

K>MOBIL

THE KIRCHHOFF GROUP MAGAZINE



Customer and supplier at the same time:
FAUN is the first bodybuilder for the ANTOS of Mercedes-Benz. KIRCHHOFF Automotive supplies significant frame components for this vehicle.

K-MOBIL

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Imprint
K-MOBIL
the KIRCHHOFF Group magazine

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KIRCHHOFF Gruppe, Privat,
Deutsche Post, Shutterstock,
FAUN, Johannes Ginsberg

Translation:
Target Languages, Dossenheim
thetranslationpeople, Glasgow

Design, Typesetting:
FETTE-BEUTE.com,
Dortmund, Attendorf

Printing: becker druck, Arnsberg

The key to prosperity

Industrial value creation ensures jobs and prosperity

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

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This industry term, which previously referred to the production of goods, has now become considerably broader. It describes the organisation of value chains for optimised customer/problem solutions and increasingly adopts the process perspective. This means the responsible use of raw materials as well as environmentally and resource-friendly production technologies.

Strong industry leads to above-average income because industrial value creation generates more than twice as much value as other sectors. With 90 per cent industry supports research and development and is therefore a key driver of innovation; industry is also responsible for 90 per cent of exports.

The two financial crises of the last decade, firstly the bursting of the "new economy bubble" in 2000, and then the real property, financial and, in some countries, sovereign debt crisis,

which started in 2008, have significantly reinforced the value of industry. While Asia, in particular China, is experiencing an unprecedented upturn with the expansion of industry and infrastructure, but also countries such as Mexico, Brazil, and most recently America, are making industry the focus of their development, we are experiencing a divided pattern in Europe. On the one hand, Germany and its central East European neighbours have consistently supported the creation of industrial jobs. On the other hand, large parts of West and South Europe have not carried out important structural reforms and have allocated more money than they earned. It is now crucial that participative, and not distributive justice from policymakers, forms the basis for the framework conditions in the countries.

This starts with participation in education (in Germany: the dual edu-

cation system) as a prerequisite for competitive jobs. Furthermore, it is important to have a corporate culture that promotes the sustainable investment of profits in new machinery and processes. In Germany, 95 per cent of companies are family-owned companies that are not interested in short-term success, but in long-term market survival. It is therefore only possible to innovate and use resources economically if there is a combination of well-trained people and modern machinery and workstations. Finally, policies with framework conditions for the job market, the educational system, the financial system, the promotion of foreign trade, and the tax system can have a positive or negative effect on industrial development and therefore directly on jobs and prosperity.

Tax increases and other levies, unreliable budget management, overregulated financial, job market, and educa-

tion systems lead, as can be seen in some European countries, to deindustrialisation and therefore a decline in jobs and prosperity.

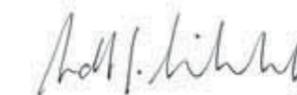
With the initiative of EU Commissioner and Vice-President Antonio Tajani, an industrial revolution should make industry in Europe competitive once again.

The first few months of the year 2013 indicated stable development in America and Asia and were marked by weak demand in western Europe only. As well as the global economy grows by 3.4 per cent, the automotive industry will also grow to a record 83 million units. To take part in this, we must increase the rate at which we innovate. To this end, we are opening the ACS (Automotive Center Südwestfalen), which is intended to become the leading development partner for

economical and innovative lightweight construction. In addition to technology and innovation management, the range of services provided will also include qualification and knowledge transfer. Our contribution to ensure the industrial value creation of tomorrow.

A cordial good luck!

Yours,



Arndt G. Kirchhoff



Series: From research and development

Innovations from the KIRCHHOFF group

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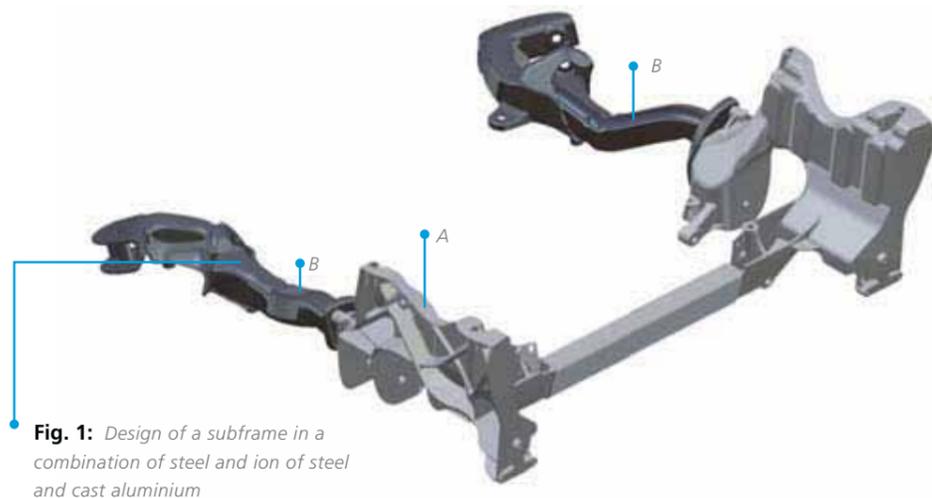


Fig. 1: Design of a subframe in a combination of steel and ion of steel and cast aluminium

The current focus of F&E activities in the KIRCHHOFF Automotive product division is on hybrid design, wherein two or more different materials and manufacturing processes, for example cast aluminium and sheet forming, are combined to make a component.

The objective of the hybrid-design development is to absorb the different loads exerted on a component by

the selection of the material and the production process. Overall, the component weight is kept low due to the low stress design of the component geometry to correspond to the production process and above all is cost-effective. Formed metal parts made of steel have specific characteristics which can only meet these objectives with simpler component geometries. Cast aluminium nodes however can meet the above objectives when sub-

jected to other loads exerted on the component. Figure 1 shows the design of a subframe made of a combination of steel and cast aluminium.

Cast nodes made of aluminium can be adapted relatively cost-effectively for various purposes and are particularly attractive commercially for small quantities. Stress peaks in the component can be eliminated by carefully arranged ribs (see Fig.1, A). This

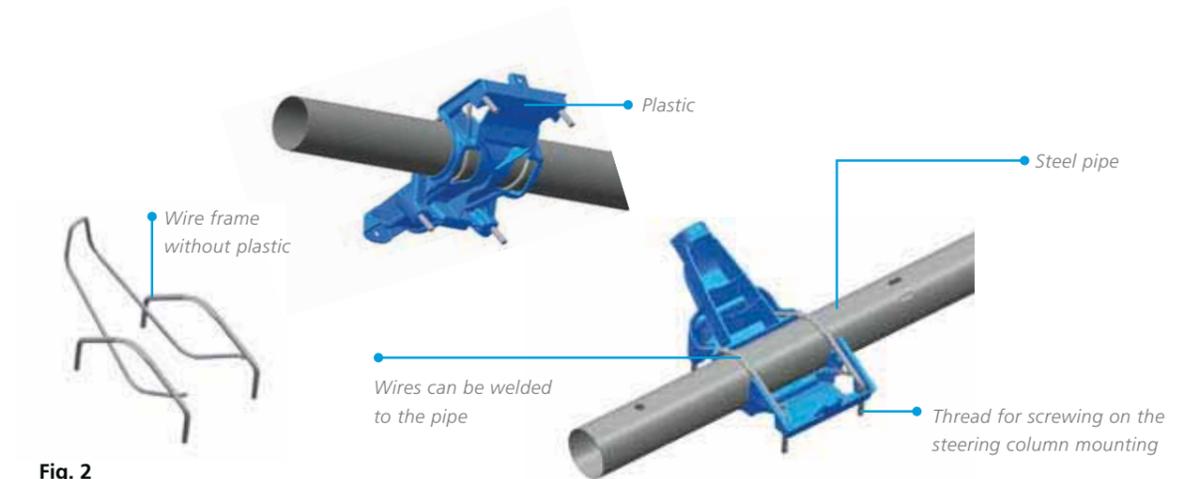


Fig. 2

provides better performance with less processing than with a straightforward steel plate solution. On the other hand the geometry of the longitudinal member (B) made of steel means it is better able to meet the above objectives in this part of the component. The connection between the steel and the casting in this case is made by screw fastenings.

In a second design project we are applying our existing expertise in an interdisciplinary company setting. For decades the WITTE tools screwdriver division has been working with us on the extrusion-coating of plastic around the wire screwdriver mandrels. Valuable expertise which has led in the Automotive product division to the first joint pre-development project based on a steel and plastic hybrid Cross Car Beam (CCB). Figure 2 shows one such possible arrangement. The aim is the integration of function in plastic components. This will reduce components, reduce complexity and therefore transport volume and transport costs and guarantee higher part availability at many locations near to our customers.

This hybrid concept involves extrusion-coating a curved steel wire (Fig. 2) to form a connecting part which can

be joined to a steel pipe of the cross car beam to form the steering wheel mounting.

The compact parts can be packed individually and delivered just in time to any KIRCHHOFF Automotive site for assembly. In a third project request, KIRCHHOFF Automotive is researching interlocking plastic and metal connections. See special report on page 22.

Our Automotive product division is also involved in the now well-advanced development of the body structure for the all-electric StreetScooter; a vehicle

designed for urban travel. The ambitious team around Professor Achim Kampker has succeeded in attracting the interest of the postal service for this concept. From July 2013 a fleet of StreetScooters will be introduced for the delivery of letters and parcels to customers in the city and the close environs. It is still an urgent priority however to hand over the further marketing and large series manufacture of the StreetScooters to one of our major customers.

Fig. 3: StreetScooter for the postal service



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+ ROTOPRESS DUALPOWER

Fig. 4



Fig. 5:
VARIOPRESS DUALPOWER

Innovations for refuse collection vehicles and lifters—KIRCHHOFF Ecotec

In the KIRCHHOFF Ecotec product division—with the two primary brands FAUN and ZOELLER—research- and development continues to focus heavily on efficient refuse collection vehicles and lifters. The first 20 DUALPOWER vehicles are now at work not only in

Germany but also in Switzerland and in Liechtenstein. The DUALPOWER drive concept has been implemented in conjunction with the ROTOPRESS superstructure (Fig. 4) and the first VARIOPRESS refuse collection vehicles with packing plate compactors (Fig. 5) have arrived with their customers.

The electrification required for the recovery of braking energy in a refuse

collection vehicle naturally also requires the electrification of the rear lifter to empty the collector. In this area, ZÖLLER-KIPPER GmbH has made further advances here in the electro-lifter-application. In the “Low-Level” lifter segment for a low loading edge the Rotary-lifter which covers this use spectrum has been electrified. (Fig. 6)



Fig. 6:
E-Rotary lifter from ZOELLER



Fig. 8:
MEDIUM XLS with E-Lifter from ZOELLER



Fig. 9:
ROTOPRESS with e-PTO



Fig. 10:
Plastic trim panels on the
ROTOPRESS DUALPOWER

An electrically powered lifter is easier to control and has less loss, including with otherwise conventionally-powered hydraulic bodies. It also offers potential savings for the operation of a conventional refuse collection vehicle if the lifter can be driven by the existing 24 volt vehicle electrical system. An initial case study is being conducted in the city of Dortmund to verify the desired fuel savings potential (Fig. 7 and 7a).

A further working area in the case of the refuse collection vehicles of FAUN and ZOELLER, on the campaign for lower fuel consumption and lower noise emissions is the plug-to-charge battery pack for the electrical operation of the bodies and the lifters of refuse collection vehicles. This system is described as an e-PTO (electric power take-off). In conventional vehicles the combustion engine supplies energy



Fig. 7 and 7a:
E-Delta lifter from ZOELLER

via the hydraulic pump attached to the PTO for the compression of the refuse and to lift the collector. In a vehicle equipped with e-PTO a battery

pack (identified by the unit behind the driver's cab), which is charged by night at the city depot in low power-draw periods, delivers the energy for the



Sprocket wheel



A project is currently underway at FAUN on a multi-element sprocket wheel made of plastic to reduce weight and maintenance. This kind of sprocket wheel has distinct technical benefits. A project to analyse the wear behaviour and the long term durability is currently underway.

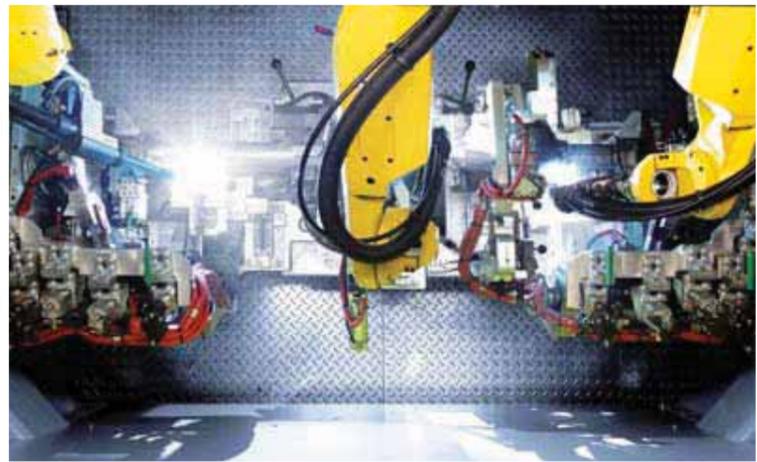
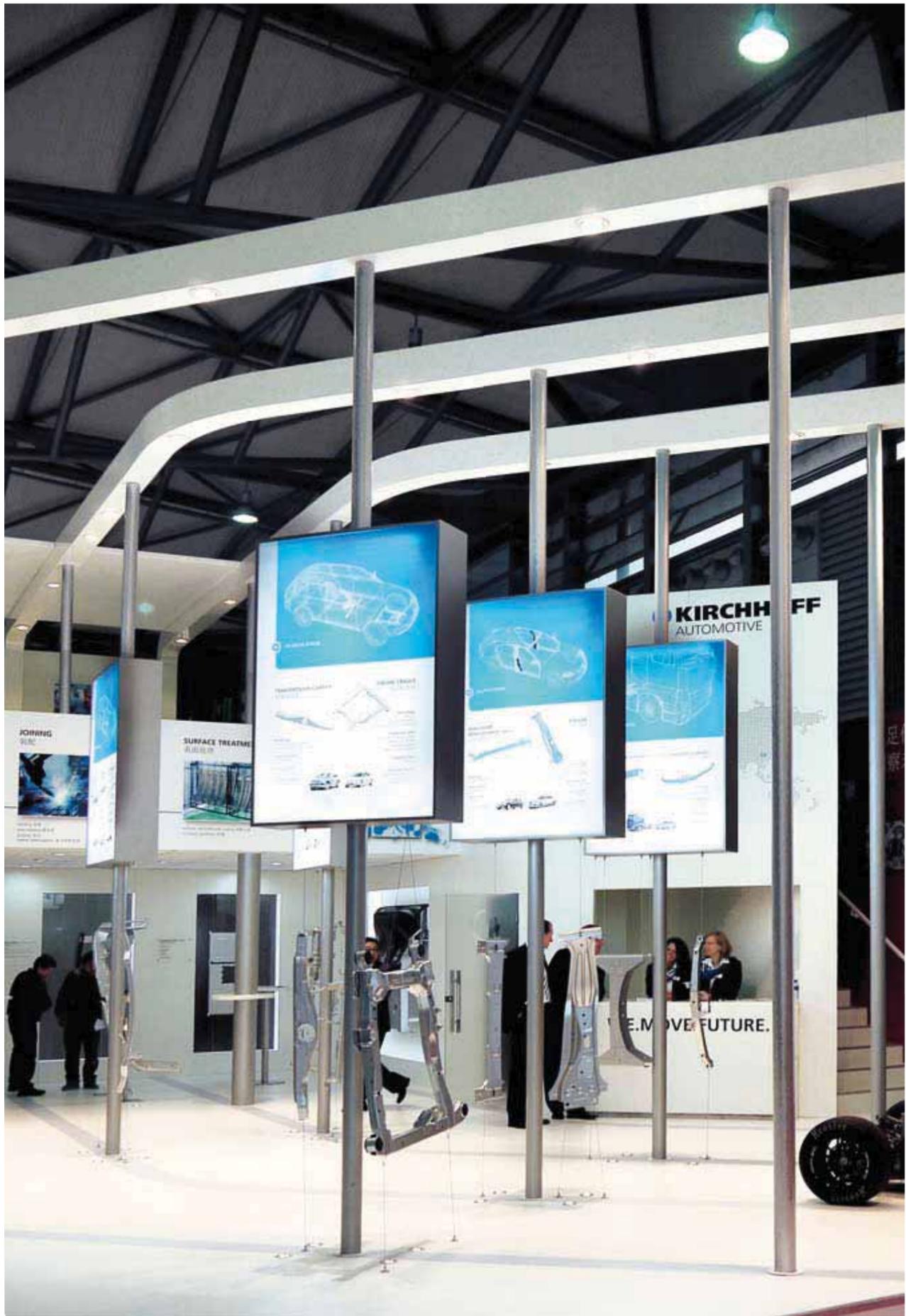
electrical operation of the compacting machinery of the body and of the lifter.

