



# ATR World



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Modelling the success of the aftermarket

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Dear readers



We are happy to present you this year's final issue of ATR World. Our cover story deals with electrification and the future of the aftermarket. With many countries intending to ban the sales of new internal combustion engine vehicles in the future, electrification will have a significant influence in shaping the automotive industry, not only posing challenges for the aftermarket but also offering many opportunities. The aftermarket will need to be proactive in dealing with these challenges, educating technicians and meeting driver needs as the world aggressively pursues decarbonisation. Please browse page 41 for more information.

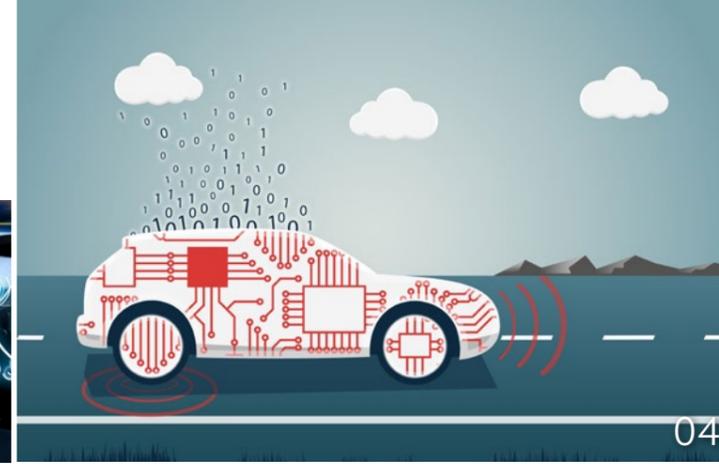
With travelling and organising international events still being quite complicated due to COVID, the IPAS Forum was held remotely this year under the banner of IPAS ONLINE. Two IPAS ONLINE events were successfully held in the LatAm and EMEA regions at which Shareholders and IPAS Suppliers were able to meet and further business discussions. In addition, we also held a Hot Topic webinar in LatAm in October focusing on Logistics Challenges and in APAC we hosted our third supplier day together with ZF and Gates. Given the success of these virtual initiatives, we plan to retain them as a part of our annual events calendar to be held in conjunction with other in-person events in the future. I am pleased to confirm that Mr Arnd Franz was elected as a member of the Supervisory Board of ATR in October and would like to take the opportunity to welcome him to the team. Read more about these topics on pages 09-10.

As we approach the end of the year, we would like to take the opportunity to thank you all for the fruitful collaboration during this year. We wish you all a happy festive season and a good start to 2022.

Warren Espinoza  
CEO, ATR International AG



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## IMPRINT

# The aftermarket's 'Big Data' dilemma

The global transition to vehicle electrification may be taking centre stage right now but, behind the scenes, the industry's most important – and contentious – transformation involves the collection, analysis and ownership of unprecedented volumes of data.

The continued digitalisation of our world is leaving no stone unturned. The automotive industry has raced to decarbonise through electrification, but the rise of Big Data will have far-reaching consequences and impact everyone, from drivers and workshops through to distributors, suppliers and even OEMs. With the global automotive aftermarket expected to grow at around 3% per annum, to an estimated €1.2 trillion by 2030, understanding both the impact and opportunities provided by this data will therefore prove critical.

Sensors, processors and vast quantities of data have already infiltrated our everyday lives. Think about the state-of-the-art smartphone in your pocket. It has

in-built GPS, a powerful processor and is almost always connected to the internet. It can self-diagnose errors, precisely track your location and tell you exactly how it has been used in the greatest levels of detail.

To that end, a modern connected car can have more than 100 sensors, 40 micro-processors and generate up to 25 gigabytes of data – per hour – across its various systems<sup>1,2</sup>. When you consider vehicle automation, the amount of data could be 700 times greater – as high as 19 terabytes of raw data harvested per hour<sup>3</sup>.

As daunting as this might sound, we are still only considering the vehicle itself. What about the servicing, repairs, distribution, production, manufacturing,

design and development of cars? These processes can all generate – and be informed by – vast amounts of data.

## The current situation

2019 saw an estimated 28.5 million connected cars registered worldwide, with predictions showing that the global connected market could easily reach upwards of 353 million units by 2023, with Europe home to 31% of the world's connected car

fleet<sup>4</sup>. As the number of connected cars on our roads grows, aftermarket servicing, parts production and logistics could all be optimised to a granular level by algorithms. The main hurdle is having access to this valuable data – will the aftermarket be able to compete if OEMs own the rights?

Indeed, there is a substantial risk that, in just 10 years from now, OEMs could hold all the cards. If given exclusive access to vehicle and diagnostic data, only OEM-approved suppliers will thus gain the extensive benefits of Big Data.

Equally, who can claim ownership and the dissemination of vehicle data? Is it the driver? The manufacturer? Hardware or software suppliers? Who is responsible for its safe collection and secure storage? What are the implications of a hack, breach, or leak? These are highly complex questions that lead to a vast number of ethical and legal obligations and responsibilities – but questions that will surely define the future of the industry.

## Access, responsibilities & the future

Currently, in Europe, thanks to the 2018 introduction of the EU General Data Privacy Regulation (GDPR), any data that could be used to personally identify the vehicle's driver is legally the property of that driver. This means that OEMs and connected car service providers must ask

## KEY FACTS

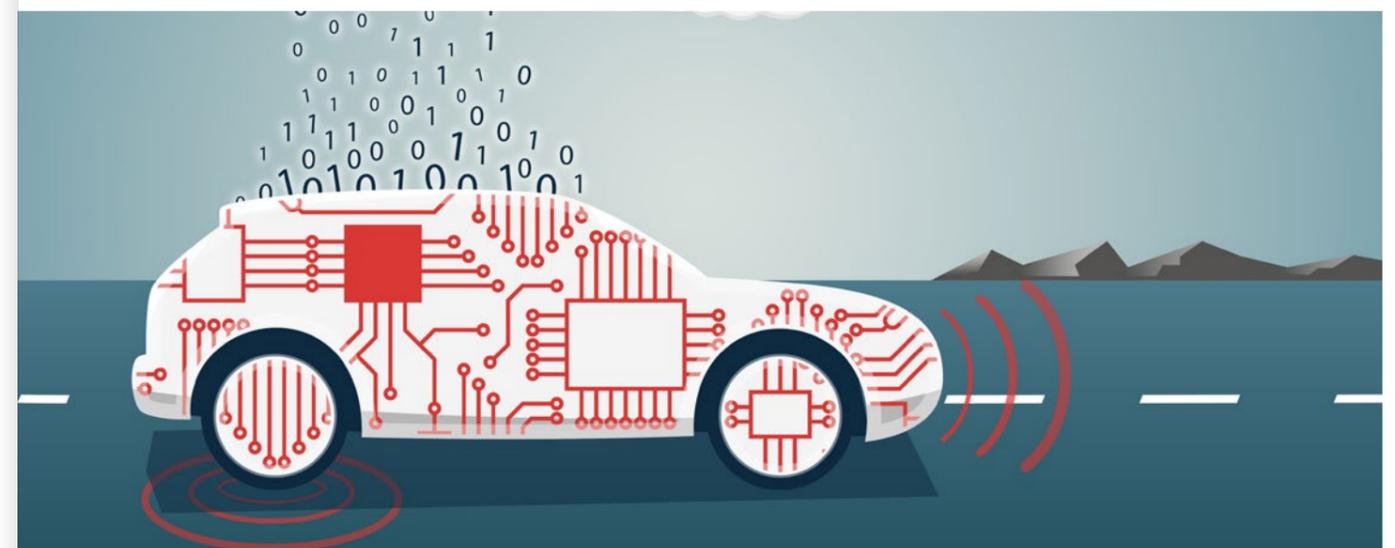
*The impact of Big Data is shaping trends in the automotive industry, and privacy and security issues play a key role in its future.*

the driver for access permission – this said, they can still anonymise the data and use it as they please.

In addition, the EU Privacy and Electronic Communications Regulations limit how much data OEMs are legally allowed to share with external organisations. This could prove problematic for the aftermarket, as OEMs could be prevented from sharing the valuable data they collect by law.

There is clearly a need for specific legislation around connected vehicles. Depending on the approach that OEMs take over the next five years, this may need to include provisions that allow for aftermarket access to relevant data, or at the very least, the resulting analysis.

As technology advances and legislation evolves, the aftermarket must understand and engage in the hugely complex global debate around Big Data and the future of the automotive industry. It's a challenging area, but one that could prove pivotal to the sector's ongoing competitiveness.



<sup>1</sup> <http://www.mckinsey.com/~media/mckinsey/industries/automotive%20and%20assembly/our%20insights/ready%20for%20inspection%20the%20automotive%20aftermarket%20in%202030/ready-for-inspection-the-automotive-aftermarket-in-2030.pdf> <sup>2</sup> <https://blog.marketresearch.com/electric-vehicle-sensors-market-poised-for-breakout-growth> <sup>3</sup> <https://www.tuxera.com/blog/autonomous-cars-300-tb-of-data-per-year/> <sup>4</sup> <https://www.statista.com/topics/1918/connected-cars/>

# Future-proofed into the new era of mobility: 15 fields of opportunity

How new technologies, a more stringent climate protection policy and changing customer expectations open opportunities in the mobility sector.



Author Enno Däneke

The automotive industry is in the midst of unprecedented upheaval. New technologies, a more stringent climate protection policy and changing customer expectations will fundamentally change the mobility market in the coming years. It is becoming increasingly important for companies not only to react to major trends but also to shape them. Thus, they can position themselves robustly for the future. Four trends are driving the change: the shift toward electromobility, the integration of vehicles into digital infrastructures and ecosystems, the automation of driving and, as the quintessence of the first three trends, radical servicing.

Each of these trends opens numerous opportunities for companies in the mobility sector - from suppliers to manufacturers to auto repair shops.

## Electromobility

Electromobility is the essential building block for the energy transition in transportation. It addresses climate and environmental protection but also means technological progress. Regardless of the phase-out plans of various countries, it can be assumed that by the end of this decade no one will buy a passenger car with an internal combustion engine. Superior driving characteristics, falling costs, increas-

ing ranges, the expansion of charging infrastructure and clear environmental benefits make this development inevitable.

### Opportunity fields:

- 1 Development of new and more powerful batteries
- 2 Integration of electric vehicles into the power grid as energy storage devices
- 3 Installation and expansion of the charging infrastructure (stationary and mobile)
- 4 Innovative payment and billing systems
- 5 Maintenance and repair services

### Digital infrastructures and ecosystems

Increasing connectivity, pushed above all by the new mobile communications standard 5G, will integrate vehicles into the Internet of Everything in the next few years. Communication interfaces are expanding rapidly: vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I), vehicle-to-grid (V2G), vehicle-to-home (V2H), etc. The growing complexity of interconnectivity creates numerous new entry points for innovation.

