnessed the inspiring opening ceremony of The Company of Pikemen and Musketeers, before the Lord Mayor arrived. The VARIOPRESS was the last vehicle to go through and was driven in by Graham Whybrow, our Demonstration Driver. It was a tough task for Graham – the roads that approach the Guildhall are busy, tight and with plenty of construction going on, but was made harder by the entrance to the square, which is very narrow and covered in sand to collect any droppings that the horses made. There were just millimetres to spare on each side of the stone gateway! Austin joined Graham in the cab, along with Vince Dignam, the Cartman that had nominated us, as part of the ceremony. Graham pulled the VARIOPRESS up next to the dignitaries and they duly accepted the invitation to 'Mark' the cart.

Author: Catherine Kings



# In Exercise

— The FAUN TRACKWAY team were delighted to have been invited to participate in an exercise with the NATO battle groups at Saber Strike 2018 earlier this year in Poland.



Heavy Ground Mobility System deploying M150 Trackway® to create a bridge head at Saber Strike in Poland, June 2018.



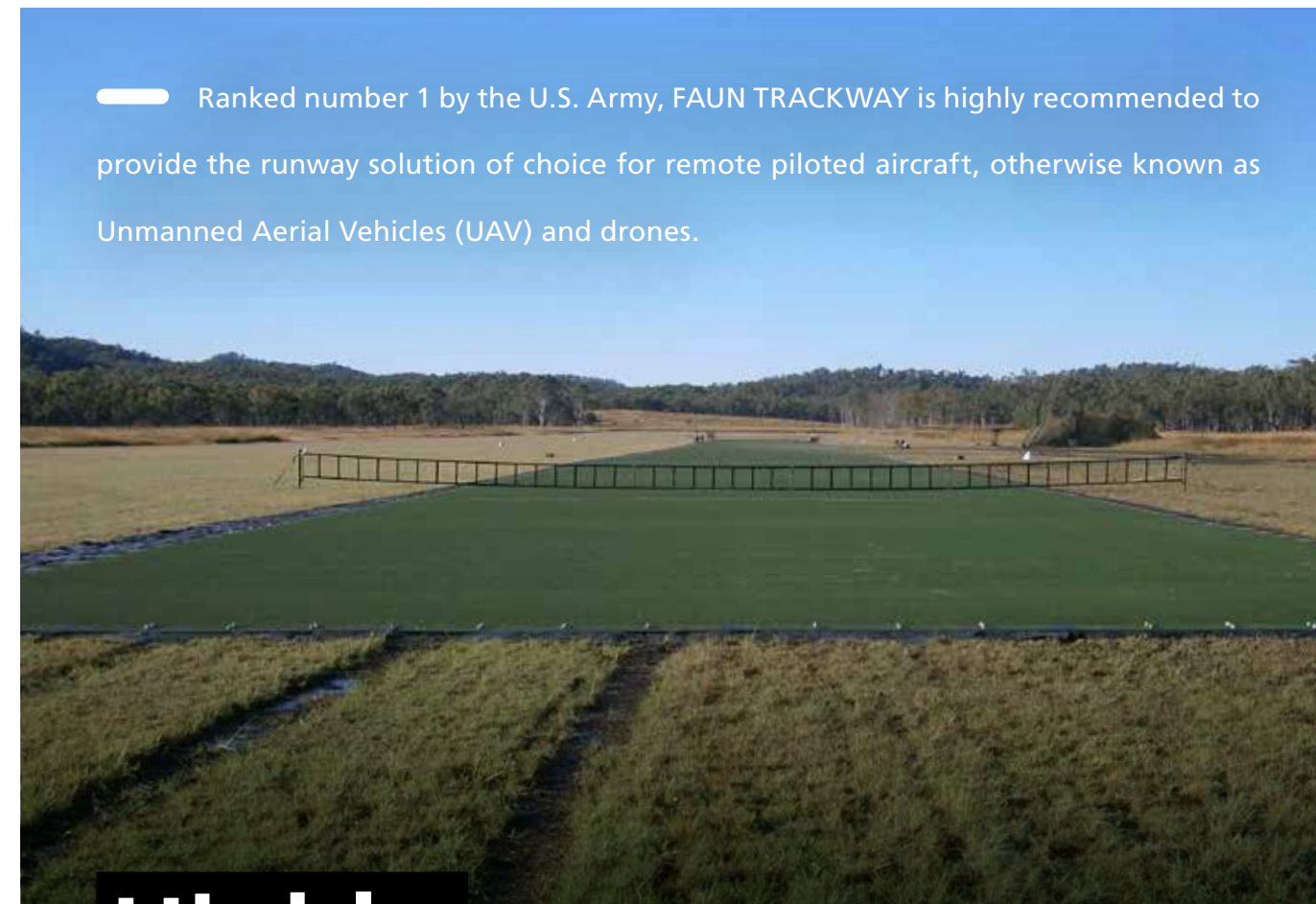
TRACKWAY Saber Strike 2018 YouTube

**D**uring the exercise our Heavy Ground Mobility System (HGMS) operated in support of the improved ribbon bridge (IRB) emplacement across Zly Leg Lake, Drawsko Pomorskie. Soldiers from the 341st Multi-Role Bridge Company positioned the bridge to enable the Polish 12th Mechanised Brigade and U.S. 2-8 Cavalry Brigade to cross the Zly Leg basin during their combined manoeuvres. The FAUN TRACKWAY HGMS was partnered with Rheinmetall MAN Military Vehicles (RMMV) HX77, expediently laying M150 TRACKWAY to provide ground stability and access points. Both for the bridge installation, and on the bridging ingress and egress sustaining the heavy vehicle movements.

Saber Strike 2018 is the eighth iteration of the long-standing U.S. Army Europe-led, cooperative training exercise, to validate the collective capability to respond to and reinforce allies in a time of crisis. Carried out annually since 2010, the exercise operates at multiple sites with the U.S. Army leading the NATO battle group in Poland, while the U.K., Canada and Germany command three others in nearby Baltic states of Estonia, Latvia, and Lithuania respectively. The team at FAUN TRACKWAY were proud to play a role in such a prestigious exercise.

Author: Danielle Thomas

— Ranked number 1 by the U.S. Army, FAUN TRACKWAY is highly recommended to provide the runway solution of choice for remote piloted aircraft, otherwise known as Unmanned Aerial Vehicles (UAV) and drones.