First vehicles with MEDIUM XLS body and E-Lifter (Fig. 8) plus ROTOPRESS and e-PTO (Fig. 9) have started work with our customers Meldgaard in Denmark. It will soon be possible to determine comparison data about consumption depending on collection performance.

As well as the energy-efficiency of our products, we are also researching in terms of extending their service life, minimising maintenance, manufacturability and the weight of components from which the refuse collection vehicles and lifter are produced. Weight reduction and the reduction of remaining component damage is a priority in the work to replace aluminium parts, particularly with deep-drawn plastic parts in the case of trim (Fig. 10).

Also in the two other business divisions R&D work is being carried out in the area of efficiency improvements, material use optimisation and complexity reduction to increase customer benefit. We will report on these in future issues.

Dr. Johannes F. Kirchhoff



KIRCHHOFF
AUTOMOTIVE

WE.MOVE.FUTURE.

12-57



Innovation and flexibility against volatility and uncertainty

— KIRCHHOFF Automotive develops strategies to counter challenging market developments.



The automotive world is undergoing a radical change. Markets are becoming increasingly volatile, and forecasts increasingly unreliable and vague. Southern Europe is in crisis, as we can see in Greece and Cyprus, but the economies of Spain, Italy, and Portugal are also stagnating or in recession, which, together with the euro crisis, is starting to affect more and more countries in Europe.

Large automobile manufacturers are postponing new vehicle start-ups, and numbers of JIT calls and orders fluctuate considerably. The lifecycle of vehicle models has halved over the last few years in some cases: the Golf I still had a life cycle of ten years, while

the Golf VI just has five years. OEMs are striking up alliances and collaborations and are significantly reducing the number of key suppliers. Plants are being closed and production is being transferred. New manufacturers are entering old and new markets, thus increasing competition and making it more difficult to survive. Well-known, established companies are adjusting their personnel levels.

At first glance, this does not seem to be good for global automotive production. Manufacturers as well as suppliers will be put to the test and find themselves faced with new challenges to overcome. KIRCHHOFF Automotive and all associated Group companies

are also affected by these influencing factors; they are unable to shield themselves from these events and the circumstances prevailing in the market and influencing global development. Conversely, this clearly means that we need maximum independence from manufacturers, markets, and products to have a very high degree of flexibility. To this end, our Company must continue to consistently pursue the approach it has already taken.

Specifically, this means further diversification of our customer and product portfolio in order to offset the market fluctuations thanks to a broad base, so that existing jobs are secured in the long term and additional new jobs can

be created worldwide. Furthermore, it goes without saying that the opportunities for expanding existing or establishing completely new locations such as in Hungary (Esztergom) or China (Shenyang) will be reviewed and implemented. Additional expansions and new locations will also help us, in the future, to upgrade and intensify our market position and proximity to our customers in order to generate follow-on orders and therefore capacity utilisation.

In addition, our focus and commitment must lie in the development of new products and processes. The new ACS, the Automotive Center Südwestfalen, also represents a key step and

pointer in this direction; it is opened in July 2013 in the immediate vicinity of the Attendorn location.

The new PLM system optimally supports the use and exploitation of existing plants, machinery, and facilities. This Product Lifecycle Management tool guarantees uniform global standards and simultaneous information and project management.

We are also working on the optimisation of our internal structures and resources in order to continue improving the cost situation and therefore our competitiveness. Despite the difficult current situation and the adverse circumstances and unpredictability, we,

the Executive Board, are certain that our market position can survive and grow.

We are confident that KIRCHHOFF Automotive as one of the large successful development suppliers can and will join the automobile manufacturers on the path to a mobile future. We will offset the volatility and uncertainty of the markets with innovations and a high degree of flexibility. Because: WE.MOVE.FUTURE.

Dr. Thorsten Gaitzsch

Ready for growth

The automotive industry in Mexico makes an annual profit of almost 30 billion USD, provides 500,000 jobs and makes the country the eighth biggest vehicle manufacturer of the world.



Mexico is among the top ten countries in the world producing cars, trucks, parts and components for the automotive industry. Because of this solid, dynamic industry the Mexican economy continues to grow.

From a production perspective, the main reasons for the success of the industry are Mexico's proximity to the United States, competitive and specialized employees, and free trade agreements. Mexico continues to attract foreign investment in this sector. By 2017, the capacity to produce four million cars and the duplication of direct and indirect jobs are expected.

Questions to Dennis Berry, CEO Van-Rob:

A. Heine: North America is one of the biggest growing markets of the global automotive industry besides China and Russia. In the first months of this year the sales of passenger cars and light vehicles increased by 8 per cent. Mr. Berry, what is your opinion? How long will we see such a growth in North America?

D. Berry: We have been fortunate since the crisis of 2009. We have continually seen growth from those very

low levels. I would say that we will continue to see modest growth for at least the next 3 years and it will be roughly a 3 per cent increase each year. That will bring automobile sales into the low 16 million SAAR (Seasonally Adjusted Annual Rate) level and we will hold there for a few years.

A. Heine: The growth in Mexico is indeed stronger than in the rest of North America. How well is Van-Rob placed in Mexico? Can we expect new investments in our Mexican plants or even the fitting of new plants to help the car manufacturers manage their growth?

D. Berry: Certainly the new growth in Mexico is very important to us. With our three facilities, we are positioned very well in Mexico. The most northern plant is located in Hermosillo. We have our largest plant in Querétaro, where we started in 2000. Furthermore, we also have a plant in Puebla. So our locations are matched very well for the customers that are there today and for sure for the customers that are coming. Honda just opened a new plant in central Mexico and we are less than an hour away. Also Audi is opening a plant in the region of Puebla, thus again in the vicinity of one of our

existing plants from where we already service Volkswagen. As Audi comes to that region, we will be investing and growing our facility in Puebla. We have a need for additional capacity there and we very much look forward to working with Audi to continue to grow with them along with our other customers in that region.

A. Heine: How important is the Mexican market for Van-Rob, for example regarding a balanced customer portfolio?

D. Berry: Today Mexico makes up 28 per cent of our sales and as we go forward, we see that increasing. With that increase, we will need more capacity, like I spoke of, in the Puebla area. Audi is in the process of opening their new plant in the Puebla region. This facility represents organic growth since it is their first plant here in North America. Furthermore, Audi's new location in North America complies with our strategic goal to minimize risk by a better balanced customer portfolio.

A. Heine: Is the Mexican business additional business or will the growth in Mexico jeopardize the utilization of our plants in Canada and in the USA?

DENNIS BERRY
CEO Van-Rob in an interview

D. Berry: Well as far as Canada goes, there is a slow reduction in the number of cars that are going to be produced in there. We see that over the next few years, Canada will drop from 2.5 million cars produced to about 1.8 million. Some of that loss is because of the shift to Mexico, but also a factor is the shift in the OEMs market share. With Audi coming to the North American market, it is reflective of this fact. The German OEMs are steadily continuing to grow their market share since the crisis. Honda has also added new capacity in central Mexico which is due to the increase in the Asian mar-

ket share. So the answer to the questions is that it will have minimal effect on our utilization of our facilities in the USA and Canada because these are new customers for us in North America. What it will do for us, is to help us grow and diversify our customer base.

A. Heine: Which technologies are very important in the future, laser welding, hot forming, the use of aluminum for instance?

D. Berry: All of these technologies are important today, and will be important in the future as they help the

customer achieve a vehicle weight reduction. These technologies help us to provide solutions to our customers. We have some stringent miles per gallon (MPG) requirements, 54.5 MPG by 2025 and certainly in Europe the CO₂ reductions are significant as well. One of the ways the OEMs can achieve this target is reduction of mass, respectively weight, thus the production of lighter components. Laser technology allows us to use thinner materials and this joining process has less distortion from the heat which enables us to achieve excellent dimensional accuracy. Therefore we are able to provide

lighter, more accurate products for our customers. Laser technology, hot forming and aluminum solutions are competitive advantages. With them, we can offer our customers solutions for current and future requirements for weight reduction in the vehicle. In 2014, 40 per cent of the products that we produce here will be laser welded. Therewith we are one of the leading suppliers in that technology field.

A. Heine: Will Van-Rob and KIRCHHOFF Automotive in the future benefit even more from each other than today regarding their core competences?

D. Berry: In the context of our strategy 2020, we are insistantly working at expanding our core competences, sharing that information and focusing our specialists' attention both in North America and Europe on the respective areas. Focusing on technologies and competences allows us to provide lightweight solutions. Mixed materials and aluminum solutions, we are doing all those products today here and in Europe and we are focusing on these and other strategies as we go forward so that we are able to provide solutions. That is what our customers need: solutions that are going to help

them achieve their objectives. We regard as our task and responsibility to support our customers at it today and in the future.

The interview was performed by Andreas Heine, Director Communication and Marketing.



Info

The development of the automotive industry in Mexico

Eight of the ten major companies in the world for vehicle construction have assembly plants in Mexico. Over one thousand automotive supplier companies are in Mexico, most of which are from abroad. And Mexico continues to draw foreign investments in this sector. The forecast for 2017 foresees four million vehicles being produced and the doubling of direct and indirect jobs.

Honda is building a new plant in Celaya, which will take up production in the spring of 2014. In Salamanca, **Mazda** is building a new plant. Vehicles will start to roll off the line in the spring of 2014

too. In San Jose, Chiapa (by Puebla), **Audi** is constructing a new plant with the start of production scheduled for spring 2016. **Nissan** is expanding its branch in Aguascalientes. Completion is scheduled for the end of 2013. Furthermore, **Mercedes-Benz** and **BMW** are investing in additional production plants in Mexico. The locations for these sites are not yet known.

Volkswagen is continuing to invest in its Mexican plant in Puebla, which will produce the seventh generation of Golf from 2014. Plans to construct a new Volkswagen plant are also under way.

Audi is breaking new ground

Foundation stone laid for the first Audi plant in North America



left: at the groundbreaking ceremony: f.l.t.r.: Rupert Stadler, Chairman Audi AG, Ildefonso Guajardo Villarreal, Mexico's Minister of Economic Affairs and Rafael Moreno Valle, Governor of the Federal State of Puebla | right: Audi chief Rupert Stadler (left) hands over the keys to an Audi Q5 in a special edition for the police of the Mexican state to Rafael Moreno Valle, Governor of the Federal State of Puebla



Lecture by Matthias Müller, Project Manager Plant Mexico, Audi AG

The foundation stone for the first Audi plant in the Mexican town of San José Chiapa has been laid.

A new plant with press shop, car body shop, paint and assembly is being constructed at a cost of more than EUR 900 million. From mid-2016, the successor generation of the Q5 SUV model will roll off the assembly line in Mexico.

As part of an Audi Q5 supplier workshop held from 2–5 May 2013 in Mexico, the key potential suppliers were made party to the coming challenges and provided with the necessary information. As KIRCHHOFF Automotive representative Dr. Thorsten Gaitzsch, Chief Technology Officer, took part.

The event was perfectly organised and defined by:

- the right Audi contact partners
- comprehensive information
- a fascinating program
- a high level of management presence and
- adequate time for interesting bilateral conversations as well

The new Audi location is being built in the federal state of Puebla approximately 60 km south west from the city of the same name. In just three years' time, the first Q5 vehicle will roll off the production line. It is hard to imagine as the area of 400 football pitches

placed side by side is currently fully undeveloped.

Although the plant will reproduce the entire process chain from the press shop all the way to delivery to customers (also known as "Zählpunkt 8" [reporting point 8]), Audi is working very closely with its global partners on this project. Only an estimated 30 parts will be produced on site for the body-in-white phase. However, these parts are mainly outer skin parts. The remaining parts will be sourced from the market. For this reason, and because Audi would like to achieve a local content of up to 90 per cent, our Company is hoping to be awarded con-

tract packages in the body-in-white and chassis product packages. These potential contracts would further reinforce our Mexican presence either as an extension of existing capacities at the Van-Rob KIRCHHOFF (VRK) plant in Puebla or also in the form of a new plant. Apart from obtaining vital information that will help during the tendering period, which has already commenced, approximately 100 invited proprietors and managing directors from Asia, North America, and Europe also had the pleasure of testing the Q5 both on- and off-road.

"All told, the workshop was a very interesting event, which was also fa-

cilitated and provided excellent support by the Mexican and German authorities. Events included sessions with the President of Mexico (Enrique Peña Nieto), the Governor of the state of Puebla (Rafael Moreno Valle), the Mexican Minister for Economics (Ildefonso Guajardo Villarreal), and the German Ambassador to Mexico (Edmund Duckwitz). Audi also had top-level representation led by Chairman of the Board of Management, Prof. Rupert Stadler, as well as Board Members Dr Bernd Martens (Procurement), Prof. Thomas Sigi (Human Resources), and Dr Frank Dreves (Production)", reports Dr Thorsten Gaitzsch.

The supplier workshop has certainly contributed towards intensifying existing contacts, creating new ties, and thus strengthening a more extensive co-operation for the future.

The fact that both Audi and other brands in the Volkswagen Group have placed numerous orders with us in the past and during the current business year allows us to look positively towards the future and towards continued growth with the entire Volkswagen family.

Anja Marcus

HYLIGHT: German Federal Ministry funds research and development project

KIRCHHOFF Automotive is working on the development of a technology for adhesive bonding hybrid plastic/metal composite parts in the injection moulding process.



Front end carrier for the Ford Focus used as a test product and demonstrator within the project

Since March 2011, the R&D team has been working together with universities and industrial companies to develop a technology for plastic/metal hybrid components in the injection moulding process. The HYLIGHT project is being funded by the Federal Ministry for Education and Research. The project's remit is to create a reliable adhesive bond between the metal which is coated during the coil-coating process and the injection moulded plastic. The front-end carrier for the Ford Focus manufactured by KIRCHHOFF Automotive in Iserlohn/Germany is serving as a test product and demonstrator within the project.

The actual production way of hybrid components are, forming, cathodic dip-painting of metal parts. These parts are inserted into an injection

moulding tool and injected with plastic via cut-outs and seams. This results in a form-fitting connection between metal and plastic. With the new technology, a metal sheet is coated with adhesive, formed and then inserted in an injection moulding tool. The metal sheet with the adhesive coating is injected with plastic, resulting in an adhesive bond between the plastic and adhesive coating. The benefits of this process are an improved metal/plastic bond, which shows the same performance with less material input.

The staff in the Research and Development department at KIRCHHOFF Automotive have been focusing on component production and the properties of the adhesive coating after forming. An optimal component design should be created in the early

design and construction phase. An integrated simulation is being carried out throughout the entire duration of the project for this purpose. With the potential for deployment of such coated metal parts in series production, the Research and Development department has then been assessing the forming process.

The hood ledge test has already been carried out by Lanxess on a front end manufactured using the adhesive bond technology. This test has proved the bond strength and the associated improvement in the component's mechanical properties.

In the further project phase, Hühoc will examine the coating of coils using a system based on adhesives from Evonik. Once the coils have

been cut to metal blanks, KIRCHHOFF Automotive employees from Iserlohn are responsible for forming the metal blanks using the series-production system. The manufacture of adhesive bonded metal/plastic composite parts will subsequently be undertaken by Montplast using the injection moulding with a plastic supplied by Lanxess. The testing of the demonstrator will be done at the automobile manufacturer Ford. The project is scheduled to be completed in February 2014.