### Opportunity fields:

- 6 Use of new digital interfaces to the customer
- 7 Smart monitoring and assistance systems for safety, convenience and optimisation
- 8 In-vehicle entertainment solutions
- 9 In-vehicle commerce services
- 10 Building value-adding digital ecosystems

### Automation of driving

While the 20s are mainly characterised by electrification, fully self-driving cars will become widespread by the 30s at the latest. The development may occur much

earlier. The way vehicles are used then will usher in a new era of mobility. If drivers become passengers who no longer own a car but use it as 'mobility-as-a-service', this will open the scope for new offerings and services.

### Opportunity fields:

- 11 Automated inspection: remote maintenance or autonomous driving to the car repair shop
- 12 New mobility services: door-to-door mobility, seamless intermodality
- 13 New customer groups: children, the very elderly, people with disabilities
- 14 Flexibility and efficiency: switching between passenger transport and logistics services
- 15 New use options of the vehicle interior for office, gastronomy, fitness, shopping and entertainment.

### Servicing

In the interplay of the three trends, it becomes evident that especially servicing has great potential for opportunities. It forms a fourth overarching trend that encompasses both direct and indirect mobility services as well as 'docking' services from completely different industries in future ecosystems. These can be provided physically or digitally.

Exploring the opportunities outlined here in terms of their potential for products, services and business models forms a good initial basis for positioning one's own company for the new era of mobility in a future-robust manner.

### KEY FACTS

*Pioneering technology yields distinct prospects in the e-mobility generations to come.*



# Integrating multi-brand OE telematics data



Digital platform CARUSO for access to OEM telematics data gets momentum.

As reported in the July issue of ATR World in 2020, since its foundation in March 2017 by the data specialist TecAlliance, CARUSO has been building a digital platform to allow third parties to get access to OEM telematics data. ATR was the very first trade partner to support this initiative from the industry. It was followed shortly by other parts wholesale organisations.

Since 2017 CARUSO has been striving to integrate as many OEMs as possible. The platform aims to reach the largest European car park coverage to enable multi-make use cases, such as remote diagnostic or predictive maintenance for IAM repair workshops. So, 4 years down the lane, what is the status?

Overall, it is clear that CARUSO has made significant progress on the “data supplier” side. In-vehicle data from the following makes is now live and available through the marketplace:

• Alfa Romeo • Audi • BMW • Citroen  
• DS Automobiles • Fiat • Ford • Jeep  
• Mercedes • MINI • Opel • Peugeot  
• Porsche • Vauxhall

In addition to the above brands, three more OEMs are being integrated and should be live on the platform by the end of this year. For 2022, CARUSO is aiming at adding 5 to 10 new OE brands to its platform.

## The challenges associated with OEM in-vehicle data integration

Integrating data from a new OEM is a challenging task. Next to the “IT” integration with the OEM back-end, several other legal, technical and commercial aspects have to be taken into consideration.

The first step of the process is typically the signature of a framework agreement between the OEM and CARUSO. Depending on the level of maturity of the



Norbert Dohmen,  
Managing Director at CARUSO

OEM when it comes to offering in-vehicle data to third parties, this first phase can take between a few months up to a few years.

Once the legal foundation is in place, the integration process itself can start.

“The collection and processing of data is the reason why CARUSO exists. That is practically the core competence of CARUSO. It is about collecting, processing and standardising data from different OE sources and making it available to our customers, data consumers as we call them, in the simplest possible way,” explains Norbert Dohmen, Managing Director at CARUSO.

Understanding and mapping every single OE datapoint against the CARUSO data catalogue is thus an essential phase

in the integration process. As an example, while one OEM may provide “Remaining oil life” measured in %, another OEM will be delivering “Next oil change date”.

The technical solutions to share in-vehicle data also greatly vary from one car manufacturer to the other: while some OEMs offer data “per call” on a pull basis, others are streaming a continuous flow of telematics data from each connected vehicle.

The same goes for consent management. OEMs typically operate different solutions to collect consent from the vehicles’ registered keepers and thus ensure compliance with the European GDPR privacy laws.

Whatever solutions are chosen by the different car manufacturers, CARUSO must make sure that the data from all makes is easily accessible through its single standard interface. Here again, the aim is to ensure that IAM spare parts wholesalers and repair workshops will be able to easily query and receive data from all connected cars, whatever the brand and model.

Stay tuned to ATR World as further updates will be shared on the progress of CARUSO in coming issues!

### KEY FACTS

Sharing data allows consumers easily gain new insights through a standard interface.



# LKQ Europe CEO Arnd Franz becomes a new board member

Arnd Franz, CEO of ATR shareholder LKQ Europe GmbH, has more than 15 years of experience in the independent aftermarket. Having served as a member of the Management Board of ATR IPAS supplier MAHLE GmbH for many years, the 56-year-old brings substantial knowledge in new vehicle technologies, including new hybrid and electrical powertrains. Joining LKQ Europe in 2019 – the leading distributor of automotive aftermarket parts for cars, commercial vans and industrial vehicles in Europe – he has led the 1 LKQ Europe integration pro-

gramme, driving better European business performance and accelerating digital and sustainability agendas.

During his time in the automotive supply industry, Franz was the steering committee chair of VREI / AAMPACT, an association of more than 50 leading parts manufacturers worldwide supplying vehicle manufacturers and the independent aftermarket for nine years. In addition, he has served on the boards of TecAlliance and CLEPA. Arnd Franz is a promoter of collaborative business models, fair competition and freedom of choice for the



consumer, and clean and safe mobility on European roads.

In its extraordinary general assembly on 21 October 2021, the shareholders of ATR International AG voted unanimously to elect Arnd Franz as a member of ATR’s Supervisory Board. He succeeds John Quinn, previously also CEO of LKQ Europe.

# ATR’s virtual communication offensive

IPAS ONLINE events – IPAS Forum goes digital.

Facing the current challenges of coming together physically, ATR International AG has created a new digital communication format – IPAS ONLINE. This way ATR accelerates business development among industry



leaders, provides industry-specific support services and creates a collaborative community.

In September and October 2021, the first IPAS ONLINE events took place. Derived from the concept of the IPAS Forum, the IPAS ONLINE events are focused on online meetings between ATR shareholders and IPAS suppliers on a virtual landscape. The IPAS ONLINE events took place over three days and focused on bringing local responsibilities and regional decision-makers together, and moving local collaboration to the forefront.

AT IPAS ONLINE EMEA, ATR recorded almost 500 participants from 35 IPAS and 27 shareholders in 600 virtual meetings, while approximately 100 participants from 30 IPAS and four shareholders joined 60 virtual meetings at the IPAS ONLINE LATAM. The events set a milestone for ATR as they were the largest

digital events in terms of participants to date and set a new benchmark in meeting quality. In the EMEA region, a new easy to use collaboration platform simplified the matchmaking process to optimise the agendas of all participants.

With the IPAS ONLINE series, ATR has

transferred the traditional IPAS Forum into a digital version and will develop and offer further similar events in the future.

ATR would like to thank all participating ATR partners and IPAS suppliers who made this new communication format a distinct success.

# APAC Supplier Day enters into the next round

Between 26-28 October 2021, IPAS partners Gates and ZF participated in a web conference dedicated to market development in APAC alongside regional shareholders. Within a general session plus several breakaway meetings, the local needs of ATR shareholders, industry issues and the respec-

tive business landscape was discussed.

Another successful virtual business development meeting chapter in APAC has been written, which leads to further expansion, strengthening business relationship development at a regional level.

Vincent Tan from ATR APAC is available for more information: [apac@atr.de](mailto:apac@atr.de)





## LatAm Hot Topics webinar series drives attention

ATR LatAm has successfully started knowledge transfer through a series of webinars.

Contributing to the IAM community in Latin America, ATR LatAm has organised a series of four webinars around key topics the industry is currently dealing with. The automotive industry quickly shifted from a rather stable and conservative status into one that is being redefined by multiple new and structural mega-trends. Interchange and collaborative thinking have outdated individual stars. Creating Instances of collective exchange is one of several of ATR's LatAm activities to support and accelerate our partners business development.

How to motivate sales teams, professionalisation needs at workshop level, logistic challenges and digitalisation in the IAM are and will be topics not only catching many discussions but also demanding resources. Having the chance to take some time to park the day-to-day activities and open space for critical and constructive thinking is a simple but very effective way ATR is adding value to all its business partners.

Unique and key in these events have been its tailored content to Latin America's reality, thus allowing the audience to relate directly to concrete details presented and discussed during the webinars. Interestingly, the Hot Topics webinar series has also attracted many Spanish speaking participants from the US and Europe, demonstrating the global importance of the selected topics.

The webinar series has been supported by ATR's Latin American shareholders DPK, Mannheim, Reydi and Carlos Vázquez. In addition, ATR's suppliers' commitment of Bosch, Schaeffler, MANN+HUMMEL, ZF, BorgWarner, Valeo, Ferdinand Bilstein, OSRAM and Gates made these events possible. In some cases, industry specialists were also invited to add a neutral view and enrich the discussion. A big thank you to all!

ATR LatAm is already working on an exciting 2022 agenda and will keep you informed as we move closer to each planned event.

### Testimonials from the webinars:



**Osmael Quintana, DPK, Director Financiero:**

*"It was great to see how motivation is a relevant topic throughout Latin America. The seminar was interesting and enriching for me."*



**Bruno Martorelli, Schaeffler, Sales Manager:**

*"I would like to thank ATR LatAm for the excellent event where, as leaders, we were able to exchange ideas*

*on the 'new' methods to motivate our work teams, and look for continuous improvement. Bring on the next ATR LatAm webinar events!"*



**William Padovani, Elring, Sales Manager IAM Latin America:**

*"Motivation has changed. It is not what it used to be. Today, in a pandemic period, the look is much more directed to an internal state of the collaborators: their emotions and needs. Thank you very much for the webinar, ATR, it was great!"*



**Angel Angulo, Corteco, Gerente Unidad de Negocio Mexico, Centro America & Caribe:**

*"Grateful for the invitation to ATR LatAm's recent webinar: '2021 Conjuncture Conference - Motivation is not what it used to be'. Excellent content and world-class speakers, the various topics handled very well, with simple and pragmatic language. The webinar allowed me to take new ideas and thoughts back to my organization for immediate application in leadership issues and today's challenges."*

## Knowledge about spare parts helps us become stronger



ARMTEK has undergone many structural changes in its long history and they are in the midst of more change.

ARMTEK was established 26 years ago. Since its foundation, the formerly small company has become one of the leading distributors of auto parts, components and consumables for passenger cars and commercial vehicles in Eastern Europe, Russia and Central Asia due to its strong innovation strategies and strict stock and risk management rules.