# Highly recommended

**T**he recommendation follows independent testing at the Engineer Research and Development Centre (ERDC), to find the best commercial off the shelf matting system to support vehicle operations.

Both PSA-Flat Top (PSA-FT) and PSA-Flat Top Reinforced (PSA-FT R) passed the independent test requirements, with PSA-FT R achieving the accreditation as "the highest ranked mat system for remote piloted aircraft operations because of its ability to sustain both the remote piloted aircraft and support vehicle traffic with limited damage and deformation, and because of its ease of installation".

The test program was solicited by the U.S. Air Force to find a system to improve operational effectiveness, with a light-duty expeditionary mat system to effectively support remote piloted aircraft operations while reducing the logistical footprint required to transport the surfacing system to the field. Our PSA-FT and PSA-FT R were two of only four commercial products selected for full scale independent evaluation overseen by the U.S. Marine Corps. Each matting system was constructed, inspected and subjected to over 7,000 passes of simulated aircraft traffic movements. The overall ranking considered physical properties, installation, user feedback, and performance for mat damage and deformation.

Author: Danielle Thomas



# Putting a stop to stacks of paper

— When Industry 4.0 or digitalisation is discussed, the mind automatically jumps to production sites, humans working alongside robots, data glasses and so on. Even in offices, the new methods can help us to work more quickly and efficiently.

**D**igitalised processes and files means that we no longer need to use stacks upon stacks of paper and we can communicate with one another more quickly. Real-time systems and cloud solutions create transparency and provide up-to-date data. Over the past few months, we have come up with some ideas for the commercial departments at FAUN – some of which we have already implemented.

In 2017, FAUN started to clamp down on endless pieces of paper being used. We introduced "HRworks" – a web-based program for electronic travel expense accounting. Travel expense reports are recorded directly in the program (bills and receipts are scanned in), approved by the responsible supervisors and automatically transferred to the financial accounts department for the final review. Once everything has been reviewed, the data is immediately transferred to SAP for booking and payment. All the steps of the process are transparent and can be traced at any time. Travel expense reports can be recorded and approved from all sorts of devices: computers, smartphones, iPads – whatever the user wants to use. We are also dispensing with original paper documentation. The entire process regarding travel expense reports takes place completely digitally; it is also quick, effective and saves time.