Rolf Schwarzer, Christoph Wagener, Stefan Szabo



Info

Adhesive bonds are all bonds where the bonding partners are held together by means of atomic or molecular forces. Simultaneously, these are permanent joint connections that can only be separated by damaging the adhesive: soldering, welding, gluing, vulcanising.

The word coil is used to denote metal bands or steel strip rolls.

The country needs new products

KIRCHHOFF Automotive is present with innovative, newly developed individual components in many models.



Front Bumper

Customer / model
Ford / Ford Fiesta model 2012

In October 2012, the Ford Fiesta with its facelift arrived on the market. The vehicle with its new front design offers increased safety and complies with the guidelines issued by Euro NCAP (European New Car Assessment Programme), who carries out crash tests with new car types and subsequently assesses their safety.

In this context, a new front bumper was developed, which was supplied by KIRCHHOFF Automotive in collaboration with Shape. It has a roll form design, which was produced at the KIRCHHOFF Automotive plant in Iserlohn/Germany, and installed by Ford in Cologne/Germany.



Axle Bracket

Customer / model
Opel / Opel Adam

KIRCHHOFF Automotive is producing an axle bracket—a complex drawn part with a thickness of 3.5 mm—for the new Opel Adam. There is a left and right version, the difference being in the drawing height. Additionally, a bracket is welded on to both parts to act as a connection point for the brake line. KIRCHHOFF Automotive developed the manufacturability of the component in terms of production process in conjunction with General Motors. The very narrow tolerances in the connection area of the axle proved to be particularly challenging in this process.



Door Locking Catch

Customer / model
BMW / all BMW vehicles since 2011
Illustration: BMW 640i Gran Coupé

The door locking catch and Isofix bracket assembly (for a safe fixation of the child seats to the rear bench seat) are joined using laser welding, a technology offering the benefits of technical performance and precision.

For the customer BMW, KIRCHHOFF Automotive has been able to implement several products for the new car models of the 1- and 3-series as well as for the Mini Paceman. Special emphasis was placed on the aspects of integration and weight reduction in the steel front end structure that we developed. In the body department, we were able to integrate our expertise in the fields of “high-strength steels” and “manufacturability analysis with optimisation of deep drawn components”, e.g. for products such as side impact beams for front and rear, topshell spring supports, and console seat fixings.



Isofix Bracket Assembly

Customer / model
BMW / BMW 1- and 3-series
Illustration: BMW 3 Series Gran Turismo Sport Line

This year OEMs will bring about 32 new vehicle models onto the market. In this concern KIRCHHOFF Automotive is available as a competent partner of the car manufacturers with new technologies and innovations. We are pleased to underline this again with innovative col-

laborations in various new projects with automobile manufacturers and would like to show you some examples.

Dr. Thomas Steinhaus

China and Auto Shanghai continue to expand

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Present at Auto Shanghai for the third time and in China for six years, KIRCHHOFF Automotive takes advantage of the rapid development and huge potential of the Chinese automotive market.

Between 20 and 29 April, Auto Shanghai opened its doors to industry specialists from around the world as well as enthusiastic car fans. The trade fair has now become the largest and most important automotive show in Asia and therefore also one of the most significant international trade fairs for German automotive suppliers. This year, KIRCHHOFF Automotive again welcomed its customers at a light, open-plan trade fair stand with a surface area of 130 square metres over two storeys.

Numerous visitors, including representatives from German and Chinese manufacturers, found out about the latest developments in metallic structural parts and hybrid joints for lightweight automotive construction.

In a separate innovation area, our Company showcased selected products providing solutions for simplified vehicle structures with constant passenger safety levels. Industry specialists were particularly interested in a hybrid bumper made from a steel and alumin-

ium compound with a seat shell made from glass-fibre-reinforced plastic.

The industry specialists of the future were also represented: Over 40 students from Tongji University of Shanghai, where KIRCHHOFF Automotive sponsors the Chair for lightweight automotive construction, accepted the invitation to the trade fair and to the KIRCHHOFF Automotive stand. A workshop on the topic of "innovations and the latest research in the field of lightweight construction and



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Picture left: visit of Matthias Wissmann, President of the VDA (centre) | Picture right: Dr. Tony Chen, Vice President Supply Chain Geely



f.l.t.r.: Visit of students of the Tongji University of Shanghai | Simon Stephan (left) und Sam Li (right) are pleased about the visit of Zhou Hengzhong, Senior Manager Purchasing Chery Jaguar Landrover | Andreas Heine in discussion with Prof. Wang of the Tongji University of Shanghai | Friendly reception by: Simon Stephan, Managing Director KIRCHHOFF Automotive Suzhou; Dr. Thorsten Gaitzsch, CTO and Andreas Heine, Director Communication and Marketing



From top left to bottom right: Our youngest car enthusiast in the electric race car | Sam Li with Prof. Wang | Booth assistance international | Jenny Gao (centre), Global Sourcing Buyer Renault | Michael Eichert explains innovations in the field of light weight construction | Zhou Hengzhong (left), Senior Manager Purchasing Chery Jaguar Landrover | Visit of Hitoshi Tajima (2.f.r.) Vice President, Purchasing Mazda Motor China. KIRCHHOFF Automotive Suzhou has received its first order for a cross car beam from Changan Mazda Automobile (refer also to K>MOBIL No. 40, page 35)

joining technologies" provided additional incentive to study. The students found the highlight of the KIRCHHOFF Automotive stand particularly exciting: an electric racing car that was developed, built, and used successfully in races by the "Speeding Scientists Siegen" student team at the University of Siegen.

In 2013, KIRCHHOFF Automotive will open its third location in China at Shenyang, thus addressing concerns about increasing order volumes in the Chinese market. A long-term comparison shows how important China has become as a production location for the German automotive industry: in 2000, German passenger car pro-

duction in China only made up nine per cent of all foreign production by German manufacturers. In 2012, this proportion increased to 35 per cent. Over one in every three cars that German manufacturers produce outside Germany at international locations is thus manufactured in China.

In recent years, the story of automobile growth in China has been more fast-paced than in any other country: the passenger car market in China has grown twenty-fold since 2000—from 614,000 units in 2000 to more than 13.2 million new cars in 2012. At the same time, German manufacturers were able to increase their market share to more than one fifth, dem-

onstrating the high level of competitiveness of German OEMs and their suppliers. This is an ideal position to hold in order to continue participating in the forecast growth of the automotive country of China—and a development that KIRCHHOFF Automotive will share with its customers.

Sabine Boehle



Info

When one trade fair finishes, another one starts: **the most important international automotive trade fair, the 65th International Motor Show (IAA) Cars, takes place in Frankfurt/Main between 12 and 22 September 2013.**

KIRCHHOFF Automotive will again be represented at the world's largest exhibition for vehicle manufacturers and their suppliers with a stand covering a surface area of 400 square metres.

"The IAA is more than just a trade fair—it is 'the most automobile show in the world'", emphasises Matthias Wissmann, President of the German Association of the



Automotive Industry (VDA). Experience the IAA and find out more about the latest developments in light-weight construction, materials, and joining technologies at **our trade fair stand in hall 5.1, stand B08.**



Info

Facts and figures about China as a growth market (Source: VDA)

China's automotive market is still growing

Since 2008 (5.7 million passenger cars), the market volume in China has more than doubled. However, the motorisation rate in China is still comparatively low. The passenger car density is 37 units per 1,000 inhabitants. In comparison: in Germany there are 525 passenger cars per 1,000 inhabitants. In the past year, the Chinese passenger car market grew by 8.4 per cent. Overall, growth of 6 per cent is forecast for 2013, an increase of around 14 million units, thus exceeding the western European passenger car market by 2.5 million vehicles.

German manufacturers increase their market share to more than one fifth

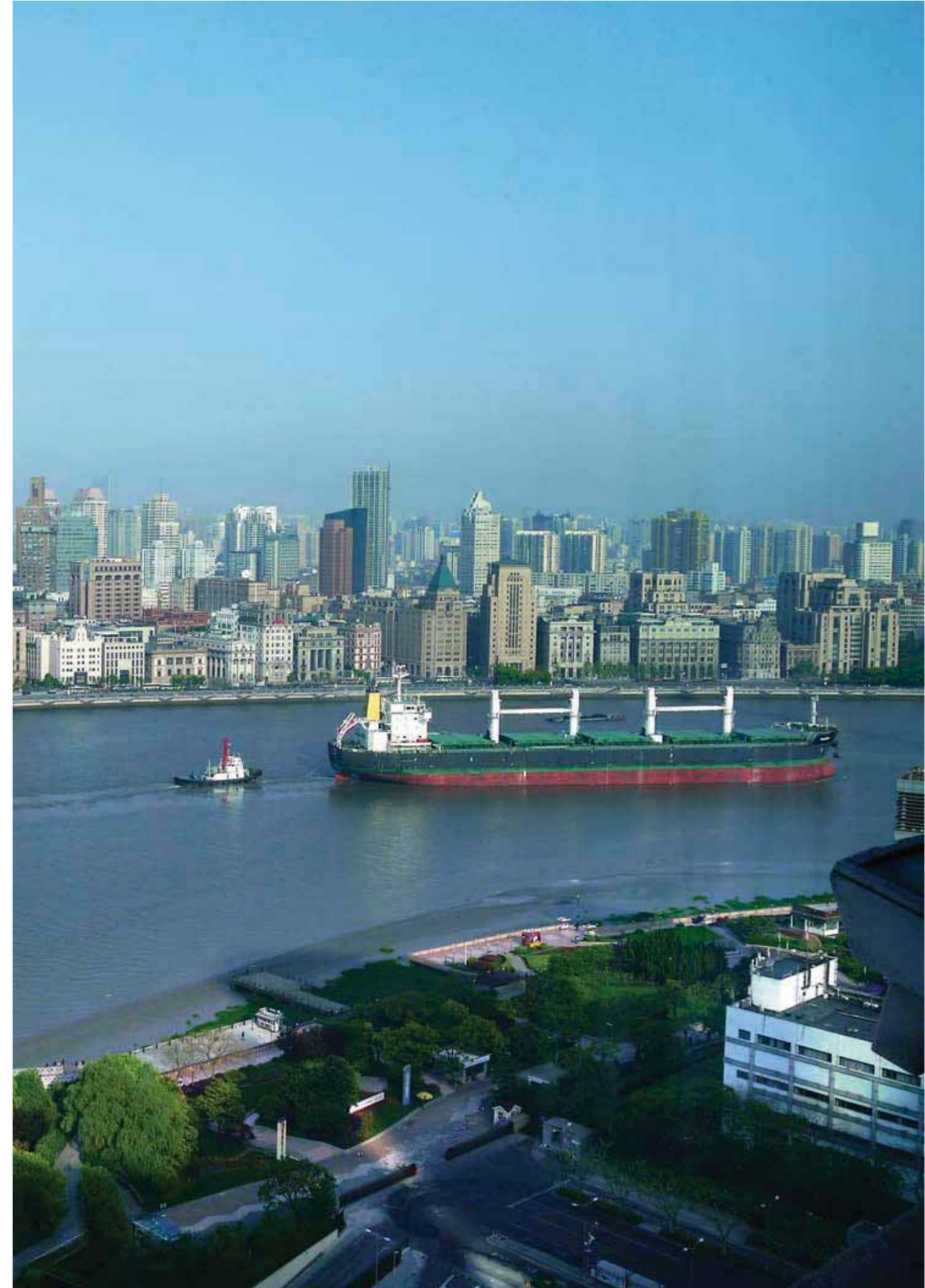
Around 30 years ago, German manufacturers were among the first international companies to be active in China, thereby laying the foundation for today's growth. Since 2009, German OEMs have increased their market share to 21.4 per cent and almost doubled passenger car sales in China with 2.84 million units. In the year to date, the market share has risen to 21.6 per cent in the first two months. This means that more than one in every five new cars that are sold in China today bears a German badge.

Local production is growing

Since 2005, German manufacturers have increased passenger car production in China sevenfold to 2.9 million units in 2012.

China considers it very important for vehicles to contain as much "local content" as possible. German manufacturers and suppliers have contributed considerably to this in recent years. Thus, certain models, which were classified as German exports one year ago, are now—due to the higher value added proportion—classified as produced in China in statistical terms. This trend is continuing in the current year.

China is also becoming more important for Germany as a supplier location. Exports of parts and accessories from Germany to China amounted to an export value of EUR 7.7 billion in 2012, an increase of 30 per cent compared with the previous year's value.



Two anniversaries — one success story

50 years of Gametal, 20 years of KIRCHHOFF Automotive in Portugal



50 years Gametal
20 years KIRCHHOFF Automotive in Portugal

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In 1963, four managers founded the company Gametal in Cucujães, 40 km south of Porto, the industrial capital of Portugal. Thirty years later, KIRCHHOFF Automotive took over the company and thus started its own global expansion.

After its foundation, production was initially carried out in a small building

in Cucujães in 1967. From the outset, Gametal produced tools and formed components specifically for the automotive industry, which was still being established in Portugal at that time.



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In the 1980s, the French group of companies Bertrand Faure—now Faurecia—acquired Gametal and expanded its activities. In 1993, the company was then sold to the KIRCHHOFF

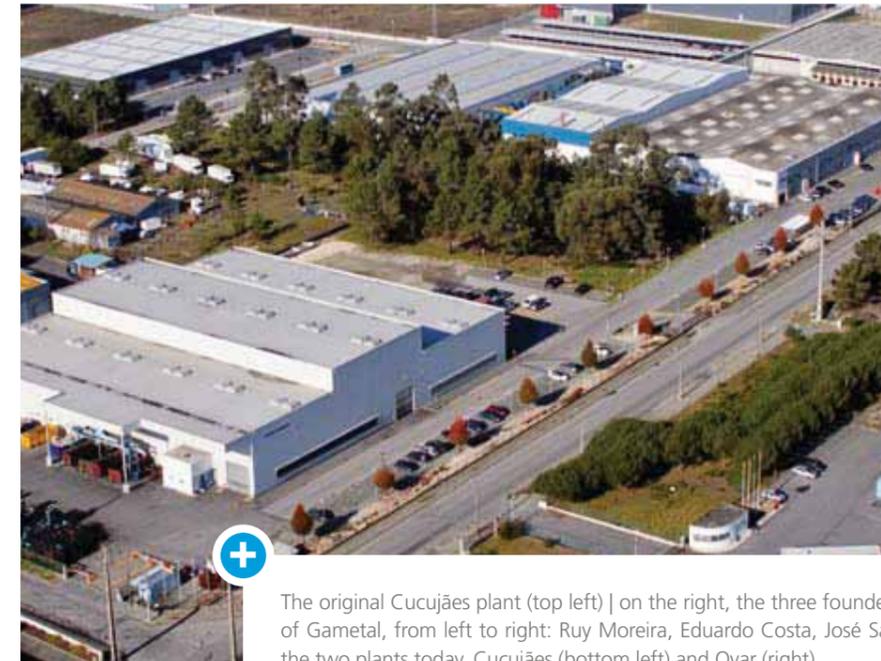
Group and developed rapidly. Although production in Cucujães had been increased many times, the location reached its capacity limit at the end of the 1990s. In 1999, all presses

and parts from the welding stations were eventually transferred to a second plant in Ovar, which had also been extended several times already in the meantime. The number of employees grew from the initial 70 to nearly 550 and yearly sales forty-folded.

The combination of German know-how and Portuguese adaptability are the key to this success. The focus is always on implementing the latest technologies and equipment: forming presses, robot welding, and surface treatment.

This year, after 50 years of Gametal and 20 years of KIRCHHOFF Gametal, the company is celebrating a double anniversary in two respects: two anniversaries, one success story.

Tomás Moreira



The original Cucujães plant (top left) | on the right, the three founders of Gametal, from left to right: Ruy Moreira, Eduardo Costa, José Sá | the two plants today, Cucujães (bottom left) and Ovar (right)

A project of superlatives

In December 2010, General Motors awarded the contract for several large structural components for the K2XX platform to Van-Rob. Since that time, the entire Van-Rob family has been fully engaged in the design, development, and product realisation process. The project is the largest product launch in the history of Van-Rob and KIRCHHOFF Automotive.