Today, ARMTEK is a fast-growing company, whose turnover has increased more than 6 times over the past decade. To date, ARMTEK has opened more than 30 branches in 3 countries (Russia, Belarus and Kazakhstan) and has sales in the EU. Moreover, the company has 7 office and warehouse complexes with a total area of

more than 150,000 m<sup>2</sup>, cooperates with 600 suppliers and accepts 100,000 orders daily. Alongside partner retailers, ARMTEK owns auto parts stores serving customers in Russia and Belarus.

More than 7,400 committed employees with a high ratio of highly qualified and experienced senior specialists help to ensure a high level of service in the company.

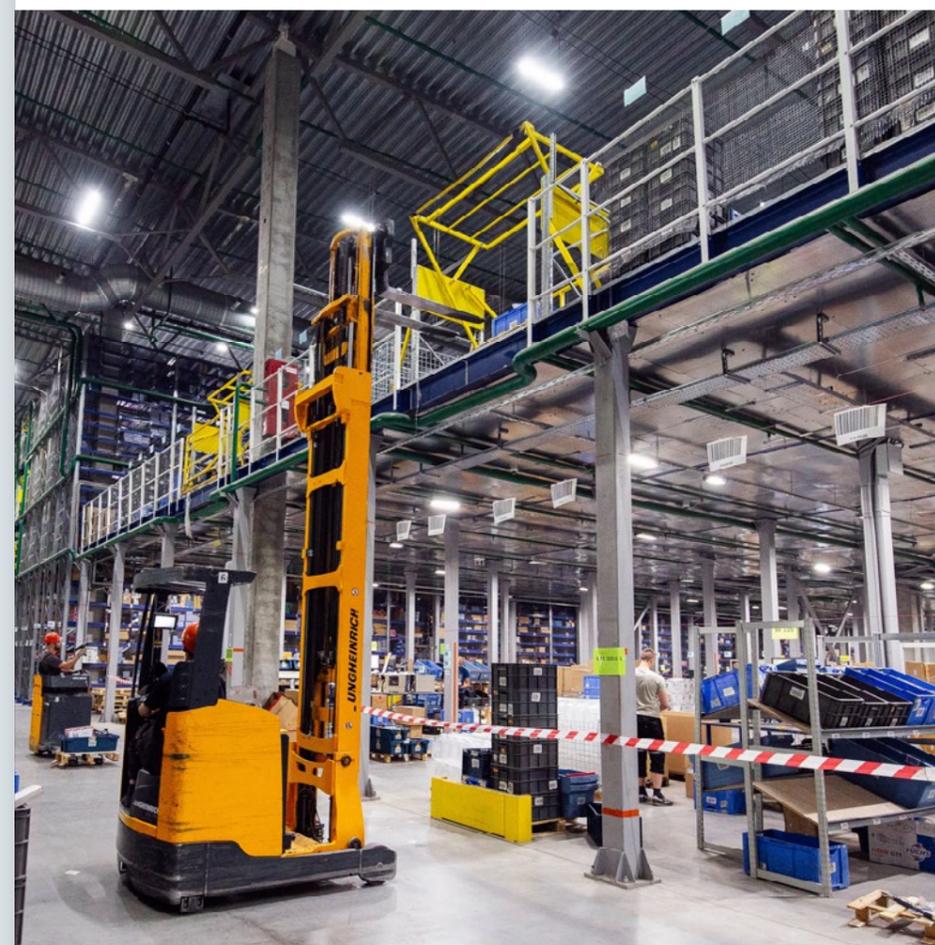
ARMTEK is one of the few global companies that has a unified information system for managing purchases, balances and sales based on SAP system solutions and, as a result, accuracy, timeliness and transparency when working with orders are ensured.

ARMTEK is not only a long-standing TecAlliance customer, which uses its Order

### KEY FACTS

*Items in stock: more than 300,000*  
*Items supplied under order: more than 15,000,000*  
*Brands: more than 2,300*

Manager and TecDoc Catalogue solutions but also a partner in the sale of RMI (Repair and Maintenance Information). The company also uses the Comfort Order service to automate the order placement process. Automation plays an important role in working with such a great number of goods. The company's warehouses occupy more than 150,000 m<sup>2</sup>. The workplaces of packers and receivers are fully automated, and conveyor lines move goods between warehouse areas. The company has established automatic detection of a suitable storage location for goods and automated selection of packaging for different types of goods. ARMTEK intends to grow and participate in the development of the auto parts distribution market not only in Russia, Belarus, and Kazakhstan but also abroad.



A further step in the development of the ARMTEK company is the provision of charitable assistance to children's hospices and hospitals, as well as cooperation with external charitable foundations in Belarus and Russia. In 2011, their suppliers began to join the Armtek Charitable Foundation. As a result, Armtek can continue to help more children into the future.



Tokiic branches in Split (top left), Ljubljana (top right), Bjelovar (bottom left), Zagreb (bottom right)

# Tokić Group thrives in pandemic ages – One year, two countries, twelve branches

Certain branches in Croatia and Slovenia became regional logistics centres (HUBs) and have successfully accelerated distribution to the end-user, depicting the continuation of the effective integration of Bartog and Tokiic.

Today, Tokiic employs about 700 people in Croatia, and alongside the acquired Bartog in Slovenia, they have about 1000 employees. There is no better witness to successful integration than the breadth of services and new jobs they have made available by opening new branches in both countries. 2021 marks the opening of nine new branches with three more to come by this year's end. Twelve new branches spanning over 8,458 m<sup>2</sup> with more than 50 new jobs were created during pandemic times. In

2021, the Croatian operation alone managed to exceed investments exceeding € 12 million.

Tokiic Group continues to invest in staff development and skills that will enable additional business optimisation. Croatian employees thus learn the Slovenian language, and staff from both countries regularly participate in new projects concerning further technological development of both companies.

In more than 140 branches throughout Croatia and Slovenia, the goal is to provide

customers with the complete range needed for maintenance and repair of all types of vehicles ranging from motorcycles and light and heavy commercial vehicles, with a rich programme of tyres, to agricultural and new industrial and nautical programmes. With more than 40 new brands and large stock, Croatian branches gained new strength in the assortment of car tyres from Bartog, while the Slovenian company received an even wider range of car parts, which currently has over 300,000 items, as well as new key special programmes such as transport, industrial and agricultural programmes. In the newly opened branches, professional sales consultants are at the buyers' disposal and with an open sales area, a large warehouse, and numerous deliveries, the buyer is getting the real experience of a modern global chain of consumer goods.

Considering that the most northern branch of Bartog in Maribor is 700 kilometres away from the most southern branch of Tokiic in Dubrovnik it was apparent that the Tokiic Group needed a smart logistics strategy – 10 centres have been transformed into logistics HUBs and now enable product availability and delivery to the end-user within a few hours. In the region of continental Croatia, a HUB-branch built as a greenfield investment serves as the perfect example, which is of great importance for the development of the local economy through the offer of transport and agricultural assortment. An even better example can be noted in Split where a 2,250 m<sup>2</sup> HUB covers the Southern Croatia region, in addition to



Warehouse in Bjelovar.

central warehouses that stretch over 36,000 m<sup>2</sup>. "With the opening of one of the most modern stores in Croatia, we completed the first part of this year's re-shuffling and strengthening of the group's market position in the Dalmatian region. Our new centre in Split is not only retail but an important logistical lever for the entire service of Dalmatia, as well as the company Bartog. There is no doubt that our business partners and all our customers from Zadar to Dubrovnik will

soon be able to take advantage of all the benefits of cooperation with the Tokiic Group," said Ivan Šantorić, a member of the Management Board of Tokiic.

By establishing a strong network in Croatia and Slovenia and becoming the largest regional distributor of automotive parts in this part of Europe, a successful internationalisation of business has been achieved, which creates the best conditions for further entry into Western European markets.



Store in Split shown in pictures left and right.

**KEY FACTS**

*Tokiic gains strength on the market and becomes the biggest regional automotive supplier.*

# ILS backs up product availability at Inter Cars



Why can Inter Cars customers sleep peacefully? This, among other things, is explained by Wojciech Aleksandrowicz, President and Managing Director at ILS, the company that manages logistics at the Inter Cars Group.



**In 2020, the domestic warehouses of ILS handled the flow of 117 million pieces of goods, sending over 100 thousand cars on domestic and foreign routes. Is this perhaps the best indication of the scale of growth that ILS is currently facing?**

Over the years of continuous development and expansion of our logistics centres we have reached the point where ILS warehouse floor space in Poland totals almost 200,000 m<sup>2</sup>. This mainly consists of three main Logistics Centres: European Logistics and Development Centre in Zakroczym Czosnów, Western Logistics Centre in Komorniki and Southern Logistics Centre in Sosnowiec. We also manage an extensive network of so-called midi-hubs, i.e., medium-sized warehouses located near large Polish cities Białystok, Lublin, Szczecin, Łódź, Wrocław, Rzeszów and Pruszcz Gdański. Let us also not forget about our foreign logistics units. As a capital group, we have large warehouses e.g. in Romania, which was one of the first, plus in Croatia, Latvia, Lithuania, Ukraine, the Czech Republic, Hungary, Bulgaria and Greece. Such an extensive logistics network requires appropriate coordination and we at ILS strive to provide this at the highest possible level.

**How has the technology used by ILS in logistics changed over the years?**

The basic technical solution, which was

introduced at Inter Cars almost twenty years ago and is still successfully used today, are belt and roller conveyor systems. Of course, today there are many more sophisticated installations, which often cooperate with other, more advanced solutions, but I will come back to them later on. Conveyor systems help bring goods collected at different levels of the warehouse to one place where shipments are put together and packed properly. They are also used in the goods receipt process.

**What else is worth mentioning?**

Another important modernisation was the introduction of mobile terminals as a basic tool for warehouse workers. These devices provide our employees with all the relevant information concerning the path of order picking, goods receipt process flow, packaging and loading. We have been using radio technology in our central warehouses for almost twenty years. Inter Cars branches implemented this solution hereafter.

**Though you have streamlined your processes ...**

... and we have eliminated paper in our warehouse workplaces, which is also environmentally friendly. The introduction of the “put to light” system in the packaging area was the last major change to be made to the central warehouse in Czosnów sev-

eral years before it moved to its new location. This solution was also implemented at the logistics centre in Sosnowiec. This project allowed for further acceleration and simplification of processes.