Another step towards achieving a paperless office: FAUN and ZOELLER are introducing an ECM system. ECM stands for "Enterprise Content Management system" and represents an enhancement of the conventional archiving and document management systems. All legal documents as well as documents that must be retained – such as invoices, delivery notes, quality documents, contracts and employee records – are digitally recorded in this system. This project aims to cut down on the amount of paper used, printing costs and the amount of storage space required, as well as make it easier to find the information requested. With upstream workflows, processes – which are mostly still based on paper today – are being digitally reproduced so that they are always transparent and can be viewed by everyone involved in the respective process. We are implementing this project with ECM software provider SER and ECM software Doxis 4, which is integrated into the SAP system.

With the introduction of a professional applicant management system, we are now able to reproduce our entire recruitment process – from the creation and publication of a job description to going through applications and inviting applicants to interviews, through to the rejection or hiring process – in a cloud-based system and thereby accelerate and significantly optimise: the project management team responsible for a job description (HR) and the assessors (the responsible department managers) can communicate with one another about applications in the "Concludis" system in real-time so that there is significantly faster feedback on applications and applicants are informed of the respective decision in a timelier manner. Naturally, this has a positive influence on our personnel marketing activities and therefore how FAUN is perceived. Other features – such as applicant pools, various templates for cover letters, the one-click application function that enables candidates to transmit their xing profile, and the availability of mobile end devices in this regard – simplify our administrative processes in accordance with data protection requirements and also makes it easier for interested applicants to get in touch with us. And the whole system is secure and free of viruses.

We are currently trying out portal solutions that would enable our employees to submit a holiday request online so that we can bid farewell to paper holiday forms. As soon as a supervisor has approved a holiday request, the person who submitted the request will be notified and the holiday is automatically booked into the system. Supervisors can see an overview of the entire team in this system, making it easy to see any overlapping holidays. What's more, in the future it should be possible to make invoices, certificates and additional information available electronically via the portal so that documents do not need to be delivered by post. An "employee self-service" system should also be available so that basic data such as our employee's addresses or bank accounts can be updated by the employees themselves.

Author: Ina Westermann



# Moin from Bremen

— The Hanseatic City of Bremen and recently founded company Abfalllogistik Bremen GmbH rely on vehicles from ZOELLER for waste disposal.

In 2018, Nehlsen GmbH & Co. KG and Bremer Stadtreinigung AöR (Bremen urban cleaning authority) started a joint business model for cleanliness in the Hanseatic city with two recently founded companies – Abfalllogistik Bremen GmbH and Straßenreinigung Bremen GmbH. As part of this restructure, the vehicle fleet also needed to be modernised. The Abfalllogistik team opted for modern Euro 6 chassis when they purchased vehicles with packer plates from ZÖLLER-KIPPER. In addition to the latest rear loader model MEDIUM X4, the Bremen entrepreneurs ordered the smaller MINI XL and MINI XL-H models. On a 2.30-m-wide chassis, these narrow vehicles are especially ideal for the historic old town in Bremen, with its narrow alleyways. The MEDIUM X4 is perfect for household waste operations. The short overhang and the short wheel-base shine through in the model's high level of manoeuvrability and lots fits neatly into the optimised body.