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The new 2014 pick-up truck from General Motors built on the K2XX platform



The new grille opening reinforcement (GOR) for the K2XX platform

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With more than 1.2 million vehicles worldwide, the K2XX platform is the largest platform manufactured by General Motors in terms of volume, from which all pick-up trucks and SUVs are produced (Chevrolet pick-up trucks, GMC pick-up trucks, and Cadillac SUVs). K2XX is also the largest product launch in the history of Van-Rob and KIRCHHOFF Automotive. Four General Motors assembly plants will be supplied with support from seven Van-Rob plants in Canada, the US, and Mexico, including a new JIT plant in Dallas, Texas. Once in full production Van-Rob will produce 2,780 km of laser weld, 720 km of MIG weld, as well as 9.5 million spot

welds each month on 20 million stampings and 48 million bought-in parts.

In order to manufacture this volume of orders, Van-Rob will invest over USD 34 million in machinery and equipment. Besides many other specialised machines, this includes twelve laser welding cells, 20 MIG welding cells, nine spot welding cells, six assembly cells, and 61 projection weld cells, as well as many other specialised machines. Our teams are working with great commitment towards the successful implementation of this massive project.

Our biggest challenge is the grille opening reinforcement (GOR), a

complex component made from galvanised steel tubes and stampings, which are laser welded together, e-coated (CDP), and subsequently reinforced with a structural plastic moulding. A new welding process had to be specifically developed for the galvanised material in the GOR laser welding process. Nevertheless, with a great deal of initiative and commitment, Van-Rob was able to satisfy the customer requirements and expectations. The end of the Mazda 6 programme was a cause for concern at Van-Rob Tecumseh. Employees were therefore all the more pleased to hear that Van-Rob had been selected as a supplier for General Motors's K2XX programme.



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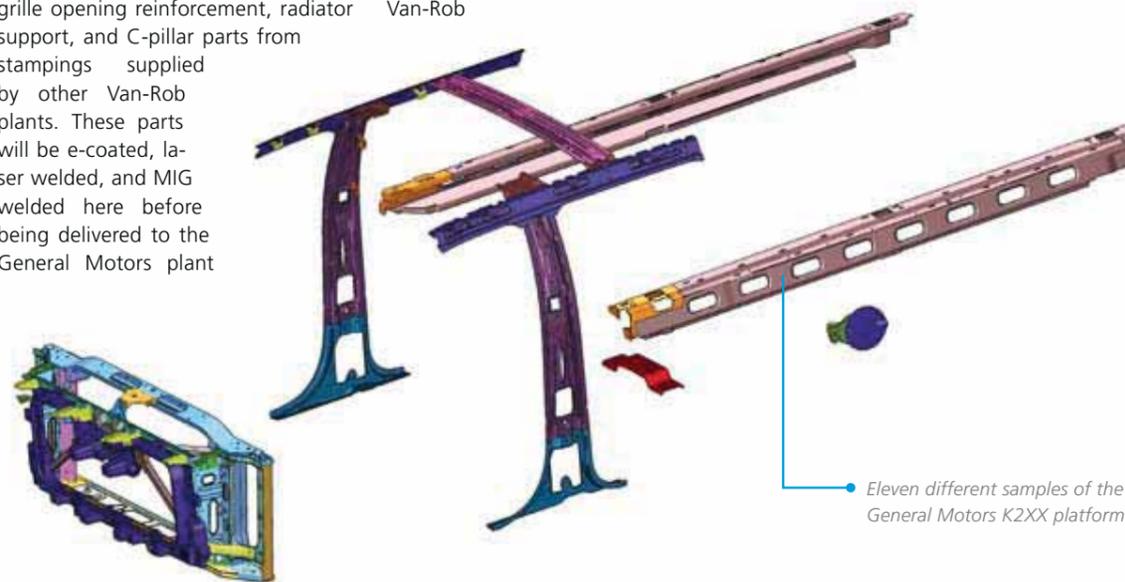
Since then, employees at Tecumseh have received training in laser safety, quality, and weld inspection.

All employees have rapidly acquired extensive knowledge about laser welding. The new Van-Rob plant in Dallas will also play a part in the launch of K2XX. Dallas will be producing the grille opening reinforcement, radiator support, and C-pillar parts from stampings supplied by other Van-Rob plants. These parts will be e-coated, laser welded, and MIG welded here before being delivered to the General Motors plant

located nearby in Arlington. However, it will still be many months until the e-coating system in the Dallas plant is fully installed and operational. At least 150 jobs will be created in the Dallas-Fort-Worth Metroplex within the scope of the Van-Rob K2XX programme. Therefore, in partnership with local universities and technical schools, Van-Rob

Dallas has already started a recruitment programme for graduates with the required technical degrees.

Jeff Molyneux, Christi Williams



Eleven different samples of the General Motors K2XX platform

First order from BMW for Van-Rob Manchester

In the middle of 2013, Van-Rob in Manchester, Tennessee will start producing stampings and welded assemblies for the new BMW X5 that will come out in November 2013.



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Exemplary chart of the first components that Van-Rob delivers for the new BMW X5, using the example of the current BMW X5

The BMW X5 will be produced in the assembly plant in Spartanburg, South Carolina, which opened in 1994 and builds all of the company's SUV models for worldwide distribution.

Based on the close working relationship between BMW and KIRCHHOFF Automotive in Germany, Van-Rob established partner-like connections with the Spartanburg operation. The launch of the new BMW X5 offers the ideal opportunity to expand this new supply chain and to support BMW USA as competitive partner.

While Van-Rob in Manchester already supplies almost all US automotive manufacturers directly, including Ford, General Motors, Honda, Mazda, Nissan, Toyota and Volkswagen, this is the first BMW order for this location. It involves the production of stamping parts and components for both body assembly and general assembly.

In Manchester, all parts are made in stamping presses up to 600T and subsequently joined to bigger components using spot or MIG welding technologies. The parts that are then coated

are screwed in when the vehicle is assembled.

The investment made in the Manchester plant and the expansion planned for 2014 offer our growing customers and Van-Rob the opportunity for further orders or the intensification of the cooperation in North America.

Michael Kobiske, Jeff Grubisich

New Corvette Stingray sets standards

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Van-Rob Manchester, Tennessee supplies 29 stampings for the all-aluminum frame of the new Corvette Stingray.

The seventh generation Corvette will be an all-new model for 2014 which went into production in June. Van-Rob produces stampings and welded assemblies for the General Motors Corvette assembly plant in Bowling Green, Kentucky.

Van-Rob Manchester has been a Corvette supplier for several years and is Tier 1 to nearly all US automotive manufacturers. The Manchester plant produces metal stampings and various welded subassemblies.

The new C7 model is taking technology to a new level by using an all-aluminum space frame in their base model along with numerous other

high-tech materials and features to provide performance rivaling cars five times the price. The upgrades to the body, interior, power train and chassis/suspension are so significant that General Motors has re-introduced the Stingray name last used in 1976.

All parts for this Corvette are various grades of high strength aluminum. The new chassis is 99 pounds (45 kg) lighter than the previous generation's steel frame but 57 per cent stiffer. The various aluminum pieces are welded, using Spot, MIG or Lasers plus adhesives to create the larger assemblies.

Of significance to Van-Rob, we will use a new General Motors proprietary

method for Spot Welding of aluminum which puts Van-Rob Manchester on the cutting edge of this technology. In addition to the new robotic Spot Weld cell, Van-Rob invested in a new robotic MIG weld cell.

Michael Kobiske



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With the new Corvette Stingray the seventh generation in the 60 years of the marque's life is newly introduced in 2014 in the car showrooms



left: Usage of the new General Motors proprietary method for Spot Welding of aluminum | right: C7 Corvette all-aluminum frame

New facilities for a new product

Commissioning of special welding facilities for the MAN Front Underrun Protection in Iserlohn/Germany—Run @ Rate on 13–14/05/2013

Since the start of 2013, new facilities were commissioned at Iserlohn: special welding facilities for the new Front Underrun Protection (FUP) product for the customer MAN.

The machine was developed and constructed by LEWA based in Attendorn/Germany in conjunction with KIRCHHOFF Automotive. Due to the exceptional properties of the FUP, the special welding facilities are larger than conventional welding systems.

The FUP is 2,324 mm in length, weighs 38.6 kg, and has a weld seam measuring 9,500 mm in length. Consequently, the product is unique at KIRCHHOFF Automotive in terms of dimension. For the coming years, it is forecast that approximately 50,000 FUPs including pedestals will be called up annually by MAN. With a turnover of an estimated EUR 7.5 million, this has considerable impact on the location's figures.

At the end of 2012, Stefan Keller, now Head of the Iserlohn press shop, held a first KAPS workshop about welding (PPS1). After introducing the known standards TPM and 5S, the focus shifted to compiling a standardised workflow.

LEWA has already trained and instructed six system operators, two fitters and four programmers in preparation for the start of FUP series production (incl. pedestals). Now the objective is to achieve the pre-defined cycle time of 4.5 minutes at a planned availability of 85 per cent. An important milestone was the visit by our customer MAN from Munich on 13 and 14 May: the progress with the facilities has been assessed and the entire process chain has been audited. No discrepancies were detected and a positive summary was drawn.

Mario Kranklader



The front underrun protection for the MAN TGX and TGS, a product that KIRCHHOFF Automotive is in charge of during all phases of the product life cycle, from design and development through prototyping to series production



The CNC bending line is the largest of the multiple lines within Van-Rob and is a custom, modular configuration

Customized CNC bending

The bending line is the largest of the multiple lines within Van-Rob and is a custom, modular configuration designed for the specific customer applications.

Approximately two years ago, Van-Rob Tecumseh installed the first CNC bending line to support two major high volume programs for General Motors and Chrysler. Van-Rob was successful in winning this business because of the advantages of low tool cost and dimensional stability provided by CNC bending. The bending line is the largest of the multiple lines within Van-Rob and is a custom, modular configuration designed for the spe-

cific customer applications. Working with the customer design teams early in the program, our product engineering group was able to incorporate the necessary design features required for CNC bending.

The line consists of 6 modules that transform the coil steel into a finished product. All aspects of the line are monitored through an integrated controls system. The Tecumseh team has

gained valuable experience in CNC bending over the last 2 years and look forward to future applications for this unique process.

John Hamel

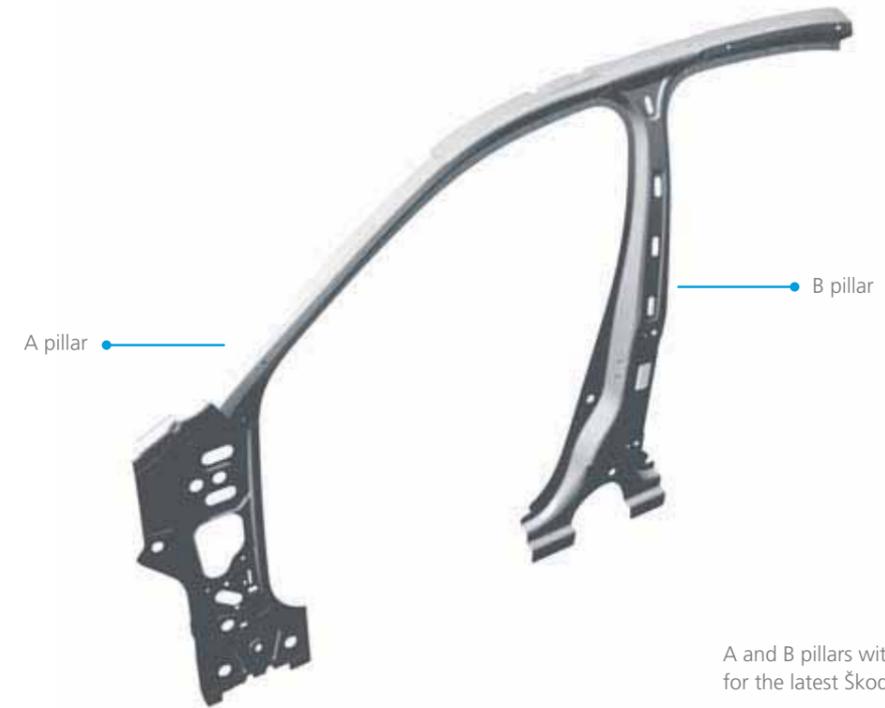
One of the best Škoda suppliers in the world

At the end of January, Škoda management invited its most important and best suppliers to Seville. At the World Dealer Conference (WDC) it honoured the top 5 per cent of a total of 680 suppliers for the new Škoda Octavia—and among them was KIRCHHOFF Automotive.

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The new Škoda Octavia



A and B pillars with reinforcements for the latest Škoda Octavia model

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Chief Technology Officer, Dr Thorsten Gaitzsch attended the event on behalf of KIRCHHOFF Automotive and thanks all of the employees involved for their exceptional commitment to this project. "Our company can, should, and will also profit from this growth, because Škoda emphasises long-term working relationships with its top suppliers." The colleagues in Hungary manufacture A and B pillars and reinforcements for the latest Octavia model.

Prof. Dr Winfried Vahland, Chairman of the Executive Board at Škoda, thanked the suppliers for their exceptional ser-

vices. The smooth launch of production of the Octavia, the "heart of the Škoda brand", is the basis for the continued very positive development of the brand. Karlheinz Hell and Michael Oeljeklaus, Škoda executives responsible for Procurement and Production, and Dr Manfred Borth, Director of Quality Management, also praised the present suppliers in attendance for their work.

Featuring one-on-one meetings with Škoda executives, a short trip in the new Octavia through Andalusia, and interesting discussions with the most important German dealers, the day was planned and organised perfectly.

The production of the new Octavia was successfully launched. In 2018, Škoda wants to have 1.5 million new vehicles registered, which represents an increase of 50 per cent. A good quarter of this growth is to be achieved with the Octavia. Also for KIRCHHOFF Automotive as a top supplier this a bright look-out.

Anja Marcus

First hot forming line in Hungary successfully starts series production

Investment of EUR 21 million in total in the production of complex body parts

Following more than twelve months of project planning, series production at the first hot forming line in Hungary started in the middle of January.

On the facilities measuring 65 metres in length, in future A and B pillars for Škoda, Daimler and BMW, floor assembly parts for Audi as well as bulkheads for Volkswagen will be produced.

Last year, over the course of several months, employees from Hungary were trained in Iserlohn/Germany where this technology has been in operation already since 2009. Fitters, tool makers as well as quality assurance and maintenance experts are now able to deploy their knowledge on site. Experts from Iserlohn and Attendorn/Germany continue to provide assistance to the Hungarian colleagues.

The considerable rise in demand for thin-walled but high-strength components moved KIRCHHOFF Automotive to invest a total of EUR 21 million in the production of these complex body parts at this location over a period of three years. Already in summer a second hot forming line will be commissioned and by the end of 2014, a total of eight state-of-the-art 3-D laser cutting machines will be added.

From 2015, approximately 600 employees will be working at Esztergom/Hungary. The headcount at the plant will thus have increased by almost 200 per cent within two years. An enormous effort, which is systematically supported from the locations in Poland and Germany.

Stefan Leitzgen



top picture: a look into the hall with the two new hot forming lines | centre-right picture: continuous roller hearth furnace of the first hot forming line | center and bottom pictures: employees from the hot forming department



For the good of the environment

Establishment of an energy management system in accordance with DIN EN ISO 50001 at KIRCHHOFF Automotive Deutschland

The energy transition in Germany and associated price increases for generated energy put a strain on both consumers and the economy alike.

You do not have to be a prophet to predict that the re-orientation in terms of energy generation will only succeed if society starts to use energy more considerably at the same time. And industry can make a key contribution towards this change. There are often major potential energy savings to be made within companies. The German Federal Government estimates EUR 10 billion/year.

In order to encourage companies to save energy or be more efficient in its usage, the legislator is offering tax relief. However, certain criteria must be met. As a result, the tax cap in line with the electricity and energy tax legislation has been linked to the introduction of an energy management system in accordance with DIN EN ISO 50001 as of 2013. Additionally, companies are set efficiency targets,

towards which they should orientate themselves. These specify how much energy should be saved.

At the heart of the specification for energy management DIN EN ISO 50001 is the continuous improvement in energy savings. Companies should be in the position to increase their energy efficiency and optimise energy usage. KIRCHHOFF Automotive Deutschland GmbH therefore decided to obtain certification in accordance with DIN EN ISO 50001 for all locations in May 2013.

To this end, an energy management system based on a manual, work instructions, and an Energy Control System (ECS) was introduced, with the help of which energy consumption throughout the Company is documented every 15 minutes.