**How does the latest new plant of ILS, the European Logistics and Development Centre in Zakroczym, look in terms of new technologies?**

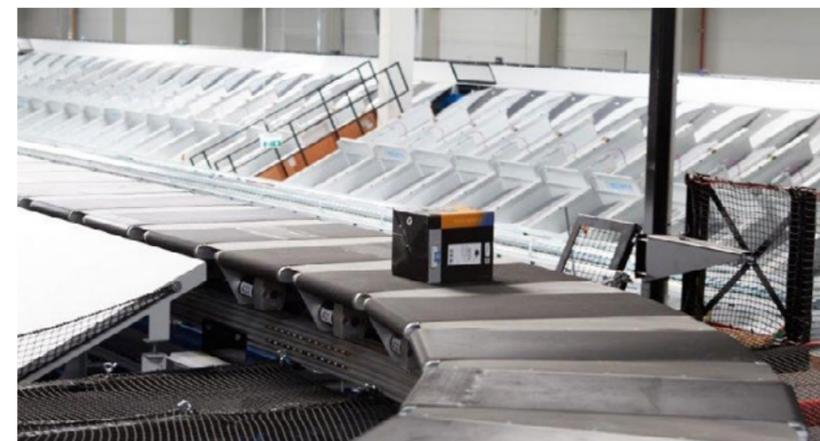
When we decided to relocate our main operations to the European Logistics and Development Centre, we began seeking technological solutions that would give way to a several-fold increase in scale. After assessing our options, we decided to implement an innovative system designed to meet our needs of attaining a very efficient crossbelt sorter. Its features include individual carriages for delivery reception and product returns, conveyor solutions and a parcel shipping sorter. This was a major technological leap for our company that helps us to accurately fulfil our customers delivery expectations.

**What are the biggest challenges facing ILS, or logistics at Inter Cars today?**

First of all, we have further distinct project plans that often involves the implementation of new, advanced solutions. Of course, due to our growth, we also face challenges in employer recruitment. With the growing



All images on these two pages show impressions from the European Logistics and Development Centre



scale of ILS' operations, we need more human resources. We are proud to be growing as an employer of choice in many regions. The labour market trends mean that we are seeing an increase in foreign workers at our warehouses – we currently employ people from 17 countries.

**What makes ILS so popular among employees?**

People working for ILS appreciate the stability of our company and the development opportunities we offer. For new employees, the friendly onboarding process that prepares them to work is very important. We know that as an employer we can compete even with the largest global corporations.

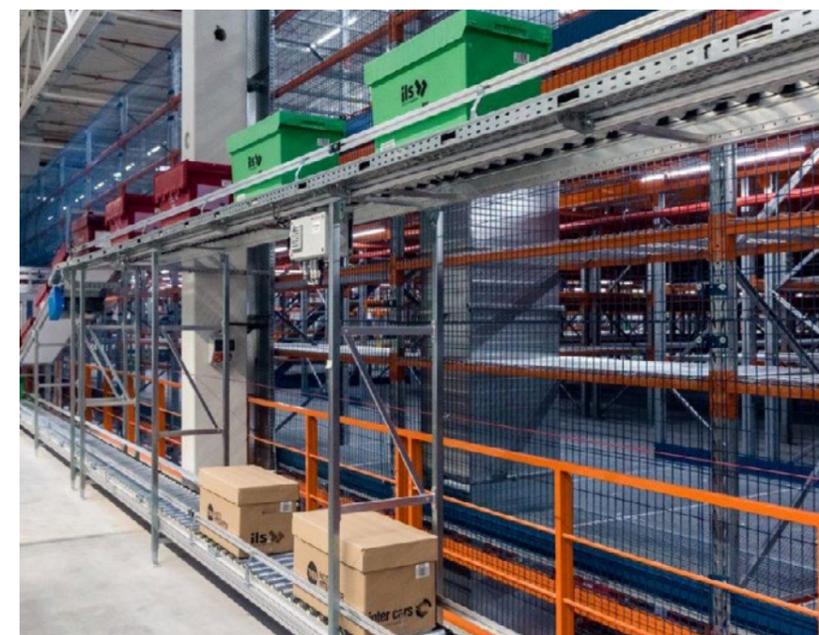
**When we analyse the current market situation, i.e. increased demand for parts and disruptions in supply chains, many companies have problems with stocking and the timely delivery of orders. Do Inter Cars customers also have reasons for concern?**

We are trying to keep up with the increase in demand, so Inter Cars customers can rest assured that they won't be disappointed. On the operational side, we are 100% ready. We were fully prepared from the

beginning of the pandemic in Poland. Our large and modern warehouse area provides sufficient space to keep our stocks safe and our employees excel in making sure that we deliver without delay. We are seeing a global supply chain crunch, but thanks to the advantageous decisions made by our purchasing and controlling department, parallelly to earlier logistics investments, our availability is one of the best on the market.

**The flexibility of the ILS offer is often emphasised. How does it work?**

We simply have tailored customer service to try and meet all their expectations. We are effectively able to put any ideas into action. We even happen to surprise clients with a level of service that is far above the agreed standards.



**KEY FACTS**

*ILS' logistics centre leads innovation in delivery without delay beyond pandemic times.*

**Finally, let's look at logistics a little more broadly. What are the biggest changes or main trends in logistics in recent years?**

For several years, there has been an increasing demand for logistics services related to the operation of e-commerce channels both in warehousing and transport services. The pandemic has further increased this demand. The development of IT tools to support these services is also crucial. Looking at the market more broadly, it is worth noticing that after a temporary slow-down last year, transport is experiencing a boom – transport rates, fuel prices and drivers' salary expectations are rising. This makes the market more difficult. In international trade, on the other hand, we have seen very large increases in container transport prices from the Far East. These have risen almost twenty times over the past several months. Many companies will be facing this problem in the near future. Fortunately, we are doing quite well in this demanding market and customers of Inter Cars can sleep peacefully.



KTW Building in Katowice, Poland – home of the LKQ Innovation and Service Center

## LKQ Europe is accelerating the development of digital solutions for the Independent Aftermarket across Europe

The implementation of new digital solutions is key to be prepared for the Aftermarket of the future.

### KEY FACTS

*The digital future of B2B platforms is critical to industry success.*

**D**igitalization will allow a faster reaction to changing customer needs, even more convenient services and better customer centricity, loyalty and satisfaction by offering faster, more transparent operation, and easier ownership-experience for car drivers and consumers.

As one of the most important trends in the automotive sector, digitalization will transform the business as a whole. While evaluating the impact of digitalization on the Independent Aftermarket, LKQ Europe identified four main drivers of digital transformation.

Today's aftermarket structure is still permeated by many inefficiencies, starting with service data that is spread over a lot of different systems and formats. This leads to time-consuming high complexity in the service and repair business which could be better addressed through con-

venient-customer facing digital solutions.

The development in the global markets at large B2B and B2C peers, even in other business sectors, has led to the change in consumer expectations. Tech giants like Apple and Amazon transformed the behavior of customers at digital marketplaces, influencing the general perception of any digital service, regardless of industry sector.

The advent of alternative drives and connected cars has accelerated immensely in the last few years, increasingly pushing digital technology into vehicles. As a result, the Independent Aftermarket needs to be prepared for significant changes in the way service and repair are managed in the future.

Access to data and its efficient use is becoming a key for future success. For LKQ Europe, these trends are an excellent opportunity to generate valuable data in-

sights and reduce complexity in the business within easy-to-use integrated digital ecosystems. The result will be a faster reaction to changing customer needs, even more convenient services and better customer loyalty and satisfaction.

Driven by these overarching trends, LKQ Europe developed a progressive innovation and digitalization strategy that is aimed to secure industry-leading efficiency in processes and a seamless digital experience for its customers.

Part of LKQ Europe's digital vision is to create the leading European fully integrated, adaptable, digital experience for all B2B customers by 2025. LKQ Europe works on agile and easy-to-use handheld interconnected garage management sys-



July 2021. More than 40 employees, including proven digital experts, are already driving LKQ Europe's digital transformation at the new site. By 2024 around 250 highly qualified employees will work in Katowice for LKQ Europe and its digital agenda.

“With the LKQ Innovation and Service Center, LKQ Europe installs a digital hub in one of its key growth markets to drive customer-centric digital solutions throughout Europe. By developing and testing advanced digital offerings for customers of the entire LKQ Europe organization, the new facility will be a catalyst for our innovation

and digitalization strategy”, says Arnd Franz.

In addition to that, the new center will increase efficiency and allow significant cost savings by digitalizing, streamlining and standardizing internal and administrative processes with a high level of quality, thus accelerating LKQ Europe's digital transformation in the aftermarket of the future.

Finally, all these efforts in digitalization will help to create a great experience for car owners by offering faster and more transparent operation, as well as easier ownership of a car.

Arnd Franz, CEO of LKQ Europe: “All these initiatives in digital innovation feed into our vision to become The Leading Auto Service System in Europe by 2030. With our digital solutions, we aim to transform our business, take advantage of new technologies and explore new and different ways of collaboration with our customers to create the very best customer experience in our industry sector.”

To accelerate its efforts in digitalization, LKQ Europe opened a new LKQ Innovation and Service Center in Katowice, Poland, in

tems. Advanced digital B2B customer portals will reduce complexities, sustain revenues and increase customer loyalty.

This year the company introduced the LKQ Academy, an educational program supporting independent workshops with training, further education and qualification programs. The LKQ Academy offers online courses, specialized E-learning platforms for customers and suppliers and skill analysis for workshop employees in addition to classic training courses. Furthermore, the platform offers access to technical support and problem solutions in the form of how-to videos, helplines, diagnostic databases and a digital specialist library. The digital offerings will be combined with flagship training centers in each country where LKQ Europe is active.

In the B2C area, LKQ Europe is aiming to become Europe's number one and most consumer-centric automotive aftermarket omnichannel player by 2025. Within its digitalization strategy, the company will generate new state-of-the-art B2C online portals. But also interconnected referral platforms like virtual mechanic networks, and on-demand systems are possible. All of these solutions will be underpinned by a common technology platform and ensure that LKQ Europe keeps cutting-edge technology in its sector.

One of the key projects LKQ Europe is working on is advanced digital mobility

services for car owners. Today there is a wide variety of cellular phone Apps for every single service concerning cars. LKQ Europe will offer an all-in-one solution to manage navigation, parking, roadside assistance, as well as maintenance and repair appointments with preferred workshops. Car owners will be able to care for their car insurances, perform digital payments, research and compare fuel prices and workshop services – all together and independent of OEMs in just one single App, saving time, hassle and money.

Arnd Franz, CEO of LKQ Europe: “All these initiatives in digital innovation feed into our vision to become The Leading Auto Service System in Europe by 2030. With our digital solutions, we aim to transform our business, take advantage of new technologies and explore new and different ways of collaboration with our customers to create the very best customer experience in our industry sector.”

To accelerate its efforts in digitalization, LKQ Europe opened a new LKQ Innovation and Service Center in Katowice, Poland, in



Arnd Franz (on the right), CEO and Yanik Cantieni, CFO of LKQ Europe at the inauguration of the new LKQ Innovation and Service Center in Katowice, Poland.

## New Board Member at Martaş Automotive

With the arrival of Martaş Automotive's new Board Member, Rıza Şahin, the company will start to operate in the heavy vehicle spare parts sector.