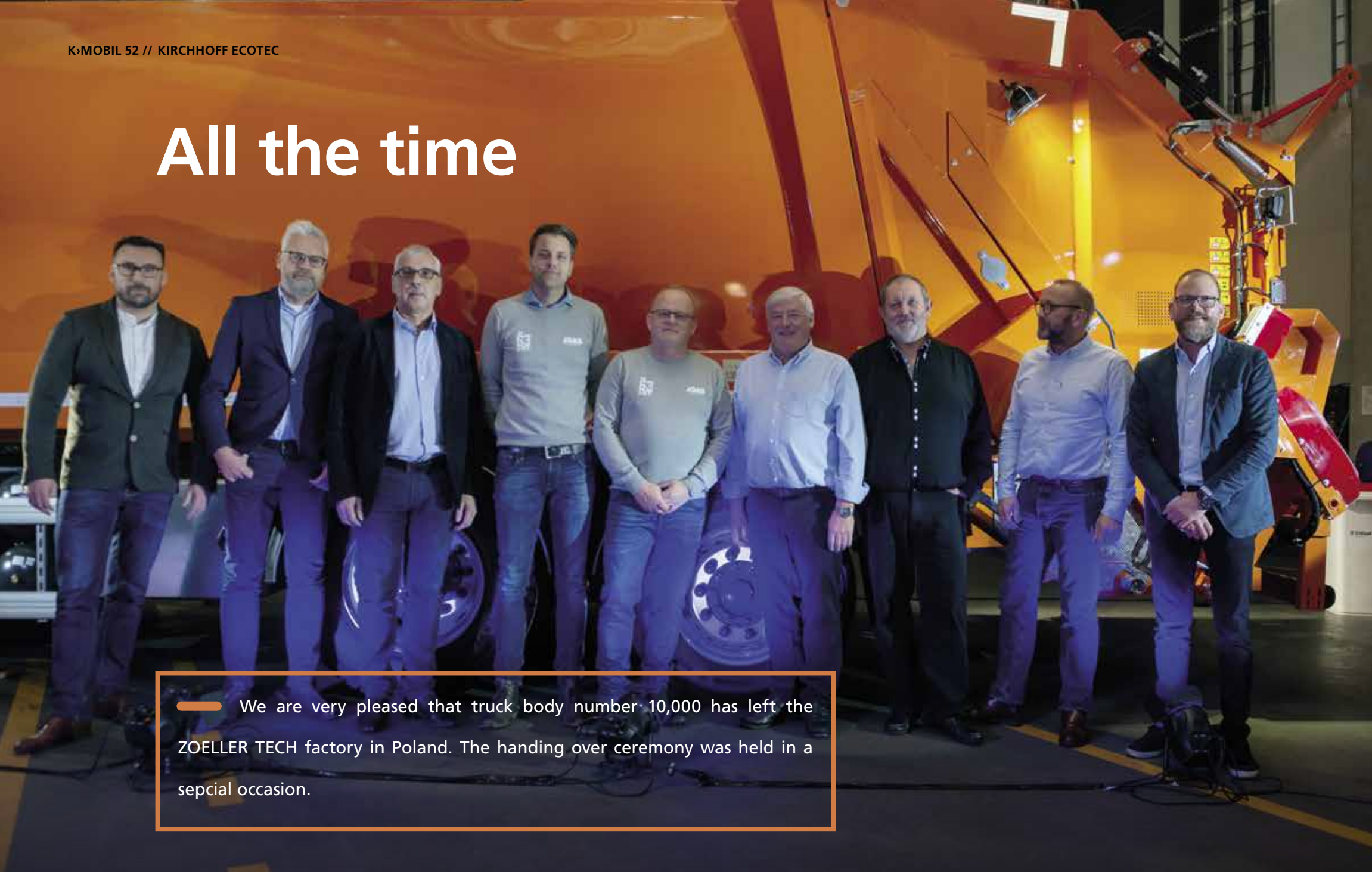
Thomas Lippardt, product manager for waste collection vehicles at ZOELLER: "I am pleased that we are able to support the new waste concept in Bremen with our vehicles. I am sure that the collaboration will continue in the spirit of Hanseatic partnership". Thomas Lippardt, who has been a part of the ZOELLER team since 2000 and has worked as a service manager for the north to date, is henceforth the contact person for technical questions regarding ZOELLER waste collection vehicles. With his experience, he is ideally equipped to provide customers with support regarding operating vehicles; he will also oversee new developments and operate as a product manager in an advisory capacity.

Author: Claudia Schae

Let's get the job to be done: Volker Ernst and Daniela Enslein (both Managing Director at Bremer Abfall Logistik) and Thomas Lippardt (Product Manager at ZOELLER)



# All the time



— We are very pleased that truck body number 10,000 has left the ZOELLER TECH factory in Poland. The handing over ceremony was held in a special occasion.

We would also like to take this opportunity to remind you that ZOELLER Group has a history dating back to 1947. ZOELLER TECH started production in Poland over 25 years ago, under the name SKK. Our first vehicles were built in Sosnowiec in South Poland but half a year later we moved production and assembly operations to Puck in Northern Poland. In August 2013, we decided to change the company name from SKK Sp. z o.o. into ZOELLER TECH Sp. z o.o. In September 2014, after 20 years of history together and after twelve months of intensive planning and design work, after nine months of construction work, and after three months of installation and furnishing, we were ready for a new development phase in a newly opened production facility in Rekowo Górne. The erection of one of the biggest factories producing bodies for refuse collection vehicles in Europe and the biggest in the ZOELLER Group, had to be done to match the high quality of our products and required the work of many people whose experience, professionalism and competence are the most valuable asset of our company. Our factory in Rekowo Górne near Reda, stationary service stations in Puck, Warszawa and Chorzów and our mobile service stations employ near 700 people. More than 1,200 refuse collection vehicles leave our factory in Rekowo Górne every year.