Uwe Suchland was named Energy Management Officer for KIRCHHOFF Automotive Deutschland GmbH by the Executive Board. Energy officer

at the Attendorn site in Germany is Markus Hundt, who documents all the current energy projects at the location and monitors their implementation. Energy teams were formed at the individual locations as part of the energy management campaign. Their remit is to identify, analyse, and where possible, exploit potential savings within processes.

If we are successful in integrating all these energy-saving efforts into our daily work routine, then we will have created the basis for increased efficiency and a more sparing use of energy.

This would thus lead to the in-house energy revolution at KIRCHHOFF Automotive Deutschland.

Uwe Suchland

A cut above the competition

Knowledge as a competitive factor: committed, satisfied, and qualified employees contribute to the Company's success and have a positive effect on competitiveness.

Employee training and development is increasingly becoming a competitive factor and is also taking on more importance at KIRCHHOFF Automotive.

On the one hand, central programmes for the promotion of particularly talented employees are being developed (see K-MOBIL winter edition, page 51). On the other hand,

our Company uses local, requirement-oriented employee qualification and training. We would like to illustrate the different methods that are used by focusing on two KIRCHHOFF Automotive locations:

the largest foreign location, KIRCHHOFF Automotive Polska, and the most recent location, KIRCHHOFF Automotive România.



Training on the job: employees from the Logistics department are trained in the various tasks at individual workstations

Our most recent plant in Craiova, Romania, which was opened in April last year, is already using various methods of employee training and on-going development. A knowledge transfer programme was therefore developed to outline the processes and tasks of different workstations. This enables employees get to grips faster with other fields of responsibilities and respond more flexibly to changing customer requirements.

Employees in the technical departments receive specific training in order to improve their technical knowledge. From the outset, the Romanian plant has followed the lean production principles; to this end, it defined processes and standards and introduced visual checks. The long-term objective is a stable lean management system with

process orientation and continuous improvement. To improve teamwork and awareness of sustainable actions, all departments participate in special training programmes. The aim of these programmes is to motivate employees to behave proactively towards the environment and to conserve resources—because it is the attitude that makes the difference.

This programme, which has been implemented worldwide to improve the leadership culture in senior and middle management, has already started in its second round in Romania. “Learn to Lead” communicates and provides training in the KIRCHHOFF Group leadership principles.

Employee surveys are carried out at regular intervals. “This is because the

opinion of our employees matters to us”, stresses Carmen Iacob, Managing Director, KIRCHHOFF Automotive România. “Their feedback forms the basis for the creation of a pleasant working environment and corporate culture. A company's most valuable asset is its qualified and committed employees. We can only be a reliable partner and fulfil the requirements of our customers flexibly and in a motivated manner if we have a well-trained workforce.”

Carmen Iacob

Pleased with the success of the training on the operation of our PLM (Product Lifecycle Management) systems (f.l.t.r.): Iuliana Micu (Sales), Diana Gingioveanu (Quality Control), Ileana Barbu (Controlling), Benjamin Müller (Project Management) und Sabin Barbu (Production Engineering)



Completing a doctorate alongside their jobs: Robert Krupa (left) and Pawel Balon

In 1998, KIRCHHOFF Automotive founded its first Polish plant in Mielec. Since then, the improvement of skills and employee satisfaction has been an integral component of the corporate philosophy.

Thus, KIRCHHOFF Automotive in Poland cultivates partnerships with local

universities and supports its employees in part-time on-going development. To this end, KIRCHHOFF Automotive works closely with the University of Mining and Metallurgy in Krakow. This is one of the oldest and best-known technical universities in Poland and, since 2009, has also operated a location in Mielec. KIRCHHOFF Automotive supported the construction of this lo-

cation, together with local authorities and UTC Sikorsky Aircraft Corp.

In the academic year 2012/2013, 29 of KIRCHHOFF Automotive's employees started a part-time engineering course at the technical university in Mielec. The prerequisites for the course are a relevant apprenticeship, at least three years of professional experience, and



Janusz Soboń, Executive Director of KIRCHHOFF Automotive Poland (3rd from right), welcomes high-ranking representatives from the Stanisław Staszic University of Mining and Metallurgy in Krakow and from Polish aircraft plants, as well as the Mayor, to KIRCHHOFF Automotive in Mielec.

The Rector of the University of Mining and Metallurgy, Prof. Tadeusz Słomka (centre of image) and the Dean of the Faculty of Mechanical Engineering and Robotics, Prof. Antoni Kalukiewicz (right in image), award a service medal to Janusz Soboń, Executive Director of KIRCHHOFF Automotive Poland



a good command of English. In this academic year, five of these students will be awarded their engineering degree by the Faculty of Engineering and Mechanics.

Two colleagues are even completing doctorates alongside their jobs. Robert Krupa, an engineer in the tool manufacturing/CME department, is in his second year of studies at the technical university in Freiberg. In his dissertation, he is investigating the stamping behaviour of high-strength steel at high temperatures. He is able to apply his experience in his professional area of work, the processing of high-strength steels, to this topic.

Paweł Bałon, a designer in the tool manufacturing department, is working on his doctorate in the Faculty of Engineering and Robot Technology at the University of Mining and Metallurgy in Krakow. His dissertation subject, "Stamping tool planning and stamping tool analysis using FEM", leans strongly on his professional experience. This work focuses on the investigation of steel springs during cold forming.

Employees can continue their education on postgraduate courses in the areas of management, lean manufacturing, project management, welding technology, CAD systems, etc. Lectures take place at weekends and lecturers

often work within the profession. 30 KIRCHHOFF Automotive employees in Poland have already completed their postgraduate courses. Their performance deserves particular recognition as it was achieved outside their regular work activities.

Janusz Soboń



The KIRCHHOFF Automotive stand at the second "Forum for Technology and Science" in Rzeszów, f.l.t.r.: Michał Kulpa (Process Engineer), Lidia Stachura (Sales Representative), Bartosz Jalocha (Personnel Officer), Bogusław Wytożyński (Assistant to the Executive Board)

Turning an idea into reality

36 months of KAPS—towards a leaner Company



Popular employer

52 KIRCHHOFF Automotive in Poland is committed to technical training in the region. A new "Regional Transfer Centre for New Technologies" develops junior talent.

In Poland KIRCHHOFF Automotive has long stood for a solid business partner and supplier, but also for a trustworthy partner in the field of science and education.

The latest management methods, logistics processes, and production processes, as well as its core Research and Development department make the Company a particularly attractive employer. This is demonstrated by its successful exhibitions at various HR and technical trade fairs in Poland: numerous interested parties at the engineering trade fair in Krakow and the "Forum for Science and Technology" in Rzeszów in the past year

brought their application documents and held intensive discussions with Polish HR representatives. High-ranking political representatives also visited the KIRCHHOFF Automotive stand in Rzeszów, among them Stanisław Sieńko, the town's Deputy Mayor, Teresa Kubas-Hul, President of the Regional Assembly, and Mirosław Karapyta, President of Podkarpacie Province.

In December 2012 the "Regional Transfer Centre for New Technologies" was opened in Mielec, whose planning and realisation KIRCHHOFF Automotive has supported from the beginning on. This is not only a training centre, but also provides qualifications to selected

potential KIRCHHOFF Automotive employees in Poland. Trainees can familiarise themselves with technologies and processes in the Company during their training and put their knowledge in practice while they are there.

KIRCHHOFF Automotive has established itself as an employer brand in Poland and has therefore created a sound base from which it can continue finding and retaining qualified skilled personnel in the future.

Janusz Soboń

June 2010 was the starting point for perhaps the largest internal project at KIRCHHOFF Automotive. With the support of Porsche Consulting, the plan was to implement a standardised production system in order to achieve a sustainable increase in efficiency.

What has been achieved in the past three years? How far has KIRCHHOFF Automotive now come in the process of transforming into a lean company?

Everything started with the definition of the 7 KAPS principles, which form the basis of the change process, and the preparation of a self-sustaining KAPS organisation. Experts in all plants as well as central consultants are still at the control centre today and are permanently driving forward continuous changes. Within twelve months, train-

ing and workshop documentation had been developed in seven languages and over 3,500 employees had been successfully trained. With 5S, SMED, and TPM workshops, considerable increases in productivity were achieved in all plants and attention was given on avoiding waste.

The permanent implementation started in September 2011 with the introduction of a standardised shop floor management system. Regular team, department, and plant meetings with fixed agendas and at set times ensure that the focus is on the standard production process and daily deviations from this process.

Since the beginning of the year, the KAPS leadership behaviour has supplemented the KAPS toolbox and the KAPS shop floor management system.

Seven basic principles should thereby communicate correct leadership behaviour. Role plays created by the KAPS experts themselves support the training of all managers. These three KAPS modules have led to the successful and sustainable implementation of the new production systems in all plants. One-piece flow projects, the conversion from forklift to milk run supply in production, and changes to the layout have significantly altered the appearance of almost all plants.

After 36 months, an idea has turned into reality.

Stefan Leitzgen



The optimisation of corporate processes is one of the targets of KAPS, the KIRCHHOFF AUTOMOTIVE PRODUCTION SYSTEM. This is on what the teams are working intensively.

KAPS Leadership Behaviour

1. I respect standards
2. I act with respect and fairness
3. I communicate clearly
4. I empower and develop my team
5. I share my knowledge
6. I promote continuous improvement
7. I am a good example

Accelerating with success

KIRCHHOFF Automotive receives the "Excellent Training Company" award, which intends to provide young people with information regarding the quality of training companies in our region.

We value the opinion of our apprentices. We can only improve apprenticeships at KIRCHHOFF Automotive with their feedback.

The management consultancy "Ertragswirtschaft" created the training company certification in order to give young people information about the quality of training companies in our region.



Our apprentices were asked questions on subjects such as "how happy are you with your training company?" and "what other opportunities does your company provide?", as well as "what could be improved?".

The survey showed that the opportunity of independent study and the fact that apprentices are highly regarded within the Company were two particularly positive aspects. It was also evident that our apprentices identified strongly with the Company.

We are constantly learning more about the training of young people

and regularly adapt the content of our training to meet new requirements. The assessment of our apprentices, who graded us an excellent training company, shows that we have the correct approach in this

respect. This superb achievement is due to our trainers and specialist training coordinators, who look after our new young talent every day.

Lisa Kitterer

Apprentice Video Project

The Apprentice Video Project entered a new round exactly one year ago. Two groups of apprentices had the task of presenting the topics "general apprenticeship at KIRCHHOFF Automotive" and "industrial mechanics at KIRCHHOFF Automotive" in a video. However, before the actual filming could start, the apprentices learnt how to use the cameras correctly in various workshops.

When they actually started filming, they improved their project management skills. This phase of the project was a real challenge and they really had to push themselves to their limits at times. And that was precisely the objective—to learn not to give up when things become difficult. The final versions of both videos have been produced and are available on our website.



Promoting young people

— The HR marketing team is making a huge effort to find qualified young talent

For pupils, students, or experienced professionals, image has a massive influence when choosing a company as an employer. Our HR marketing team has invested a great deal of energy in a variety of measures to position KIRCHHOFF Automotive as an attractive employer in the job market and attract qualified young talent.

This is why we were represented once again in April this year on a stand at the Soest Career Day and enjoyed many interesting discussions. Some of those who were interested came directly with specific job applications, others found out general information about career paths and our Company. This year's "Girls Day" in April was again an overall success. 26 girls found

out about jobs and career opportunities at KIRCHHOFF Automotive. With the support of our trainers, they were even able to produce their own long-case clocks.

Our participation at the VIA joint stand at the Olpe job fair in May has already become a tradition. This is where pupils and parents also have the op-



Left: Olpe Job Fair | right: our team at the Soest Career Day, f.l.t.r.: Lisa Kitterer, Anna Knappstein and Tatjana Schutte

portunity to discover more about apprenticeship and career opportunities at KIRCHHOFF Automotive. "Overall, we conducted more than 160 consultations this year. This job fair demonstrates time and time again that pupils and parents are very interested in this type of service", summarises Michael Isphording, head of training at Attendorn.

The shortage of skilled workers is a major topic at the moment. We are therefore focussing on personal contact with schools, in addition to our existing activities. In many individual meetings with head teachers and ca-

reer coordinators in the Attendorn and Iserlohn area, we have discussed the challenges that the current and future shortage of skilled workers poses to all stakeholders.

Various measures came out of these meetings: career orientation workshops or communication training, participation at parent and information evenings, or workplace visits by pupils and teachers. "It is not only about promoting KIRCHHOFF Automotive as an attractive employer. We are also interested in assuming our social responsibility and, together with parents and schools, supporting young talent on

the exciting path to finding the right job", stresses Lisa Kitterer, Team Manager HR Development/HR Marketing/Apprenticeship.

Lisa Kitterer, Tatjana Schutte

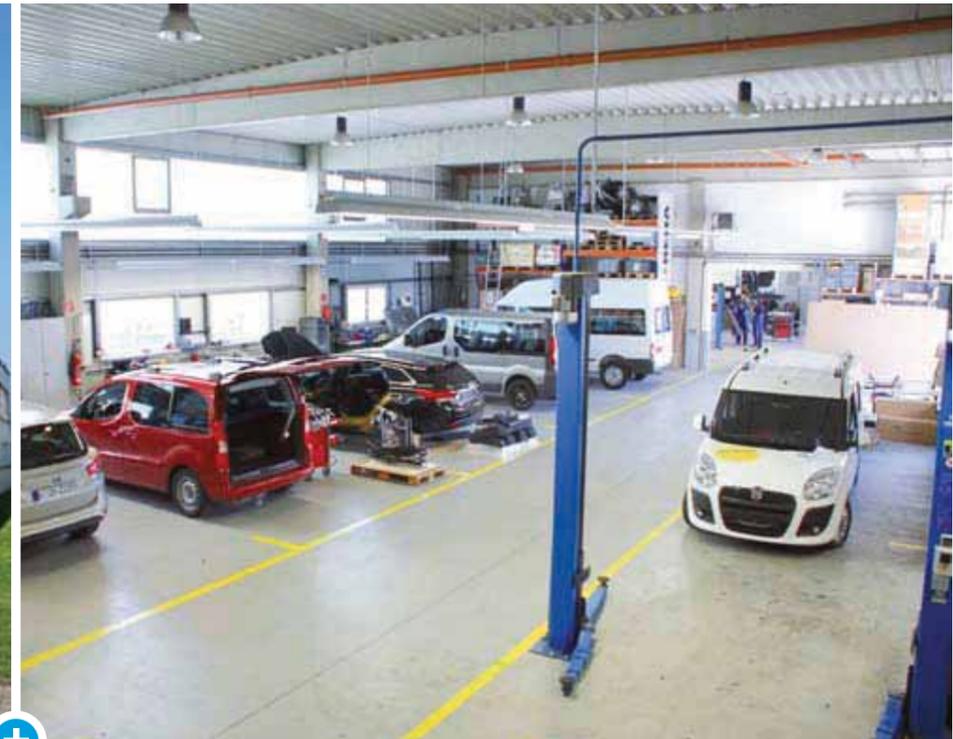


KIRCHHOFF
MOBILITY

Custom-made cars—
for handicapped people.

58-63





f.l.t.r.: Employees from REHA Group Automotive GmbH & Co. KG with their Managing Director Uwe Hausdorf (far right) | Bright exterior appearance of the new REHA branch with adjacent light-filled workshop with ample space for new challenges

More room for more service

The move of the REHA Group Automotive headquarters to new business premises amalgamates two production locations and optimises processes.

Since the end of 2012, the Hilden company headquarters of the REHA Group Automotive have been relocated to their new buildings at 5 Nikolaus Otto Strasse in Hilden. Overall, 250 square metres of office space on two floors and over 700 square metres of production space are now available.

The new location therefore provides increased space and better ways of using this space. With this amalgamation, twice the number of employees now work together on various projects. In the new workshop, vehicles for transporting people with disabili-

ties can now be easily adapted to have high roofs without any manoeuvring. With the move, long work and transport routes resulting from split manufacturing locations have also become a thing of the past.