Martaş Automotive is one of Turkey's most established automotive spare parts distribution brands in the passenger and light commercial vehicle spare parts market. They are pleased to announce that they have further strengthened their sustainable growth and globalisation process with the appointment of a new management team.

Rıza Şahin, one of the leading names in the sector with over 20 years of senior management experience in different institutions and organisations in the automotive spare parts sector, joined them as of September 1 as a new Board Member of Martaş Automotive.

They believe that Rıza Şahin's long years of knowledge and experience in the automotive spare parts sector and the future-oriented vision of Martaş Automotive will bring innovation to their company and reinforce their position in the market, which they have strengthened with the principles of trust, stability and quality.

Born in Ankara in 1978, Rıza Şahin completed his undergraduate education at the University of North Alabama in the USA in the Faculty of Business Administration, as well as in having completed the Corporate and Human Resources Management program in 2000. He undertook a position as General Manager in Hidirusta Automotive Inc. be-

tween 2001 and 2020. He also worked as the Deputy Chairman of Vibracoustic Cv Airsprings GmbH in Hamburg for six years and was a Board Member of TATCOM Automotive Inc., which is the Turkey branch of the international commercial group TEMOT International. In addition to this, he served as Chairman of the Board of the Turkish Automotive Aftermarket Association (OSS) between 2017 and 2019. As of 2020, he has been serving as a Member of the Automotive Supply Industry Council of the Union of Chambers and Commodity Exchanges of Turkey (TOBB). Rıza Şahin is married with one child and speaks fluent English alongside his mother tongue.



Ziya Özalp, Rıza Şahin, Erdem Çarıkçı and Cem Baver Özalp (from left to right)

## Battery manufacturer Exide enters the market with Martaş Automotive



Martaş Automotive confidently adds automotive battery manufacturer Exide to its portfolio betting on becoming the market leader in the Turkish battery market.

While making investments that will strengthen its distribution network in 2021, Martaş Automotive continues to build up strong cooperation. Turkey's leading automotive spare parts distribution brand Martaş Automotive has finally signed an official distributorship agreement with Exide, one of the world's largest battery manufacturers. Exide, founded in 1888, is one of the most remarkable organisations in the global battery market as well as a renewing market and also a very important supplier to the aftermarket and automobile manufacturers. Within the scope of the agreement, Martaş Automotive will undertake the sales, marketing and distribution operations of Exide branded batteries in the Turkish market. Martaş Automotive will sell all the merchandise in Exide's automotive product group. Pinpointing that Exide has significant expertise in batteries with Start-Stop technology, Martaş Automotive Battery Business Unit Manager Ceyhan Kahrıman said: "During the first stage, we will put heavy vehicle batteries with a wide range of products, together with conventional batteries with advanced technology and AGM-EFB Start-Stop batteries on the market. Hereby, we will bring Exide batteries, which have the quality and performance to meet all the expectations of different vehicle users, to the Turkish market. In the coming period, we will start key activities to launch different product groups such as marine and motorcycle."

Emphasizing the expertise of Exide in the field of Start-Stop batteries, Martaş Automotive Battery Business Unit Manager Ceyhan Kahrıman said, "The share of Start-Stop batteries in the battery replacement market is increasing every year. By the end of 2025, more than 35% of the



Erdem Çarıkçı and Ceyhan Kahrıman (right side)

### KEY FACTS

*In cooperation with Exide, Martaş aims to be top key player in the emerging start-stop battery market.*

total battery market is expected to consist of Start-Stop vehicle batteries. Exide, on the other hand, is one of the few battery manufacturers in the world that can produce such batteries. Thus, all products suitable for the needs of Start-Stop vehicles are now included in our product range. All the technology used in these batteries comes from the great experience of being an original equipment manufacturer, which is Exide's most important strength. In recent years, the need for Start-Stop batteries has started to emerge in heavy-duty vehicles. Exide products are designed to meet all the needs of intercity buses and intercity and international heavy vehicles with high energy needs. In line with this, we are aiming to become the main contender in the Turkish battery market, especially in the heavy vehicle group."

However, Erdem Çarıkçı, General Manager of Martaş Automotive, made the following assessment: "While we continue our investments in our strong distribution network, we continue to open new horizons in different fields of the automotive industry by developing strategic coopera-

tions. At this point, the battery has been an area that had been on our agenda for a long time. We are very proud to be the Turkish distributor of a global brand such as Exide. We are one of the brands with the most effective sales and distribution network in Turkey, due to more than 40 years of experience and our mission to adapt to the constant changes in market trends. By combining our strength with Exide's expertise, we intend to bring fresh breeze to the battery market. I sincerely believe that we will make a difference in important aspects such as customer satisfaction, quality and accessibility, which are especially critical in developing beyond stale old market trends. I hope the strong cooperation between Martaş Automotive and Exide will be beneficial for both parties, especially for consumers."

# Godkänd Bilverkstad – quality standard promotes compliance



Godkänd Bilverkstad (GBV) is a voluntary quality standard, which has been jointly developed by MRF Motorbranschens Riksförbund (Swedish Association for Motor Retail Trades and Repairs) and SFVF Sveriges Fordonsverkstäders Förening (The Association of Swedish Motor Vehicle Repairers). The standard serves as support and guidelines for operating a car workshop, to make it easier to understand and keep track of laws and regulations.

During the year, Autoexperter has continued to implement and work on the industry-wide standard Godkänd Bilverkstad to promote work on quality, environmental factors and safety at its workshops. The objective is for all affiliated workshops to hold approval under this standard. To be approved under this standard, unannounced inspections are required together with an annual audit by an independent third party. Autoexperter supports this scheme and is working actively to encourage its workshops to adopt the quality standard. In 2020, 174 workshops joined the GBV network. 54 workshops have joined since 2019, so that Autoexperter has a total of 385 workshops.

## 1. Why is sustainability important?

“Sustainability is a requirement for both our future and the future of the industry; without due regard for this aspect, we soon won’t have a business or a planet. I believe that most workshops don’t think about the fact that they deal with environmental and safety issues daily, and perhaps that’s why they don’t take it seriously enough either. They have huge scope to influence the industry and guide it in the right direction – towards both the vision of zero traffic-related deaths and a fossil-free vehicle fleet.”

## 2. How does Autoexperter operate?

“As a car workshop chain, it’s essential for us to help both our workshops and our customers be more sustainable. Whether you have an electric car, a plug-in hybrid car or want to upgrade your petrol car, it should be simple and feel natural to come to us. We want to take total responsibility and make it easy for our workshops to develop their offering and their services. Our customers should feel confident in their interaction with us.”

## 3. What challenges do you see?

“It’s a matter of trust and level of service, among other things. Our customers should be able to trust that we will do what we promise. Cars that have been serviced by us should be safe on the roads. Requirements and checks will increase, including tougher legal requirements regarding emissions, quality, work environment and safety. We are urging and supporting our workshops to augment their operations by gaining Godkänd Bilverkstad (Approved workshop) status, among other measures.”

### What is Godkänd Bilverkstad (Approved workshop)?

The aim of the GBV standard is to guarantee professional repairs and that the workshop is a respectable company that fulfils the laws and regulations covering its activities. Workshops must actively focus on customer assurance, quality, health and environmental factors. In order to be approved, unannounced inspections are required together with an annual audit by an independent third party.

### KEY FACTS

*GBV promotes compliance for a sustainable future at its car workshops.*



Hanna Bühlmann  
Head of Workshop Concept and Sustainability at Autoexperter

# Hack Week aids innovation at KGGK

Realising and testing new ideas is the fuel that moves businesses forward. Sometimes it takes extra focus and concentration to do this. In the world of IT, the concept of Hack Week has been used to give developers the time needed to explore ideas and develop them into concrete functions.

During the beginning of fall, KGGK IT Development conducted the organisation’s first Hack Week. For one whole week, IT developers paused their daily work and focused only on try-

ing out new innovative ideas. Ideas the team developed concerning the main sales channel, an e-commerce platform called Autokatalogen.

This is a way of working that is new to KGGK but it is common in software development. Companies like Ebay, Volvo and Spotify, among others, arrange their Hack Weeks. An example of a software feature that came out of Hack Week is Spotify’s Daily Mix playlist.

“We implemented Hack Week to promote innovation. How often have you not sat down and developed an idea that you wanted to implement, but it never be-

comes a reality because of your daily schedule that gets in the way? There is no time to be innovative. Dedicating a week to these ideas allows us to test them and make them a reality”, says Jens Lidgren, Head of IT Development.



### KEY FACTS

*KGGK’s e-commerce platform gains additional functionality during Hack Week.*

# KGGK’s sustainability strategy is in line with Sweden’s plan for a circular economy

The government introduced a circular economy strategy to Sweden in 2020, followed by an action plan that lays the foundation for long term trends and a sustainable transition. KGGK’s sustainability strategy is their way of taking responsibility and contributing to a more sustainable automotive industry.

In a press release about the circular economy action plan, the Swedish government stated that “Using materials more efficiently increases their lifespan and value and reduces both the extraction of new raw materials and landfill waste.” The transition to a circular economy will help them achieve the environmental and climate objectives and the global goals of Agenda 2030. A more circular and bio-

based economy should strengthen the competitiveness of Swedish companies and reduce pressure on the ecosystem.

“Our strategy is to work with spare parts that correspond to the original quality for the highest durability and efficiency. We also sell used spare parts, so far to a small extent, but a project is underway where we aim to offer used car spare parts to a much greater extent”, says Johan Regeflak, CEO at KGGK.

KGGK’s sustainability strategy focuses on a circular economy and protecting the environment, and shows that they are prepared to take responsibility and be involved in driving the transition to a more



circular economy and a means of sustainable transport within the automotive sector. KGGK aims to help people move forward by offering products and services that their customers demand without draining the earth’s resources.

### KEY FACTS

*KGGK is on par with the circular economy.*

**bilsteingroup®**



## The plus in your range – febiPlus

febiPLUS combines more than 1,700 specially selected articles of different and more unusual product types for all current car models – providing a solution and alternative value-for-money repair option to the Independent Aftermarket. Products that wholesalers, repair shops and consumers generally only associate with the vehicle manufacturers' parts programmes. All articles are of OE-matching quality, endorsed by febi's 3-Year Manufacturer Guarantee.

### Wiring harness repair kits

Save time and money with febiPLUS' new range of over 115 wiring harness repair kits! These high-quality kits are available for doors, rear doors, tailgate lamps, and headlamps. The kits are exclusively isolated with silicon, which is extremely resistant against thermal stress and remains flexible at any temperature. Flexibility helps prevent cable breakage.

Furthermore, the wire braids are tinned and extra fine-wired; giving the wire more flexibility and preventing corrosion of the braids upon contact with moisture. The end of the wire has a thin coating of tin - providing a lifespan up to 10 times longer than non-tinned wire braids.