Author: Ewa Maj

**N**ordRen based in Norway is the owner of this commemorative unit. The occasion was marked on November 15th, 2018, by the official presentation of the refuse collection vehicle to our Norwegian Client. Vehicle No. 10.000 is an orange amber TWIN body type which belongs to one of many segments of special bodies that are offered by ZOELLER TECH. This model is a rear-loaded two-chamber vehicle designed to collect two different fractions of waste on one route. The body is divided vertically into two parts at a 65/35 ratio.

With the benefit of two separate collection receptacles, which are fitted with their own compaction mechanisms, waste fractions will not get mixed, which is of great importance during the emptying process. The combination of efficiency and carrying capacity enables the optimisation of the vehicle's route, saving costs and the environment. NordRen

commenced trading in 2013 and immediately became an important player among urban waste collection companies. From the very start, it invested in JOAB products. Currently, they have 200 refuse collection vehicles in operation on an every day basis, which is the best proof of the quality of our products. Exemplary cooperation between ZOELLER TECH and JOAB enables us to meet the high expectations of our Clients. The effect of this cooperation is that both our companies are getting stronger on the Scandinavian markets. Today, our refuse collection vehicles from Rekowo Górne are held in high esteem, operated and recognised across the Polish, European and even worldwide markets. Rainer Rohler Managing Director ZOELLER TECH: "Our number 10,000 refuse collection vehicle is not only proof of the broad experience of our Polish team but it also shows how attractive ZOELLER TECH-designed municipal vehicles are to our clients."

The commemorative unit was given by Rainer Rohler (CEO of ZOELLER TECH, right side) and his team to: Sebastian Jamrozik, Krzysztof Sosnowy (both ZOELLER TECH), Waldemar Wojciechowski (ECOCEL), Johan Backström, Tom Sjöstrand (both JOAB), Roy Åsheim, Glenn Svensson (both NordRen) and Per Svendsen (RichSteen) from left.





# 'Die Saubermacher'

— Saubermacher. This is the name of Austria's largest waste disposal company, which has worked with STUMMER in Bischofshofen as a partner for almost 40 years.

Johannes Streif, Managing Director at STUMMER, on the collaboration: "Saubermacher is one of our most important key account customers. In fact, the company was among our first customers. We not only work on projects together here in Austria, but also in Slovenia, Hungary and the Czech Republic". Streif adds: "It is so much more than just a customer and supplier relationship. It is rather a successful, innovative and, above all, dynamic partnership characterised by dealings carried out in trust and on an equal footing". Proof of this successful partnership is the recently concluded framework supply agreement for 50 waste collection vehicles and 20 roll-off tipper in the next three to five years". We are very proud to have been given this order", Johannes Streif concludes.

## A live on

The latest vehicle in the Saubermacher fleet is an electric waste collection vehicle. The electric MEDIUM XLS body with electric PTO and ROTARY lifter is assembled on a hybrid chassis from Scania. This referred to as "Futuricum" following the modification work carried out by Swiss start-up Designwerk. This diesel/battery combination produces electric power for speeds up to 30 km/h, with the combustion engine kicking in at higher speeds. When the vehicle collects waste, braking energy is recuperated in stop-and-go mode, stored in a battery and re-used to power both the lifter and the compression procedure during the waste collection process, which means less fuel consumption, lower pollutant emissions and super-quiet operation. A real Saubermacher achievement.