The entrance to the premises is now completely at ground level, enabling better access for customers with limited mobility. This already starts with the journey to REHA. Located centrally between the A3, A46, and A59 motorways, it is possible to reach the REHA Group Automotive directly by car from the motorway exit and there

is always a parking space right in front of the entrance. It is now even easier to get to REHA using public transport too. It only takes a few minutes to get from the nearby, wheelchair-accessible city train station (S-Bahn) to the REHA Group Automotive headquarters.

All in all, this is a clear improvement for both employees and customers.

Rolf Mättig

Better together

REHA Group Automotive and PRUCKNER rehatechnik are joining forces for the benefit of their customers.

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Since the start of the year, PRUCKNER rehatechnik GmbH in Tressdorf/Austria has been a majority-owned member of the REHA Group Automotive headquartered in Hilden/Germany. Thus, the REHA Group Automotive has systematically expanded its sphere and range of activity. Following the acquisition of Jelschen Behindertenfahrzeuge GmbH last year, this latest acquisition means that an additional company with more than 20 years of experience in converting vehicles for disabled people and the elderly is joining the Group.

K>MOBIL held its first interview with the General Manager, Thomas Pruckner.

K>MOBIL: Why does PRUCKNER rehatechnik become a new member of the REHA Group family?

GM Thomas Pruckner: We have intended to separate the dealership and rehabilitation technology for quite some time, especially as this business has appeared as an independent brand to the outside world for several years now.



Thomas Pruckner

This was taking the next systematic step, which has occurred only because of the integration into the REHA Group. For me personally, this has been a very positive development, as I see many more expansion and development opportunities in the REHA sector than in pure automotive sales.

K>MOBIL: What makes PRUCKNER rehatechnik unique?

GM Thomas Pruckner: We originate and have gained most of our experience from the active driver sector in supplying tailored solutions. We are used to satisfying our customers by going beyond the common-place solution. Our goal is for our customer to drive home with "his" solution. At this, PRUCKNER rehatechnik is one of the few full-range providers in Austria.

Our excellent, tailored customer advice, the spatial possibilities within the building, and the excellent accessibility thanks to our close proximity to the new Autobahn ring road in Vienna provide us with a unique position.

K>MOBIL: Which companies have you collaborated with until now?

GM Thomas Pruckner: We have been working as direct partner with many well-known equipment suppliers such as Veigel, Autoadapt, and Guidosimplex for some time now. These part-



ners provide us with the technical basis for tailored solutions that give our customers maximum freedom to shape their lives both privately and professionally.

K>MOBIL: How are you benefiting from joining the REHA Group Automotive?

GM Thomas Pruckner: Now we are able to implement plans that I had made a long time ago more quickly and to a far better degree. At the same time, products and solutions from the KIRCHHOFF Mobility sector, particularly in the passive driver sector for family and trade, are now available to us too.

K>MOBIL: Mr Pruckner, many thanks for the interview and information. K>MOBIL would like to wish you a good start and continued success in the REHA Group Automotive!

Dr. Axel Panne

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Pruckner team from left to right: Manfred Seidl, Consulting; Thomas Pruckner, General Manager and Alexander Mixa, Consulting/Customer service

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WITTE
WERKZEUGE

When function and effect are in line.

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New product for special work

WITTE Werkzeuge develops Impact-Bit



Professional cordless screwdrivers are becoming ever more powerful and require special bits. We have developed the WITTE Impact-Bit specifically for work with these tools.

Compared with conventional bits, the Impact-Bit has an increased service life thanks to:

- individual torsion shape
- particularly elastic material
- special tempering
- the combination of a perfectly integrated torsion range and controlled handling of the tool in proximity of the screw

The compact design with a length of 38 mm enables:

- the direct use in an impact screwdriver without the use of a bit holder

Oliver Fries

High standard—constantly maintained

Quality management system from WITTE Werkzeuge certified in accordance with ISO 9001 for 20 years.



What is now regarded as a matter of course was just a marketing instrument 20 years ago. WITTE Werkzeuge is one of the first companies to have its quality management system certified, both within the tool industry as well as within the KIRCHHOFF Group.

In 1992/93, the Materials Testing Office North Rhine-Westphalia as a regional authority was one of the few "non-profit certification offices". Apart from their economic neutrality, the authority's expertise in materials testing made MPA-NRW an obvious choice. The authority accredited WITTE Werkzeuge in accordance with

ISO 9003 in 1992 and with 9001 during the following year. At the start of 2013, the "Federal Materials Testing Office North Rhine-Westphalia" successfully concluded an inspection of the QM system in its twentieth year.

Frank Rohlf, Oliver Fries



Screwdriving tools—for professionals and discerning home improvers

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WITTE Werkzeuge always has the fitting and sophisticated screwdriving tool

Securely tightening and loosening tight screw connections—these have been the key themes on which WITTE screwdriving tool developers have been working on relentlessly for decades. By maintaining a close contact to the market and users, new ideas and innovations are always emerging, which WITTE Werkzeuge systematically improves in detail.

Focus on user benefit

WITTE screwdriving tools (screwdrivers, bits, and bit boxes) cater for both private and professional users by offering as many benefits as possible. As a result, the Company focuses on overall concepts that simplify work and make it more comfortable and safer to execute. In so doing, the Company has established itself as a specialist global player that offers trade, industry, and

end users alike particularly sophisticated, superior, and effective tooling solutions.

Broad range of screwdrivers

WITTE has the right hand tools for wherever screws must be tightened or loosened. Apart from classic tools such as the traditional screwdriver with beech handle and continuous blade, a comprehensive programme for electrical engineering and electronics (VDE), there are also precision, T-handle, and offset screwdrivers available.

Innovation highlights

Two highlights of the WITTE screwdriver range are the **PROTOP II** and **MAXXPRO** series. Both series are the product of close co-operation with industry designers and faculties for ergonomics. Combined with WITTE

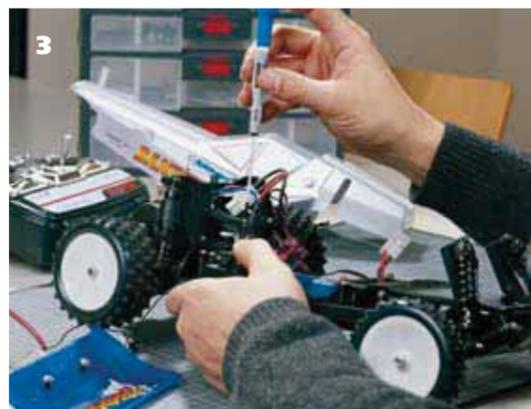
tooling expertise, these solutions unite comfort with performance thanks to their design and choice of materials.

(1) Power in your hand

All models in the **PROTOP II** and **MAXXPRO** series have the tried-and-tested triangular design. This accommodates the hand's ideal angle of rotation (120°) and enables an easy but powerful screwing action with a minimal amount of contact pressure. Thanks to this optimised handling, a fixed link between the head of the screw and the blade tip is formed. The materials are selected such that screwdriver and hand form a unit and any slipping is prevented. The PROPTOP II plus and the MAXXPRO plus are equipped with a special non-slip micro-fibre coating, which enables work even in damp and oily



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conditions. WITTE Werkzeuge is the only provider on the market offering a screwdriver with cork insert in the guise of the MAXXPRO nature. Cork is a naturally renewable resource, is particularly slip-resistant, and absorbs moisture optimally. The handle shapes for both series have not simply been scaled in the various sizes but been specifically conceived and developed.

(2) Quality blades and blade tips

One of the quality attributes of WITTE screwdrivers are the predominantly matt, chrome-plated blades along with the black blade tips. All blades are manufactured from special, highly tempered steel made in Germany, which ensures safety and a long service life. The typical black blade tip is phosphated and not chrome-plated, thereby offering both a high degree of precision and resistant corrosion protection.

(3) Precision work with WITTRON

WITTE has specifically designed the WITTRON series for highly precise work in the fine mechanical and electrical fields. With a deep finger recess, slim fast-turning section, a slide guard close to the blade and rotating central head, all components and details are tailored towards precision work. The practical colour coding speeds up the process of choosing the correct blade tip.

(4) Smooth T-HANDLE

If high torques are required, then WITTE has the perfect solution with its T-HANDLE series. Particularly advantageous is the smooth design of the handle that enables the user to work pain-free despite high screw pressure. With the shorter blade integrated in the handle, the already high torque transmitted by the T-HANDLE concept is further improved by using the longer blade as a lever. The series received the "red dot award" for product design.

(5) Screwing at angles

The WITTE offset screwdriver (hexagon, Torx, triple-square) are manufactured from a particularly high-quality chrome-vanadium steel to enable powerful yet safe work. Particularly practical is the specially developed holder that keeps all offset screwdrivers in one compact set. Easy to open, the holder enables the individual offset screwdrivers to be taken out quickly and easily.

(6) The complete WITTE bits range

WITTE has the right bit for any task and almost every screw drive type (Phillips, Pozidriv, PH module, PZ module, slot, hex socket, hex screw, Torx, Torx TR, triple-square, Robertson, TRI-WING, TORQ-SET, five-pointed star). These speak for themselves thanks to the choice steel qualities, special hardening processes, and exact fittings in their fields of application with the optimum transfer of torque, long useful lives, and long service life. WITTE develops and produces bits that are not included in the range upon request as a tailor-made solution.

Six bit series:

In order to have the right bit in a variety of application environments, WITTE offers the bit series INDUSTRIE, BITFLEX, EXTRAHART, TIN (Titanium nitride coating), DIAMOND (tips containing diamond particles), and STAINLESS (specifically for stainless steel screws). The INDUSTRIE series in particular always has the perfect solution with a wide and deep range of bits. One particular WITTE innovation is the BITFLEX system that buffers over-torque and any transient torque peaks, thus guaranteeing considerably increased service lives.

(7) Practical bit boxes

In order to always have the right bit to hand, WITTE has a wide range of particularly compact bit boxes (COMBIT-

BOX, BITSNAP, PROBIT-BOX). These are easy to take with you and offer practical handling for removing and swapping bits in an uncomplicated manner. The COMBIT-BOXES 7 and 17 can also be used as a hand-held screwdriver—the magnetic holder is simply pushed into the box housing, which acts as a handle.

(8) RATCHDRIVE and BITDRIVE

The RATCHDRIVE is an all-in-one bit box and ratchet. The magnetic holder and bits have a space-saving design and are housed in the ratchet handle, easy to access at any time. The BITDRIVE is a screwdriver with a bit holder. The handle houses a retractable magazine with six professional bits. The BITDRIVE has a changeable ratchet (clockwise, anti-clockwise rotation), extremely high mechanical strength, and saves a considerable amount of time thanks to quicker screwing operations.

WITTE for end users

Currently, WITTE is building a brand new online shop, where all WITTE products will be available to discerning end users in future. At present, WITTE products can be obtained across Europe from Hornbach hardware stores (bits in blister packaging and the COMBIT-BOX 11) and from the Swiss JUMBO hardware stores (MAXXPRO Nature and VDE, PROTOP II plus, WITTRON, and BITDRIVE with ratchet).

Jens Schönlau



FAUN
KIRCHHOFF GROUP

ZUVERLÄSSIG FORTSCHRITTLICH

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Reliably progressive

Restructuring of the Management Board of the FAUN Group

After almost 20 years as active Managing Director, on 1st March Dr. Johannes F. Kirchhoff handed over the operational management of the FAUN Group to Patrick Hermanspann.

In 1994 the Kirchhoff family of industrialists from Iserlohn took over the FAUN Group. Under the leadership of technophile Dr. Johannes F. Kirchhoff, FAUN successfully developed to the point of becoming the European market leader in refuse collection vehicles and road sweepers.

The integration of the lifter and disposal vehicle manufacturer ZOELLER into the KIRCHHOFF Group in re-

cent years has meant more and more new tasks and responsibilities for Dr. Johannes F. Kirchhoff. So in future Kirchhoff will concentrate even more intensively on the further development of the KIRCHHOFF Ecotec area of business—with both the main brands of FAUN and ZOELLER—and on developing the Group further particularly at international level.

To replace him in his duties as CEO of the FAUN Group, Kirchhoff has found an ideal successor in Patrick Hermanspann. The 39 year old has been employed in the group of companies since 1999 and, before his job as CTO (Chief Technical Officer) for

the Group he was very successfully in charge of the areas of marketing, the expansion of FAUN Services GmbH as a rental and leasing company and building up the FAUN brand in China. Together with Peter Höning (CFO) and the Board of Directors, Hermanspann is now steering the fortunes of the leading Europe-wide manufacturer of refuse collection vehicles and road sweepers.

Passing on the baton

Dr. Armin Vogel is another rock in the recent history of FAUN and waste disposal technology to be leaving the group. In 1995 Dr. Johannes F. Kirchhoff summoned his comrade-in-arms, with



from left to right: Patrick Hermanspann, Dr. Johannes F. Kirchhoff, Tim Collet and Dr. Armin Vogel

whom he had already collaborated since 1986 in the disposal industry, from MSTs to FAUN. Having started as Head of Marketing, since September 1996 Dr. Armin Vogel was responsible for the international sales and marketing for FAUN as Managing Director of FAUN Expotec and since 1999 also as Managing Director of the Group and as Chief Sales Officer. All through these years Dr. Armin Vogel has shaped the FAUN brands extraordinarily strongly and has achieved great success in sales by building up new markets and customer relations. After 18 years he is now leaving the company at his own wish and has switched to a leading role in waste technology at Fritz Schäfer GmbH.

The position of Managing Director of FAUN Expotec GmbH and Export Sales Manager has now been taken by Tim Collet. The Managing Director of the Swiss FAUN subsidiary J. Ochsner AG has also been working for FAUN since 1995. On his arrival the 47 year old took over the management of marketing from Dr. Armin Vogel. In the course of his career with the FAUN Group, Collet was responsible for expanding and integrating the Papaix SAS company in France taken over by FAUN and later he became a co-director of the French FAUN SAS in Toulouse. He then worked intensively on building up new foreign markets, before in 2012 Tim Collet stepped up

to the management of the Swiss company J. Ochsner AG.

Everything flows and nothing abides, as Heraclitus said. We thank Dr. Armin Vogel and say farewell and we wish all four men much joy and success in their new jobs.

Claudia Schaeue

In tune with the times

The industry meets up for the Municipal Vehicles Experience and FAUN shows the New VARIOPRESS on the Antos chassis for the first time.

On 30 April 2013 the waste management industry met up in Würth for the first Municipal Vehicles Experience event held by AKT (the German academy for municipal vehicle technology) under the leadership of Dr. Hans-Peter Obladen. Together with ZÖLLER-KIPPER GmbH, FAUN participated in the AKT specialist event and demonstrated the latest trends in vehicle technology.

The latest trends

In addition to a prototype of the new FAUN SIDEPRESS with ZOELLER Delta lifter for containers from 80 - 1,100 litres, the New VARIOPRESS on the Antos chassis from Mercedes-Benz was particularly highlighted. As the leading second-stage manufacturer worldwide, FAUN had the opportunity to fit a body onto the new Antos with a Euro 6 engine. FAUN

exhibited a VARIOPRESS 524 with a 24 m³ container capacity, 4 m wheelbase and ZOELLER Delta lifter. More refuse management vehicles of this type are to follow in the future and make their mark on the waste management and recycling industry. The Antos is designed for light and heavy distribution transport and with its 26 tonne maximum permitted laden weight it is

ideally suited as a chassis for the bodybuilder. In combination with the new VARIOPRESS in the new container design, this refuse disposal vehicle is not only a feast for the eyes, it also stands out in terms of loading capacity.

The industry event brought 140 experts together from waste management businesses. The Mercedes-Benz business information centre (BIC) provided an outstanding backdrop for this and the latest trucks were ready for test drives. Interesting talks and discussions rounded off the programme. In his welcoming speech Dr. Johannes F. Kirchhoff, CEO of the KIRCHHOFF

Group, got to the heart of the matter: "Events like this are immensely important for the bodybuilder. We bring bodybuilders, manufacturers and users together. In our discussions and one-to-one dialogues we can track down the latest trends together and get in tune with the times. We can all profit from it—for the benefit of citizens and our environment."

Claudia Schauf



Info

You can find detailed information on the AKT programme at:

www.kommunalfahrzeuge.biz



SIDEPRESS

New VARIOPRESS on Antos

Think BIG

FAUN with two road sweepers of the Streamline Generation at the most successful bauma of all time. With 530,000 visitors from 200 countries and an exhibition space of 570,000 m², this bauma made history.