### Door lock actuators

Constant usage of a car door – opening and closing, locking and unlocking - makes the door's lock mechanism prone

to wear, corrosion and electrical failure of the actuator, switches or the circuit board.

Now, febiPLUS' door locks include an innovative new feature: the metal parts of the door lock are treated with zinc-nickel alloy for anti-corrosion protection.

During production, each part of the door lock functionality is tested to ensure quality and a long operational lifespan of the lock system.

### KEY FACTS

*The next time you think a product may not be available in the Independent Aftermarket... check febiPLUS!*



**f+ SOLUTIONS**  
MADE IN GERMANY  
[www.febi.com](http://www.febi.com)



## Evolved Bosch Aerotwin wiper with robust wiper rubber and AeroClip

New AeroClip adapter for efficient windshield wiping at high speeds.

The Aerotwin wiper with a new AeroClip adapter – an aerodynamically optimised connection between the wiper blade and wiper arm – increases the contact pressure against the windshield, preventing the wiper from being lifted by the airstream. The result is improved wiping results, even at higher speeds. The Aerotwin wiper with AeroClip adapter also features the Power Protection Plus (PPP) wiper rubber with its patented coating and long-life formula. Since a special additive makes the rubber of the wiper blade more resistant to wear and environmental influences, it lasts even longer.

**AeroClip is becoming increasingly available on the aftermarket**

A number of vehicle manufacturers already use the Bosch Aerotwin with its

- The new AeroClip adapter is innovative and aerodynamic.
- The higher contact pressure of the wiper to the windshield improves wiping results even at high speeds.
- Less wear and abrasion due to improved formula of the wiper rubber.

AeroClip adapter as original equipment. For these vehicles, the evolved wiper with its new aerodynamic adapter is also available on the aftermarket. In the coming months, Bosch will be continuously expanding its portfolio for workshops and retailers with versions for further vehicle

types. Like all the Aerotwin wipers on the aftermarket to date, the blade element of the Aerotwin with AeroClip adapter is made of long-lasting rubber. A special additive makes it resistant to environmental influences such as ultraviolet radiation and the ozone and makes it less prone to wear when wiping debris from the windshield. Compared with conventional rubber blades, there is less abrasion. Drivers can thus benefit longer from Aerotwin's optimised wiping performance.

### KEY FACTS

*Continuously optimised wiping results for windshield wiping at high velocity: The Aerotwin wiper with a new AeroClip adapter.*



## Safe, clean, steadfast – This is what winners are!

ATE shines thanks to its Ceramic brake pads in the latest ADAC brake test. The brake specialist came out on top against five competing brake systems, acknowledged in the categories of safety and durability.

**A**TE Ceramic brake pads came away as the clear winner with an overall grade of 1.7 (good). In the renowned brake test of ADAC, Europe's largest motor association, the ATE Ceramic comfort brake pads came out on top against five other competitors. ATE is a brand of technology corporation and automotive supplier Continental. The ADAC testers took a close look at six brake systems, consisting of brake pads and brake discs. The test product candidates included an OEM product, various branded and sports

brakes, and a budget brake – all of which are brake systems intended for the aftermarket.

### Top scorer in the brake cycle test

Finally, it was a total and complete victory: the test proved that ATE Ceramic brake pads, combined with ATE original brake discs, were convincing in terms of wear, where they marginally prevailed over all other competitors. During the process, the brake systems were tested under realistic and highly stressed braking cycles. ATE Ceramic brake pads secured an overall score of 1.0. And not only this: the second-placed test candidate was more than a whole grade behind the winner. In terms of braking distance, the ATE Ceramic brake pads achieved the second-best score of 1.5 which demonstrates their good friction properties.



### Less abrasion contributes to a cleaner environment and provides greater comfort

"ATE Ceramic brake pads offer both: high safety, as shown by the results in the brake test, and also durability," says Maik Spengel, the Continental product manager. "We are particularly pleased that ten years after winning the Innovation Award at the Essen Tire Fair, ADAC has now also independently confirmed the outstanding properties of ATE Ceramic brake pads," adds Peter Wagner, Head of the OE & Aftermarket Services business unit at Continental.

#### KEY FACTS

Best brakes make safest and most heavy-duty halting power for the aftermarket.



## Multiple award-winning all-rounder: the Ford 1.0 | EcoBoost®

Better engine configuration and smoothness.

**N**ot only does the 1.0-litre EcoBoost® gasoline engine from Ford power the Fiesta small car, but it also puts in a sterling performance under the hood of the large Ford Connect van. Over a quarter of all Ford models sold in 2018 had this compact power unit on board, and it also provides the basis for the engines in the new Fiesta and Focus model variants with a mild-hybrid powertrain and belt-driven starter generator. The widespread use of this engine is reasoned enough for automotive mechanics to take a closer look at it.

### Notable success in performance and efficiency

Since making its debut in 2012, the 1.0-litre EcoBoost® gasoline engine has racked up a string of international awards. And quite rightly too, with its high-pressure direct injection, turbocharging and variable camshaft timing resulting in powerful,

responsive performance. Thanks to the turbocharger's exceptionally efficient turbine with a low moment of inertia, the engine has virtually no turbo lag either. And that means even more fun at the wheel. This driving pleasure is delivered by units ranging in output from 74 to 103 kW. Ford ingeniously designed the engine's flywheel with a precisely engineered degree of imbalance to counter the characteristic uneven running of three-cylinder engines.

### Decrease in fuel consumption and CO<sub>2</sub> emissions

In 2016, the Ford engineers went one better with a genuine world premiere: they added cylinder deactivation technology to a three-cylinder engine for the first time. The cylinder deactivation feature automatically halts fuel injection and valve operation for one of the three combustion cham-

bers when full engine power is not required – e.g. when coasting or cruising along at a constant speed. It takes just 14 milliseconds to deactivate and activate a cylinder; i.e. it happens 20 times faster than the blink of an eye. Shutting down a cylinder in this way lowers fuel consumption and CO<sub>2</sub> emissions by reducing friction and pumping losses in the engine.

Continental is offering a wide range of replacement parts for this engine in its aftermarket range. What's more, Continental also highly recommends the new addition to popular Watch and Work series of service videos, in which Continental's technical trainer Stefan discusses how to change the timing belt on this exact engine. It's well worth checking out [here](#).

#### KEY FACTS

Time and again, Ford EcoBoost receives high scores for its 1.0 litre, three-cylinder efficient petrol engine.



# Sensing customer's needs: Delphi Technologies relocates oxygen sensor production in significant global move



Delphi Technologies relocated its sizeable oxygen sensor portfolio production to a customized, in-house plant. The move to Piracicaba, near São Paulo in Brazil, puts production and engineering expertise under one roof to better serve global demand. The relocation project demonstrates a significant commitment to customer market needs worldwide, building resilience to the current situation.



The change establishes many immediate and long-term benefits for customers. Delphi Technologies is situated to accelerate product delivery and respond with agility to market demands as sensor technology proves to be pivotal to unlocking intelligent, interconnected future mobility.

The facility to launch new applications and expand coverage with market-leading quality gives Delphi Technologies customers an advantage when choosing sensors for the latest car models. The sustainability benefits also make the strategic decision to move locations a logical choice. Reducing the carbon footprint of manufacturing and emissions from transportation

further demonstrates Delphi Technologies' ability to satisfy customers' needs in the supply chain.

"Bringing the production in-house allows us to work with the best suppliers alongside our pioneering manufacturing expertise to guarantee reliable future business when customers partner with Delphi Technologies," says Mehmet Kulahci, Delphi Technologies Aftermarket, Global Product Line Director. "This move puts us in the ideal position to serve global customers with a sustainable supply chain, in a vehicle market set to grow by over 200 million oxygen sensors into 2030."

34 of the most popular applications, serving South America and Europe, the

Middle East, and Africa, have been chosen to kick off the move and lay the framework for more to come. Delphi Technologies oxygen sensor portfolio boosts broad aftermarket coverage coupled with OE expertise and more robust production than ever before. Combining this with Delphi Technologies advanced diagnostics and comprehensive technical training completes the O<sub>2</sub> sensor package, bringing together all the components of a successful workshop solution and prolonging a vehicle's life.

**KEY FACTS**

*Production relocated to benefit customers globally and sustainably in a growing vehicle market.*



# FERODO® introduces first automotive brake pads to bridge gap between braking performance and comfort



Revolutionary FERODO Fuse+ Technology pads offer top-tier stopping power, longer pad and disc life, reduced dusting and certified OE matching quality.



Fuse+ Technology pads extend the FERODO brand's 125-year history of game-changing innovation. FERODO in 1922 became the first manufacturer to supply OE friction linings for a mass-production car. In 1956 the brand introduced the world's first disc brake pad. Today FERODO product engineers continue to explore new material formulations, pad designs and other innovations to address needs among the world's leading automakers and workshop professionals.

The new technology also continues the brand's heritage of bringing OE braking technologies, quality and performance to the aftermarket. In addition to being developed in the brand's European OE R&D facility, Fuse+ Technology brake pads are man-

ufactured to OE standards in Tenneco's European production facilities. FERODO Fuse+ Technology brake pads are available immediately for almost 100 premium-level vehicle models from Europe's premier automakers, including Audi, BMW, Mercedes-Benz and Volkswagen. Each set of pads is packaged complete with all required accessories to ensure fast, easy installation. To learn more about FERODO Fuse+ Technology brake pads, visit [www.ferodo.com](http://www.ferodo.com).

FERODO®, the preferred original equipment (OE) brake products supplier for more than 100 years, has introduced innovative automotive brake pads to bridge the gap between outstanding braking performance and high-end comfort. The new FERODO Fuse+ Technology brake pads, engineered and manufactured exclusively in the brand's class-leading sites in Europe, feature a highly advanced new friction material that combines the trusted, high-performance braking power of low-steel formulations and the comfort-intensive characteristics of non-asbestos organic (NAO) materials.

A new era of braking innovation is afoot. FERODO Fuse+ Technology brake pads are the result of more than three years of intensive research and development at the FERODO Tech Centre, Chapel-en-le-Frith, U.K. Fuse+ Technology pads feature a unique combination of more than 20 precisely engineered components that work in concert to deliver unsurpassed braking performance, helping to lower the traditional drawbacks associated with conventional materials. These new pads also include FERODO's exclusive zero-copper\* Eco Friction Technology, which reduces dusting and cuts pad emissions by 60%.

"Fuse+ Technology marks the beginning of an entirely new era of braking innovation on behalf of the professionals, racing teams and consumers who rely on FERODO brake pads," says David Coimbra, Braking Aftermarket Product Manager, Tenneco DRiV EMEA Motorparts. "This exciting new technology eliminates the need to lose certain important braking characteristics to achieve others. Now, our customers can enjoy the best of both worlds."

**KEY FACTS**

*Premium innovative brake pads lower traditional pitfalls and deliver superior quality performance to the aftermarket.*

\* according to the California and other regulations in place

# Elring – Das Original online sealant advisor



Find your perfect sealant in just three steps.