Author: Johannes Streif



Saubermacher AG is an international waste disposal and recycling company headquartered in the Austrian municipality of Feldkirchen bei Graz. The family company was founded by Hans and Margret Roth in 1979 and is a competent partner for around 1600 local authorities and approximately 42,000 businesses. Over 3100 workers are employed across six countries. According to Saubermacher, the company is the most sustainable in the world: in the sustainability performance assessment conducted by GRESB\*, Saubermacher took first place (96 out of 100 points; 280 businesses took part around the world). With its "Zero Waste" vision, the company is pursuing the ideal whereby all waste materials are pre-processed so that ever greater amounts of the original material can be utilised. In addition, Saubermacher partners with 21 public-private partnerships in central Europe (including Graz, the second-largest city in Austria), is the global leader in the field of (lithium-ion) battery recycling and continually strengthens its position in the market as a leader in waste intelligence with its digital innovations such as wastebox – the Daheim service app for "Smart Waste". You can find more information at: [www.saubermacher.at](http://www.saubermacher.at).

Have a good trip! Hannes Roth (Saubermacher AG), Wolfgang Föttinger (STUMMER Sales), Klaus Roth (Chairman of the Supervisory Board Saubermacher AG), Werner Toppel (Managing Director Abfallverband), Martin Schuster (Mayor of Perchtoldsdorf) and Johannes Streif (CEO STUMMER) from left.



# No breakdown no cry

Spare Parts Manager at SEMAT:  
Ludovic Ardouin

— With opening a new specific website, the SEMAT spare parts department wants to optimise its customer satisfaction rate. K>MOBIL spoke with Ludovic Ardouin, SEMAT Spare Parts Manager, about the new business unit.



## What are the key figures for this spare part activity?

**Ludovic Ardouin:** "Today, spare part sales represent a turnover of 11 to 12 million euros out of a total of 70 million euros for SEMAT. Every year, we sell 5,000 references to 2,500 customers, with an average purchase of 720 euros per sale. Every day we ship out about 140 packs and every month our call centre in La Rochelle receives 1200 calls. As we do not want to stagnate around those figures, we have set up a new organisation."

## And what would that be?

**Ludovic Ardouin:** "We wanted to meet the increasing service expectations of our customers. They have become more professional, have been more organised and have raised the level of requirements they expect from us. The vehicles we sold them must, for example, be ever more operational by having as little down time as possible. Our studies led us to develop a specific sales organisation for spare parts to allow local authorities, private groups and the approved garages that make up our customer base to benefit from an effective part shipment service to repair their equipment when it breaks down. To do that, we created a website: [www.semat-pieces.com](http://www.semat-pieces.com)

## What are the specificities of this new service for your customers?

**Ludovic Ardouin:** "Firstly, we should say that in our usual professional context, this evolution in the spare part activity is quite innovating and puts us in a commercial business with a market, competition and different criteria compared to our core industrial manufacturer business. To embark on this web adventure, that some of the leaders in the mail order sector failed to do, we created a web site that combines technicality with simplicity. Customers therefore have easy access to exploded views of their equipment, order history and tracking, pictures and technical descriptions of our spare parts. We have also set up a chat system so that we can support our customers in real time to help them identify the correct part very quickly while maintaining a "human" connection between them and us.

Previously, our customers had a lot of trouble finding the right reference in our catalogues; a refuse collection vehicle has over 3000 different parts, so that task was painstaking. Today, with specific technical diagrams for spare parts, customised and put on line by our design office, everything is simpler and faster."

## What is your sales policy in this field?

**Ludovic Ardouin:** "We want to have strong commitments to product quality, the relevance of pricing and reactivity. By supplying original parts that we produce ourselves, we guarantee their service life, their reliability and compliance with applicable safety regulations. On pricing aspects, we are not in a discounting logic, but rather on credible pricing that takes into consideration the "service plus" that we offer, in particular with the express delivery we provide. Furthermore, our new web site allows us to better target our customers' expectations and be able to propose offers that are in line with their expectations (quantity discounts, attractively priced part packs, targeted offers, etc.). Our objective is to combine our strengths: quality, compliance and availability with a balanced pricing position."

## Are the first operational indicators for [www.semat-pieces.com](http://www.semat-pieces.com) encouraging?

**Ludovic Ardouin:** "They are. A month after the web site went online last September, we already had over 400 unique visitors listed who spent an average of 15 minutes per day viewing the pages, a very satisfactory conversion rate with a high number of daily orders on the site which, at the start, wasn't intended to be commercial. Furthermore, we have a very low rebound rate which proves the real interest of our customers who reconnect regularly. We should quickly achieve our triple objective of increasing sales, increasing average sale amounts and above all, increasing our customer satisfaction rate which, I hope, we will see in a few months using a customer satisfaction survey."

Author: Yann Vrignaud