At the bauma everything is just a bit bigger. This goes for the stands, the exhibits and the expectations. FAUN, too, exhibited two large dimension road sweepers of the Streamline Generation for special applications to trade professionals in Munich. Not to be overlooked was the VIAJET 12 R/L HS with sweeping units on both side of the vehicle as well as suction equipment on the back and a high-pressure washing system. This new road sweeper has been specially designed for use on construction sites and for tunnel cleaning. The high suction per-

formance, the optimal aerodynamics, more water storage volume and the air circulation system give the road sweeper structure its name: Streamline Generation. This VIAJET 12 was specially assembled and built for the Götz cleaning company in Haiterbach, Germany. The second road sweeper of the Streamline Generation which was exhibited in Munich was a VIAJET 7 R/L H. New features of the machine are the revised blower design for a higher suction power and the modern suction equipment on the back. An additional technical characteristic is the

versatile and adjustable high-pressure washing system with a huge water storage capacity of up to 3,000 l. Burkard Oppmann (Sales Manager for Germany) and Tim Collet (Export Sales Manager) were very happy with the way the bauma exhibition went. Tim Collet: "In fact our expectations were exceeded on the Export front. Expressions of interest came above all from the Asiatic and African area." A successful appearance for FAUN at the bauma 2013. We are certain that 2016 will be even bigger.

Claudia Schaeue



VIAJET 12

Benefits

- Suction road sweeper with 12 m² system volume
- 24 - 26t 3-axle series truck chassis with a high loading capacity
- The most powerful road sweeper for construction sites and special applications

Characteristics

- Versatile equipment range for the toughest applications
- High-torque hydrostatic drive for a high performance at low speeds
- Optional suction equipment on the back with a new type of air conveyance for perfect surface suction
- Versatile and adjustable high-pressure washing system with sufficient water storage capacity

1. The powerful suction equipment on the back
2. Accessory equipment for cleaning tunnels
3. Brushes on both sides
4. VIAJET 12 road sweeper for special applications in tunnel cleaning

The New VARIOPRESS

The rear-end loaders from FAUN have a new face

Presented at the IFAT in Munich last year, the new body construction for the VARIOPRESS and POWERPRESS rear-end loaders has been in series production since the end of 2012.

The structure has undergone a complete facelift and the construction of the body has been revised. The unit is available in sizes from 8 to 33 m³ with smooth side walls or optionally also with ribs.

Claudia Schae



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What's new:

Light

- Weight reduction with simultaneous volume optimisation
- Smooth surfaces inside the body; maxi-mixed cross-section for optimum waste compaction

Durable

- Use of high-quality materials and perfect finishing
- Throughput plate with rubber seal on the container walls (series)
- Control buttons to open and close the rear section integrated directly into the container without additional attachments
- Low corrosion with predominantly closed profiles

- Access cover with galvanised connection frame to prevent corrosion
- The use of extremely high-precision roll-forming profiles at the four corners of the container and for the guide rails
- Side walls and floor in 4 mm (series)

Clean

- Easy to keep clean with the absence of dirt traps
- No runs of dirty water down the side walls from the roof

Elegant

- Clear, modern design
- Perfectly suited to take advertising



We're revving up Germany

With the ROTOPRESS on a demonstration tour in Germany

The classics among refuse disposal vehicles are on a promo tour of the Republic.

The operating mechanism of the rotating drum vehicle and the advantages associated with it are unique and therefore reason enough to put the vehicle on the wish list of clients.

Burkard Oppmann, Sales Manager for Germany, also tells us why: "There is always much to say. But only when you test and drive the ROTOPRESS yourself can you be impressed by the advantages of this refuse collection vehicle." Until the end of August, two ROTOPRESS vehicles are touring through the disposal areas of Germany.

If you are interested, please send a message to:
AlexanderBreyer@FAUN.com

Claudia Schau



ROTOPRESS

At a glance

In contrast to a conventional press plate vehicle, the FAUN ROTOPRESS does not need any hydraulically driven press system in order to achieve compaction. The compaction system consists of a cylindrical drum container with two spiral-shaped screw conveyors. The drum rotates continuously. The screw conveyor causes the waste to be conveyed forwards right from the start of loading. This means that an optimum axle load distribution is ensured. The waste is compacted by the stationary screw press in the back part.

With up to a tonne more load with two collection rounds a day, you can carry away up to ten tonnes more a week – depending on the chassis! Thus you can save one complete round per week as compared with conventional collection vehicles. Work out what that means over a year! An unbeatable advantage for the rotating drum principle and the FAUN ROTOPRESS.

And a further cost benefit: years of experience and practical statistics confirm it: the ROTOPRESS is impressive with its considerably lower servicing and maintenance costs as compared with the conventional press-plate vehicle.

Simply enormous

As of now, the FRONTPRESS is available as a four-axle vehicle with 35 m³ and 13 tonnes loading capacity.

We all know what it's like. If something turns out particularly well and we are very happy with it, then what do we want? More of it.

This is the case with the popular FRONTPRESS. The version with 33 m³ on a 3-axle chassis ought to be just a bit bigger, as the front-loader with its very good compacting performance quickly reaches the 26 tonne permitted laden weight. The engineers therefore took a 32 tonne chassis with three main axles and one trailing axle and adapted the FRONTPRESS structure to 35 m³.

The body was 500 mm longer, the wheelbase was 5,100 mm and the loading capacity increased to more than 13 tonnes. A terrific result which has already convinced its first customers.

The FRONTPRESS can now also have a sliding lid

Another highlight has been created by FRONTPRESS constructor Frank Stephan with the sliding lid opening mechanism for MGB bins according to DIN EN 840-3. This means that the FRONTPRESS range is extended by an additional option and once again meets a customer wish to be able to collect all MGB types under DIN EN 840 with the comb and trunnion lifting combination. The convenient optional infrared remote control enables two-wheeled MGB bins with a capacity of 80 litres right through to 5000 litres to be picked up without problem. Also the combi-

nation with pocket containers of up to 7 m³ can be envisaged depending on the version of lid. With the pneumatic drive for the "third flap" on the roof of the body and the gas spring hinged frame, the sliding lid opening mechanism, the FRONTPRESS also stays within the maximum permissible height of four metres in accordance with road traffic regulations when in the drive position. Amazing possibilities for yet more customer benefits.

Claudia Schau



Happy Birthday

FAUN Services GmbH celebrates ten years of existence



Burkard Oppmann

Three was a magic number for FAUN Services GmbH. Founded in the year 2003, at the beginning there were three leased vehicles available and the team consisted of three members of staff.

Today the company achieves a turnover of 30 million and the rental fleet numbers 110 refuse collection vehicles—from the rear-end loader right through to the hybrid vehicle and everything in between—plus 17 road sweepers.

There are eight employees in the crew. At the beginning of the year there were a few changes. For example the used vehicle centre moved from Augsburg to Ebelsbach. Burkard Oppmann,

who has been Managing Director of FAUN Services GmbH since 2009, thanks the team for their fabulous service and commitment through the years. "Without the team we would certainly not have reached our tenth anniversary."

For the coming years he sees the following activities as being in focus: "We are going to intensify our activities abroad and expand the rental fleet by additional vehicles. I am thinking here, for example, of dustbin washing vehicles and skip lorries as well as roll-off vehicles. In addition we will be marketing our services more strongly on the Internet."

Claudia Schau



Workshop 3.0

New leadership in the FAUN After Sales Service

The responsibility for the After Sales area at FAUN Umwelttechnik GmbH & Co. KG was taken over in February 2013 by Christian Bremer.

This qualified industrial engineer has been working for FAUN since 2006 and has gathered a great deal of experience, firstly as Assistant to the Managing Director of FAUN Expotec GmbH and later as Section Manager for special waste containers and also in the international sale of FAUN products. Bremer will contribute his knowhow in the after sales and customer service area and, together with the team, will continue develop this very important area for FAUN. He will be reporting to Burkard Oppmann, Managing Director of FAUN Services GmbH and Head of Sales for Germany.

Bremer outlines the following key areas for his future work: "We also want to set up an even more reliable and

progressive system for the after sales areas. The satisfaction of our customers is significantly determined by our performance in terms of service. This is also something we require because the quality of a company is reflected in continuously high-quality customer care."

FAUN already runs eight customer centres in Germany today and, from the Osterholz-Scharmbeck location, it looks after the service partners established worldwide as well as the international spare parts business.

"We are already very well set up in Germany" continues Bremer "but we are constantly working on intensifying and optimising our customer care. Another major subject which we are going to be tackling in the near future, taking account of the high export ratio at FAUN, is availability in international service support and the expansion



of the FAUN training programme for customers and partners."

Claudia Schau



Info

The range of services of FAUN Services GmbH

Vehicle hire:
waste disposal vehicles available promptly no matter when and no matter where

Vehicle financing:
decent conditions for decent vehicles

Used vehicles:
even after years of hard service, still maintained in good order

Patent in hand

Ann-Kristin Dalheimer takes over the Sales Management of the Ochsner Bucket in Germany



J. Ochsner AG is aiming at extending the sales channels for the patented Ochsner design bucket in Germany. We have managed to get Ann-Kristin Dalheimer to look after this area.

The 32 year old has been head of marketing at FAUN since 2008 and she can now offer her talent for sales and her affinity for design specifically to this new task.

Originating from Switzerland, this product is as yet unknown in this country so Ann-Kristin Dalheimer also sees an interest in this item for discriminating and design-oriented households. "My first tasks will be to prepare a market and competition analysis, to determine potentials and strengths and to look for suitable sales channels. The product is a high quality, modernised traditional Swiss product which combines aesthetics and usefulness. I can very well imagine that Germany is a market for the bucket", says Dalheimer of her new job.

Ochsner Bucket patent

Brushed chrome steel, clear minimalistic lines and a distinctive design mark out the patent Ochsner bucket as being truly Swiss. As a practical container for utensils in daily use or wood for the fireplace, as a seat with storage room, what was formerly an ashbin can be an indispensable item for every household.

Details:

- Volume: available in 37 l and 28 l
- Body, lid and fittings in high-grade stainless steel
- Beech wood handle (FSC certified wood from ecological Swiss stock)
- Low odour thanks to lid sealing, rubber edge protection on the bottom of the container
- Weight: 5.9 kg, 4 kg
- Dimensions of standard bucket: (W x H) 42 x 51 cm, 43 x 42 cm
- With integral shovel and brush always to hand

Claudia Schauen



Info

More information at:
www.patent-ochsner.com
 or
www.youtube.de
 (keyword: Produktlinie Patent Ochsner S664)



The Ochsner Bucket

A new broom in the team

Reinhard Röder is the new salesman for road sweepers



In May Reinhard Röder took over from Volker Hengstenberg, who has moved to ZÖLLER-KIPPER GmbH as Head of the Customer Centre in Herne.

Reinhard Röder studied business management and can look back at many years of professional experience in sales. In future he will be selling road sweepers for FAUN in the areas of North Rhine-Westphalia.

We warmly welcome Reinhard Röder!

We wish Volker Hengstenberg great success in his new job and thank him for his commitment during his eleven years in the FAUN Group.

Claudia Schauen



Goodbye Germany. Hello Netherlands.

Working aboard—trainee Cindy Bargmann has taken advantage of this opportunity

“For once to get out of the daily routine, to get to know another culture and new people and to get involved in something completely new.” With these words Cindy Bargmann describes her motivation to take part in a three-week exchange programme in the Netherlands.

In September 2012, Cindy Bargmann successfully completed her training as a specialist in warehouse logistics at FAUN Umwelttechnik. In addition to the correct storage of goods and products and logistical planning and organisation processes, the 19 year old also learned how conveying systems or storage and retrieval machines are operated. When an advert was displayed in the vocational school for the

BAND exchange programme (bilateral exchange programme between the Netherlands and Germany) she saw this as an opportunity to get to know about other training practices. Cindy was selected from 60 co-trainees and in April she travelled to Zandvoort with five other young people. In the three week industrial placement she worked in a supermarket. Goods had to be sorted and priced on the shelves. On Fridays she went to college.

The trainee said about these activities: “At FAUN I have more challenging tasks and my work is more varied. But it is good to try out other jobs once in a while.” In addition to day-to-day operations, the Dutch adoptee also had the opportunity to get to the bottom

of some stereotypes: “Yes, there is lots of bicycling, yes there is an unbelievable number of type of cheese, yes the Dutch are incredibly laid-back and we were warmly welcomed everywhere and no, the Dutch do not go to coffee shops every day” Cindy summarises with a smile.

“We wanted to give our trainees the opportunity to gather some experience in a professional, and also a cultural environment beyond our country borders”, explains Marc Grube, FAUN Head of Personnel about the activities abroad for young people. “However we do not only want to offer these opportunities to our business trainees, for whom a stay abroad is basically included in the planning of additional



qualifications for European business men and women, but also to our industrial trainees as well. Cindy Bargmann very much wanted to go to the Netherlands and we were happy to give her this possibility.”

In June 2013 two more trainees from logistics will complete a three-week stay in the context of the “Leonardo project” in Budapest.

You can find more information about training at FAUN at: www.facebook.com/faunkarriere

Claudia Schae



Info

With the German-Dutch “BAND” exchange programme, the Deutsche Gesellschaft für International Zusammenarbeit GmbH (GIZ) on behalf of the Federal Ministry for Training and Research is making it possible to young people to complete their training with a few weeks in the Netherlands. With this programme, GIZ and the Ministry want to get trainees and their companies to participate in a qualification abroad at an early stage. (Source: www.giz.de)

In addition to the BAND project, FAUN is also participating in the EU Leonardo project (www.na-bibb.de/leonardo_da_vinci.html)

Go Green

It's small, it's agile and it's quiet.



Since June a Smart e-drive has been part of the fleet at FAUN Umwelttechnik in Osterholz-Scharmbeck. Employees use the electric vehicle for business trips in the surrounding area and put green thinking onto the streets.

With DUALPOWER vehicles, FAUN has for years been demonstrating and selling itself as one of the first businesses offering holistic environmental protection in waste disposal. The themes are lower emission pollution of the environment through reduced carbon

dioxide and noise and fuel savings. Using the Smart e-drive also continues the idea in terms of local traffic.

Patrick Hermanspann, CEO of the FAUN Group, on this addition: "We have always been open to new ideas. With the Smart e-drive we are combining driving pleasure, coolness and environmental protection in an ideal way."

In the context of the electro-mobility business initiative (UI Elmo) in the model region of Bremen/Oldenburg, FAUN has tapped into the project, which was initiated by the Nehlsen company. The aim of the initiative is to conduct a cross-company and cross-sector trial of electric mobility in operational practice. So far 60 electric vehicles are on the road in the Bremen area in the context of this initiative. With Nehlsen as the central contact, not only are vehicles and infrastructure used more efficiently but information is exchanged about loading locations.

Claudia Schau



POWERPRESS in all its colours

Well equipped for the Universiade

FAUN delivers 20 vehicles to Kazan

Kazan, deep in the heart of Russia, is a multicultural city with a centuries-old history which goes back to the year 1005. The city with 1.3 million inhabitants is the capital of the Tatarstan Republic and also the target of numerous tourists on account of its diverse buildings and historic monuments.

In order to offer visitors and residents a modern, aspiring metropolis, the Christy Gorod waste disposal company was looking for a supplier to provide it

with suitable disposal technology and found the ideal partner in FAUN.

FAUN Sales Manager Ewgenij Schönberg: "They were looking for a reliable and progressive supplier who can also guarantee the right service."

The vehicles are primarily used for household waste disposal and they empty 5000 1.1 m³ bins and 300 8 m³ containers. The first VARIOPRESS and POWERPRESS vehicles on VOLVO chas-

sis made their journey back in December 2012 and the second batch, plus a VIAJET 6 as a exchangeable model, follow in early Summer 2013. In time for the Universiade, the competitions for students from all over the world which will be held in Kazan this summer.

Claudia Schau

Something new in the State of Denmark

12 SELECTAPRESS for the Island of Zealand

A very good start with the success of the new FAUN dealer in Denmark. Ove Kock from Ove Kock A/S from Esbjerg. At the end of 2012 he received an order for twelve SELECTAPRESS DUO for the Reno-Norden A/S waste management company.