As part of the restructuring of the Elring – Das Original sealant range, the familiar online sealant advisor on the Elring website has been adapted to make it more user friendly. You can find the required sealant and further information in just three easy steps. The user is first asked about the type of application and can then specify conditions such as temperature or breakaway torque, meaning that only those sealants that are relevant for your application appear. If the online advisor fails to offer

a solution, you can provide a brief description of the location to be sealed in the contact form and request direct advice from one of our Elring experts.

The range includes not only the high-quality Dirko™ HT silicone sealants in different colours and with different cross-linking systems but also our anaerobic sealants. These include EL-Liq 73 and EL-Liq 74 surface sealants, which are, for example, perfect for metal-metal seals on valve covers. The new EL-Loc 43 and EL-Loc 70 thread lockers are now available in

10 ml vials, along with two brand new products – EL-Fil 77 and EL-Add 48 – and are suitable for threaded connections in piping. The enhanced Curil™ T2 rounds off the product range. It is a permanently elastic and fuel-resistant sealant, with a brand known and trusted for decades.

#### KEY FACTS

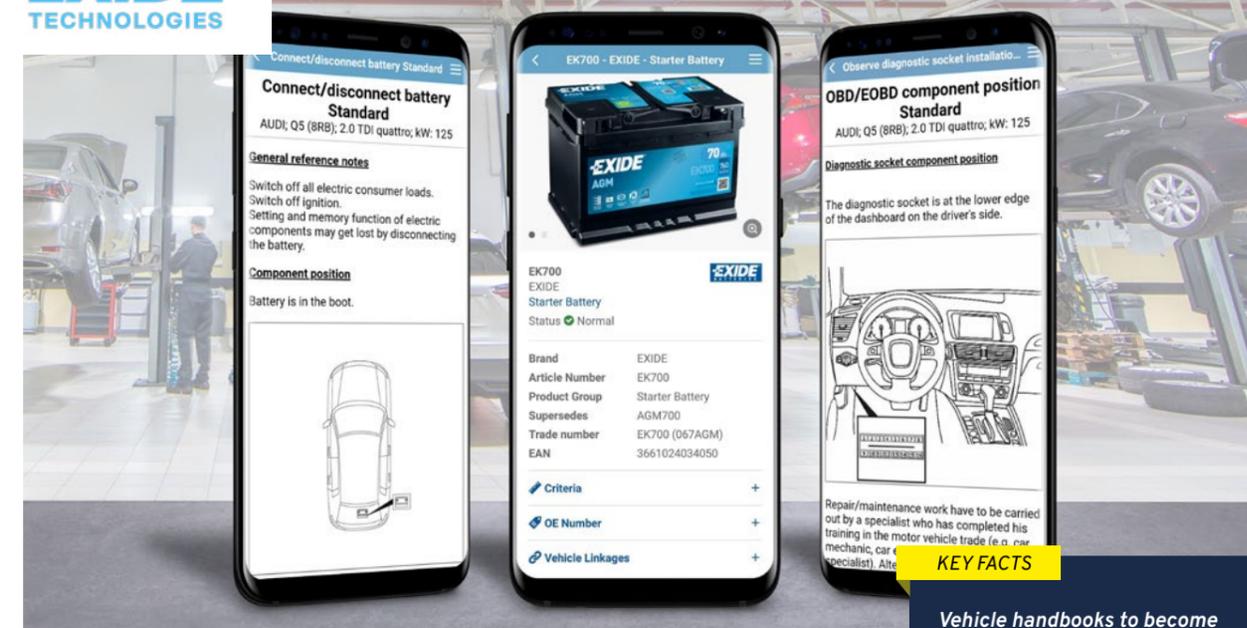
*Innovative online advisor helps users to easily identify the correct sealant needed to protect and retain the original seal.*



10 ml vials, along with two brand new products – EL-Fil 77 and EL-Add 48 – and are suitable for threaded connections in piping. The enhanced Curil™ T2 rounds off the product range. It is a permanently elastic and fuel-resistant sealant, with a brand known and trusted for decades.



**EXIDE**  
TECHNOLOGIES



#### KEY FACTS

*Vehicle handbooks to become outdated when needing to find the battery location.*

## Exide Battery Finder now with battery replacement instructions

Finding the right battery is just half the battle.

Exide enhances the power of its online Battery Finder. As well as providing market-leading fitment information across a broad range of vehicle types and models, the advanced Exide Battery Finder tool helps guide mechanics through the replacement process for passenger cars of the European car parc, including hybrid and electric, and light commercial vehicles. Once the correct battery for the selected vehicle has been identified by the model, VIN or by using country codes/license plates, Exide offers accessible and detailed instructions on:

- **Battery location**  
From now on, no need to consult the vehicle handbook to find the battery location of a model.
- **Approximate labour time**  
The approximate labour time (directly

communicated by car makers) allows mechanics to estimate the complexity and cost of repair in advance.

- **How to exchange the battery**  
Mechanics see how to connect and disconnect the vehicle's battery and set up its related functions, such as initialising window regulators and gearbox settings which means they can use the tool from start to finish.
- **Information regarding validation and how to register this into the vehicle's battery management system**  
Using a professional diagnostic tool, the battery is accurately registered to prevent damage in a car's electrical system and the battery on its own.

87% of the existing European car parc\*. Exide's dedicated team regularly updates the database to cover the European car parc in the most comprehensive manner. The enhanced Battery Finder including the new Battery Replacement Instructions can be accessed on a desktop computer or as an App on a mobile device – no registration required and completely free of charge.

Available on the  
**App Store**

GET IT ON  
**Google Play**

Visit [www.exidegroup.com/eu/en/battery-finder](http://www.exidegroup.com/eu/en/battery-finder) now or download the app on Apple Store or Play Store.

# Gates and the transfer to electric power



Driven by stringent low emissions targets set by governments, vehicle manufacturers compete to deliver an electrified car parc.

Manufacturers like Gates are assisting with the transfer of power from the Internal Combustion Engine (ICE) to the Electric Vehicle (EV):

“When it comes to new powertrain systems and the new technologies, we are at the forefront of vehicle systems design and the development of dynamic systems capabilities,” says Steven Zimmer, VP automotive aftermarket sales, EMEA. “We have the R&D teams. We appreciate the OE performance specifications required. We manufacture the parts in our factories, and we understand the market. This expertise allows us to set standards for quality and reliability in the aftermarket, which represents a very significant part of our business.”

Successful OE collaborations enabled Gates to develop aftermarket parts programmes for hybrid cars and EVs and contributed to a legacy of product ranges and technical support for ICE-based technology. “This is important because the car parc is getting older that means Gates will play a significant part in the maintenance of cars with ICE technology for at least the next 15 years.”

## New products key hurdle in vehicle manufacturers' race to clean energy

Two new products were added to Gates fluid power range at Automechanika in 2018 which shows us their versatility and increasing focus on vehicle electrification.

“The first was modular coolant hoses, which sometimes incorporate sensors that make them subject to more frequent replacement,” says strategic product development director Jean-Christophe Etienne. “These are new product opportunities manufactured in Gates factories. The second was electric water pumps. These are essential for battery durability and the overall vehicle performance of hybrids and EVs. Some EVs have multiple units, so it's a range that is growing fast,

adding value and new revenue streams for installers and distributors.”

## More product ranges have since emerged

“The launch of E-Start™, last December, is the latest example. It is already helping to associate our belts and kits more strongly with a wide range of hybrid vehicle designs,” says Casper Haenbeukers, VP engineering global engine systems power train. Thanks to a broad portfolio of OE collaborations, he says the Gates core product range continues to expand. Recent examples include:

- Sidewinder tensioners and Micro-V® belts and kits for Stop-Start applications.
- Belts & tensioners, dry and in oil
- Alternator Isolator Decouplers.
- Eco Sprockets.
- Flexible couplings.
- EPAS belts for steering columns.
- Electrical and mechanical water pumps.

Vehicle sales trends show that the vehicle parc is getting older.



“By 2030, EVs will comprise around 30% of the market in EMEA. The remainder will be mainly hybrids, in any configuration, featuring ICE technology such as power recuperation systems, power boost modes fitting many with Gates belts designed to run for up to 300,000 km.”

Steven Zimmer concludes by saying that vehicle electrification is bringing new opportunities to the independent aftermarket and that Gates will help to deliver the technical knowledge that installers will need:

“To manage a successful transition into EV maintenance, garages will need information. We are doing everything we can to provide it. We are continually developing new training materials and have the infrastructure in place to deliver the support that our distributors will need to service the requirements of their garage customers.”

## KEY FACTS

Gates manages and plays a significant role in the successful switch to e-cars.



# Perfectly fitted prop shafts from GKN Automotive

Safe, precise and available from specialist retailers.

GKN Automotive prop shafts offer workshops several advantages. Not only are all parts of the highest OEM quality and available from specialist stores and all major online parts suppliers, but customers also profit from their unrivalled portfolio range. GKN Automotive provides all the necessary components, from partial shafts to complete power trains.

Quality is everything in passenger cars, SUVs or light commercial vehicles when replacing prop shafts. These parts are genuine high-tech components, requiring high-precision production systems and comprehensive expertise. Therefore, workshops operating in this segment should order spare parts from GKN Automotive, as they precisely match the

customer not only receives OEM quality parts with products from GKN Automotive but also benefits from the advantages of wholesaling – a win-win situation for workshops and end customers.

## High tech for power transmission

Prop shafts are one of the high-tech components in modern vehicles, especially those with four-wheel drive. The new generation is no longer comparable to the “good old cardan shaft”. For instance, prop shafts nowadays are an important element when it comes to vehicle safety. In the event of a crash, simply constructed joint shafts can irrupt the interior of the vehicle, causing potentially serious consequences for its occupants. GKN Automotive prop shafts meet the manufacturers' high safety standards and contain the best possible precision technology needed in worst-case scenarios.



Safety in series: The Ballspline sliding unit from GKN Automotive – seen here in section in the right half of the shaft – enables the component to be shortened in the event of a crash (example from the VW Amarok).

prop shafts supplied to OEMs. As a leading producer of original equipment shafts, GKN Automotive works closely alongside many key manufacturers to keep expert quality standards.