SELECTAPRESS DUO

The project is a joint effort within the FAUN Group. Looked after by Export Manager Thomas Hoffmann, the SELECTAPRESS was produced in the French factory in Valence at FAUN Environnement. The French team has specialised in the production of the twin-compartment SELECTAPRESS vehicle. Different types of refuse can be collected in two independent compartments and emptied separately from each other. Each side has its own

back section, its own throughput plate and its own lifter. The further development of the SELECTAPRESS has made it even lighter and the rear section has been able to be shortened. Nine vehicles are equipped with a FAUN UNILIFT and three vehicles with ZOELLER Delta 2301/2342 lifters.

Less emissions with e-PTO

Eleven of the SELECTAPRESS vehicles are equipped with the e-PTO (electric power take off). Both the body and the lifter are driven via the e-PTO. When the refuse bins are emptied, the chassis engine is switched off via the inbuilt automatic start-stop device and it starts automatically as soon as the vehicle moves on. This means that noise and waste gas emissions are reduced when the vehicle is stationary.

The batteries in the e-PTO are charged by Reno-Norden A/S overnight with the advantage of power produced from wind energy.

Good feedback

Feedback from the media in Denmark to the modern, environment-friendly vehicles has been enormous. RenoNorder has been using the SELECTAPRESS since May 2013 in Slagelse on the main Danish Island of Zealand for the collection of refuse from 32,000 residents: household refuse in the large compartment and organic waste in the small one remain cleanly separated from one another.

Claudia Schae



MICROPRESS on FUSO Canter chassis

Love Recycling

FAUN ZOELLER (UK) Ltd. will be supplying a total of 35 Refuse Collection Vehicles to Kier Group

Kier Environmental & Street Services provide sustainable waste management and recycling services to local authorities, government agencies and the private sector within the UK. With high standards of service delivery at the forefront of their operations Kier and FAUN ZOELLER (UK) Ltd. share a like for like business philosophy. In October 2012 Four East Sussex Local Authorities jointly awarded Kier a ten year-contract to deliver waste and recycling collections, street cleansing and beech cleansing. The East Sussex Waste Partnership contract, which will cover nearly 200,000 properties over a 550 square mile area, is expected to save an estimated £30m over the next decade. FAUN ZOELLER (UK) Ltd. will be supplying a total of 35 Refuse Collection Vehicles to Kier Group. Both Companies recognises that waste collection is a high-profile service, the

quality of which will often influence the public's perception of an organisation as a whole. As a result it is in Kier's best interests to acquire the very best vehicles and equipment to ensure the needs of the service are met.

With years of specialist experience Kier's fleet management resources ensures their Clients acquire the right vehicles at the right price helping them to make strategic decisions and maximising return on investment. Their recent order with FAUN ZOELLER includes 20 VARIOPRESS with 22m³ bodies and 11 COMBIPRESS with 22m³ bodies with recycling pods that will be used for glass collection, all of which have been fitted with ZOELLER Rotary bin lifters and mounted on 6 x 2 rear steer Mercedes-Benz Econic chassis. To complement they have also ordered 4 MICROPRESS with 202.80

lifters mounted on 7.5 tonne Canter chassis which will allow them better access to restricted areas. FAUN ZOELLER (UK) Ltd. and Kier are already working successfully together in other parts of the UK, FAUN ZOELLER (UK) Ltd. is proud that their partnership with the Kier Group is flourishing and as a result providing innovative solutions for all parties involved.

Kier said: "We have worked closely with FAUN ZOELLER throughout the mobilisation period to ensure that the vehicles chosen were the best suited to support the service. Recognising the importance of a seamless service start and transfer FAUN ZOELLER also provided an onsite response team, throughout the initial start up week, who were onsite working closely with the Kier team".

Kristie Sanderson



left: The Danish Transport Minister Henrik Dam Kristensen got his own impression of the SELECTAPRESS during the Transport Exhibition in Herning, Denmark | above: The batteries of the e-PTO in the SELECTAPRESS are charged with green power from wind energy

60 counts

— Awarded a 10 year after sales contract across three locations

Private waste disposal and recycling specialist Biffa have recently placed an order with FAUN ZOELLER (UK) for an impressive 60 refuse vehicles. They have also awarded us a “10 year” repair and maintenance contract. Providing innovative versatile vehicles for waste collection is how we have built our respected brand name and we know that the best products have to be accompanied with an outstanding aftersales service.

The process of winning the contract was rigorous; we literally had to compete in a head to head challenge with our nearest rivals, enhancing our service offering to create the complete bespoke package.

The mobilisation of the vehicles has been staggered across two workshops in Mid Kent, UK. These workshops will be operated, fully equipped and staffed by our own team. Highly trained engineers and dedicated managers will be based on site overseeing all service activity from start to finish. To offer our customer an unbeatable service we are also taking on responsibility of maintaining their existing fleets whilst the new vehicles are introduced.



The first roll out took place this July; the second will be taking place in August and the third in February 2014. Each depot will be taking delivery of a combination of SELECTAPRESS and VARIOPRESS with Rotary lifters, all highly popular UK products.

The aftersales contract will generate an estimated minimum of £7million revenue and will offer long term po-

tential for development and growth, with plans to utilise the space for commercial retail business.

The whole team would like to thank Biffa for investing their trust in FAUN ZOELLER. Together we can keep a healthy fleet of refuse vehicles on the road.

Kristie Sanderson



Great team work: Colin O' Donnell (left side) and Vincent Donnelly (right side) both from Kier an Ben Lord (FAUN ZOELLER (UK))

One Stop Shop

— FAUN ZOELLER (UK) Ltd. won £3.5 Million contract

We are continually working to create added benefit for Municipalities looking to purchase a new fleet of vehicles. FAUN ZOELLER (UK) Ltd. yet again works seamlessly in offering the ultimate 'one stop shop' for customers.

UK Municipality in Sefton, Merseyside UK has renewed its fleet contract ordering refuse collection vehicles and eco-drive assistants in a deal worth £3.5 million. The order comprises a variety of 26-tonne and 32-tonne capacity FAUN VARIOPRESS rear-loaders plus ZOELLER lifting systems. Every vehicle is equipped with an innovative Eco Drive Assistant (EDA). Designed to fit the chassis of any refuse collection vehicle, the EDA helps to deliver a more economical and environmental-

ly-friendly waste collection service by optimizing driving for stop/start refuse collection cycles.

Vincent Donnelly, Transport Manager said: "When it came to selecting a new fleet it was apparent that we needed a high performing waste management solution that was environmentally friendly. Through a competitive tendering process FAUN ZOELLER (UK) Ltd. were eventually selected as the best option. In addition to delivering on price and quality, the customer service on offer has been outstanding, with after sales support from the service department and field service engineers proving particularly valuable in the past. Our overall experiences have been wholly positive".

Ben Lord, FAUN ZOELLER (UK) Regional Account Manager said: "FAUN ZOELLER excels in working together with its customers in order to deliver and maintain top quality products and services. Our qualified and professional engineers combined with excellent resources ensure that we are able to deliver the best possible solutions to clients."

Kristie Sanderson



Engaging with the US Military

Tailored solutions to ground mobility showcased to US troops

In November's issue of *Army Engineer*, FAUN TRACKWAY USA outlined a deliberate engagement with all branches of the US military as a way of unlocking new markets for our suite of defence products.

We're pleased to report that we've made serious in-roads after holding our fourth demonstration to US military forces to show the expertise of FAUN TRACKWAY USA and the tailored solutions we have developed to meet the ground mobility needs of armed forces. The first two demonstrations, held in 2011 for the US Navy and 2012 for the US Army, were complemented by two very successful events earlier this year.

From 7 - 8 March we held our first session for the United States Marine Corps (USMC) Engineering School and Requirement Development centre at Camp Lejeune, North Carolina. The demonstration included the Heavy Ground Mobility System (HGMS)—FAUN TRACKWAY USA's leading portable roadway solution for wheeled and tracked vehicles—and our newest product, the Adjustable Ground Mobility System (AGMS), which can be mounted on a broad range of medium front-end loaders and is deliberately flexible in its design to be deployed with both Military Load Classification (MLC) 30 and 70 Trackway.



The event also acted as an opportunity to present sample sections of our robust portable runway solutions, which include Helicopter Landing Mats (HLM), UAV Landing Mats (UAVLM), and Rapid Runway Repair (RRR). Then on 15 - 16 May, FAUN TRACKWAY USA visited Fort Leonard Wood to conduct a demonstration of HGMS for the troops and requirement development team at the US Army Engineers Bridge Training Center. Michael Holdcraft, vice president of business development at FAUN TRACKWAY USA, said: "The US is at the core of FAUN's future strategy, particularly where research and development are involved. Collaboration and engagement with American engineers will be the key to unlocking this."

"As an engineering business that works with armed forces to understand the specific challenges they face and tailor solutions to their needs, hosting demonstrations for key personnel and end users is an important facet to our success in new markets."

Rachael Williams

New order for HGMS components

Irish Defence forces extend Relationship with FAUN TRACKWAY

FAUN TRACKWAY are pleased to announce our continuing support for the Irish Defence Forces through an extension in the relationship which will see us further bolster its capabilities in challenging environments.

The Irish Defence Forces made its first purchase from us in 2009, and the troop has recently shown its long-term commitment to FAUN TRACKWAY by signing a contract for an additional order of our world-leading Heavy Ground Mobility System (HGMS). For modern defence forces it's crucial that they're able to traverse challenging terrain and diverse territories without difficulty. Portable roadway solutions like HGMS will help

to prevent heavyweight vehicles from becoming bogged down and protect valuable military assets. Comprising of aluminium matting that can withstand repeated loads of tracked and wheeled vehicles of up to 70 tonnes, 50 m of HGMS track can be laid by two men in less than six minutes.

In extending its order for HGMS technology, the Irish Defence Forces has strengthened its stock and increased on-the-ground efficiency. Under the new deal, the force will now own 500m of our aluminium TRACKWAY and HGMS laying and recovery equipment.

Rachael Williams



Info

Ireland is one of the five participating nations in the Nordic Battlegroup, which alongside Sweden, Finland, Norway and Estonia supplies soldiers to the European Union in crisis situations, so there's a potential that our system could be deployed in humanitarian and disaster relief missions. FAUN TRACKWAY has long been recognised as a developer of quality and innovative global mobility solutions and it's thanks to our strong pedigree in engineering and manufacturing that defence forces continue to invest in our systems.





 **ZOELLER**
KIRCHHOFF GROUP

Technik entscheidet.

98-103



A new figure in international marketing

After 34 years, Manfred Zöller is retiring and handing over to Dirk IJfs.



After 34 years Manfred Zöller leaves ZOELLER group and Dirk IJfs took over his role

There is a new but familiar face at the Export Division of ZÖLLER-KIPPER GmbH. Dirk IJfs is the new leader of Export Management. The Dutchman has been working for the ZOELLER Group since the end of 2009, and before that he was actively involved in the waste management industry for twelve years. At the end of 2012 Dirk IJfs took over the position of Export Manager, relocating his office to the company headquarters in Mainz. IJfs welcomes this new challenge and has specific ideas about his future work. Together with dealers, his aim is to intensify long-term customer relations. Dirk IJfs says "we can only achieve this aim by working together. We must en-

sure loyalty and always offer customers the best possible products for their tasks. Over the last few years, our aim in Denmark has been to achieve a good market share. This aim could only be achieved with high quality innovative products, together with a high standard of service."

With electric power take-off (e-PTO), Dirk IJfs sees this as one of the most important developments in recent times. With e-PTO, energy (for example wind energy) will be stored in lithium batteries. This energy will be used for set-up and lifting operations during collection. This will firstly achieve up to 30 percent savings in fuel con-

sumption and also reduce CO₂ emissions and noise. This means that our customers will be in a position to proceed with waste collection during off-peak times as well, without disturbing either residents or the environment. Dirk IJfs is confident that the ZOELLER Group will be proactive with developments such as this in the future.

Farewell to Manfred Zoeller

Manfred Zöller's retirement in April 2013 saw the end of an era for ZÖLLER-KIPPER GmbH. In his 34 years as Director International Sales of the Group, Manfred Zöller succeeded in winning key projects, contributed to the growth of the company and helped shape the waste management industry. He had the gift of winning people over with his manner and his principles. As Managing Director he built up subsidiaries in Great Britain, the Netherlands, Spain and France. He achieved a great market share in these countries. The management of the KIRCHHOFF Group and the entire ZOELLER Group extend their thanks to Manfred Zöller for his dedication and wish him all the best and good health for the future.

Volker Schröder



Markets and Makers

ZOELLER dealer RG Techo takes part in WasteTech.

At WasteTech in Moscow from 28 - 31 May 2013, our Russian dealer RG Techo presented the latest products from ZÖLLER-KIPPER GmbH. WasteTech (International Exhibition of Waste Management, Recycling, Renewable Energy and Environmental Technologies) is the largest trade fair of this kind in Russia and CIS States (Commonwealth of Independent States). Under the banner "ZOELLER's five years in Russia", RG Techo presented six of the latest technological advances in the waste management sector.

A particular attraction for visitors was the MEDIUM XL SK200 with integral washing facility for waste containers. Up to now there has been nothing comparable on the Russian market. Another highlight was the MINI SK200 on a Mercedes-Benz ATEGO chassis.

This small, compact vehicle is the ideal solution for waste collection in the narrow Russian streets overrun with parked cars. The product range was completed by a new waste collection vehicle with GPS and a bin identi-

fication and weighing system. Dirk IJfs, Export Manager of the ZOELLER Group, was very satisfied with the way the trade fair progressed: "A thorough triumph and success. Compliments to the RG Techo Team!"

For more information see: www.waste-tech.ru

Krzysztof Sosnowy

Europe meets Africa

Cape Town is a place of natural beauty with mountains, alongside the most beautiful beaches and vineyards, as well as being the location of the offices of ZOELLER's subsidiary, Mechlif (PTY) Ltd.

Tourists generally see Cape Town and other major towns in South Africa as very modern and western-orientated, but socially deprived areas are still rife. In the towns, some four million waste containers are cleared every week from around 800 waste collection vehicles. But the majority of the popula-

tion of South Africa of 81 million still uses the black-bag system, while some residents have no regular waste collection service. Mechlif, a ZOELLER subsidiary, gives an insight into life there and the daily tasks and challenges when European technology comes up against conditions in Africa.

In 1992 as a competitor to ZÖLLER-KIPPER GmbH, Mechlif (PTY) Ltd started production of its own lifters. At that time the ZOELLER Group was still the only supplier in South Africa. Importing products from Europe some 10,000 kilometres away was, however, not only cost-intensive but also



The company headquarters of Mechlif (PTY) Ltd. in South Africa



Photo top left: The Mechlif (PTY) Ltd. team | Photo bottom left: the workshop team | Photo right: A ROTOPRESS with Mechlif lifter

time-consuming, especially when it came to swift supplies of spare parts. In 1996, both companies therefore decided to join forces in future. The ZOELLER group has had a 51 percent holding in Mechlif since that time.

The waste containers most commonly found in South Africa are 240 litre wheeled bins. These bins are not cleared with vehicles or lifters built to European standards, however. With an unemployment level of 40 percent, the focus is on job creation measures. The crew of a waste collection vehicle generally consists of one driver and four other operators to pick up the bins or bags. There is virtually no automation of work procedures. The lifters have simple circuits and servicing work is handled by mechanics or welders. Personnel are generally poorly trained and unfortunately often poorly edu-

cated. This is why Mechlif's philosophy is "Simplicity is the ultimate sophistication".

Mechlif offers a range of five different lifters, tailored to suit local conditions of use. Products are marketed in a type of Internet shop, and there is always a sufficient stock of spare parts based on the selected number of products. Mechlif also handles the After-Sales service for customers. The market share is 90 percent.

But the South African waste management sector has now moved into the modern age. Mechlif has developed a lifter data monitoring program for the iPad. With the "LiftLogger", the lifter performance can be read off and displayed on the Internet. The new system has gone down well in the market and has changed the way of thinking

of waste management companies. Training is increasingly regarded as an essential constituent of modern company policy, to ensure that personnel are properly trained and supported.

Gerald Dorrington



Info

For further information see: www.mechlif.com
www.liftlogger.com



We wish you a great
summer season.