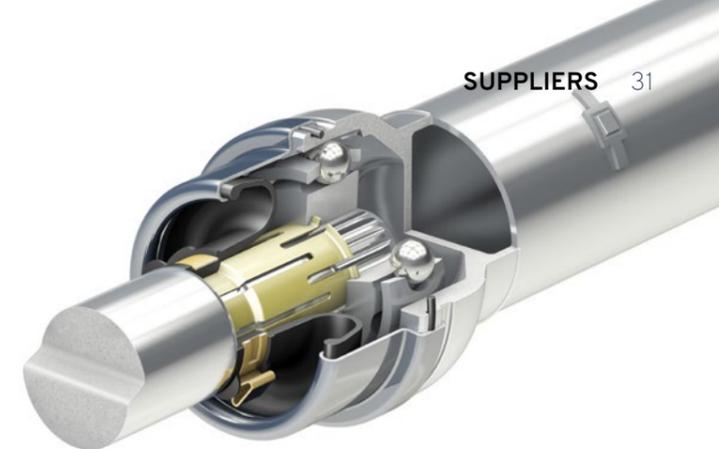
Because GKN Automotive products are listed in the catalogues of all major wholesalers, ordering the prop shafts is as easy as using the vehicle manufacturers' ordering systems. It is helpful to know that the

Another important aspect in terms of driving comfort is the vibration characteristics of the shafts. In extensive test runs, GKN Automotive precisely matches the specific requirements of the individual vehicle types and their “NVH behaviour” (noise, vibration, harshness) to avoid annoying noises and vibrations. This process requires choosing suitable high-quality materials and weight optimisation and precision balancing of the prop shaft. In short, replacement shafts from GKN

Automotive are manufactured precisely according to OEM specifications, which means that the end customer enjoys the same driving comfort as in a new vehicle. “As one of the world's leading OEMs for prop shafts, we work with the manufacturers' engineering departments on the development of new vehicles. Thus, we can offer automotive companies products tailored to the specific requirements of the individual vehicle types and manufactured precisely according to the factory specifications”, says Holger Freese, Sales Manager for Germany, Austria and Switzerland at GKN Automotive Aftermarket Business. “Our workshop customers also benefit from this technology, because our prop shafts for the spare parts market deliver the same performance as the original parts.”

The growing number of SUVs and other vehicles with 4x4WD, which often have multi-part configurations for prop shafts, means that demand for technically advanced spare parts solutions for workshops is continuously increasing. With a broad portfolio of OEM quality complete prop shafts for the independent spare parts market, GKN Automotive offers this growth segment what it needs.

Listed on TecDoc, the extensive product range of the GKN prop shafts is available at all major wholesalers.



Top technology for power transmission: Detail of a prop shaft for the Audi Q5

## KEY FACTS

GKN Automotive's new generation of prop shafts boost fine-tuning without integrating capability or performance of the original parts.



## KEY FACTS

Hella Gutmann presents X, a brand new intelligent solution for diagnostics.

## The revolution in vehicle diagnostics

With the new mega macs X, Hella Gutmann is launching a highly flexible all-in-one car translator with X advantages.

Communication with the increasingly intelligent vehicles is changing quickly. Hella Gutmann concludes that diagnostic solutions for the future should therefore be as flexible as possible. That's why the diagnostic and data world has been thoroughly redesigned introducing the mega macs X. Just as a driver can configure his new car in almost any way, a workshop should also be able to decide individually which function modules and data types it needs for multi-brand diagnostics and which operating hardware it would like to use for this. The X, therefore, stands as a variable for the different possibilities that arise for workshops of all sizes and specialisations thanks to individual function and data configurations.

### Modular device concept with separate display/control unit

In addition, the X in the name of the new Hella Gutmann diagnostic device stands for new freedom in device handling. In contrast to previous diagnostic solutions from Hella Gutmann, the mega macs X has a cable with an illuminated CARB connector for the vehicle's OBD interface, but neither display nor keypad. The impact-protected housing houses the entire intelligence, i.e. the processor, the diagnostic software and

the integrated diagnostic protocols – including CAN FD and DoIP for new vehicle models such as Skoda Octavia, Volvo XC 90 and Golf 8 from Volkswagen.

For the operation and display of the diagnostics, the mega macs X needs to be paired with a separate device. This can be a tablet, a notebook or a PC with one of the standard operating systems (Windows, Android, Apple iOS, Linux). No need to carry a heavy diagnostic device around – and no great effort if the display has been damaged in the tough workshop environment. It can be easily replaced by another tablet. A specially adapted, impact protected Hella Gutmann tablet is also available.

### Individually configurable function and data modules

In terms of content, the mega macs X masters exactly those functions that the user has defined through his configuration. After purchasing the hardware and desired SDI software X<sup>1</sup> to X<sup>5</sup>, he still needs the appropriate license module\* X<sup>1</sup> to X<sup>5</sup> to unlock the use of the data and functions. This already includes the future regular software updates. A workshop may start with the minimum functions read/delete error code in the licence module X<sup>1</sup>. Later upgrades to X<sup>2</sup> to X<sup>5</sup> are always possible



and allow the mega macs X to grow with the dynamic needs of the workshop. The possibilities range from a top-quality diagnostic solution with guided measurements to new functions and data types for ADAS and lighting systems and e-mobility. An integrated bracket allows the positioning of the mega macs X on the vehicle's side window, thus ensuring a stable Wi-Fi connection to the display/control unit at all times, even on vehicles with chrome-plated windshields. A green LED scroll bar on the front and rear of the device confirms active vehicle communication during diagnosis. Other functions are signalled by the illumination patterns of the so-called swoosh. A circumferential cable duct and a magnetic surface for fixing the CARB connector make the diagnostic device a compact unit when not in use and can be systematically placed on the inductive charging station.

<https://www.hella.com/techworld>

\* Name and scope of the license packages may vary from country to country.

## Calibration at the touch of a button

Calibrating cameras and sensors are about precision and speed. Now, MAHLE's setting new standards with TechPRO® Digital ADAS 2.0. The updated calibration tool uses artificial intelligence that automatically does much of the work for you.

When calibrating driver assistance systems, preparation takes up the most time: finding the right calibration panel, aligning the vehicle, and manually transferring the data to the diagnostic tool. MAHLE's TechPRO® Digital ADAS unit has already dramatically sped up the first two steps compared to their competitors, due to the digital calibration panels projected on the screen and the vehicle alignment supported by MAHLE's laser-based technology. This alone reduces the time spent on a job by up to 80%.

### Automated Laser Metres

The new TechPRO® Digital ADAS 2.0 goes a few steps further and almost completely automates the setup process. All you have to do now is attach the wheel clamps, place the digital calibration panel in front of the vehicle, and move the laser range finders into position. One more click, and the Digital ADAS 2.0 takes care of the rest. For this purpose, MAHLE has developed new laser metres that measure the distances and transmit the measurement data to the diagnostic tool themselves via Bluetooth. You no longer have to read off figures and type them in, which not only saves time but also makes it nearly impossible to enter data incorrectly.

Furthermore, MAHLE can top this: at the touch of a button, the calibration panel also moves into the correct position in front of the camera or sensor fully automatically by artificial intelligence. Setup is completed in no time!

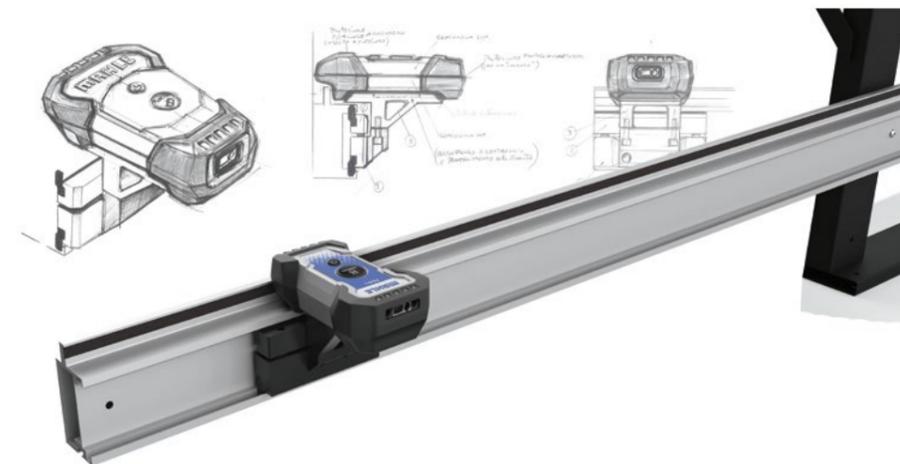
### Automatic vehicle identification

In France, Italy, the Netherlands, Spain, and the UK, license plates are directly

linked to the VIN. MAHLE jumped at the opportunity of this and made use of artificial intelligence. Therefore, in these countries, the calibration tool comes with an optional webcam. All you have to do is place the vehicle in front of the calibration tool as usual. The camera takes a photo of the license plate and transfers it to the TechPRO® diagnostic tool. No more looking at the vehicle registration document, no typing, no need to confirm. It saves time and prevents data input errors as the vehicle selection process is complete in a single step! You can also include the photo of the license plate as proof in the calibration report.

### Support directly at the Workplace

Calibrating driver assistance systems is a complex process that needs to take place with care and precision at every step. MAHLE has developed short (5–10 seconds) step-by-step video instructions for each calibration phase to help you if you're new to their tool, unsure of a procedure, or want to train an employee. You can play the clips directly on the new 65-inch matte monitor. Tip from MAHLE: You can also use the monitor as a multimedia centre for



# MAHLE

## KEY FACTS

MAHLE boosts autonomous calibration technology through artificial intelligence getting to the bottom of the ADAS challenge.

## Advantages

- MAHLE laser metre: transmits the distances from the vehicle to the diagnostic tool via Bluetooth.
- Fully automatic height adjustment at the touch of a button.
- Webcam: automatic vehicle recognition (only in countries with VIN lookup via license plate, such as France, Italy, the Netherlands, Spain, and the UK).
- 3D animations of the setup process.
- Matte monitor: no reflection.
- Horizontal bar can be split: saves space.



Available in the MAHLE and BRAIN BEE brands.

presentations or advertising.  
[www.mahle-aftermarket.com](http://www.mahle-aftermarket.com)  
[www.mpulse.mahle.com](http://www.mpulse.mahle.com)



**MANN  
FILTER**

70 years of MANN-FILTER:

## Celebrating every accomplishment, raising the bar each time

The premium filtration brand proudly celebrates a milestone jubilee in retrospect of a successful development history, which paves the way to an optimistic and promising future.

In 1941, Adolf Mann and Dr. Erich Hummel established "Filterwerk MANN+HUMMEL" in Ludwigsburg, as it was called back then. Eight decades later, MANN+HUMMEL has become a global leading filtration expert, employing more than 21,000 people at over 80 locations, with sales totalling 3.8 billion euros (in 2020). MANN-FILTER has been there from the start and remains a globally valued company brand

### MANN-FILTER: Then and now

70 years ago, on August 16, 1951, MANN-FILTER became a registered trademark. What started as a small national brand in Ludwigsburg, the company started gaining international popularity in the 1960s. The premium brand is now an undisputed force in filtration technology for the automotive and industrial sectors across the globe. Their filters combine the entire know-how and experience of the MANN+HUMMEL Group in a comprehensive product portfolio with 100% OE quality for the worldwide aftermarket.

"We proudly look back on the very successful 70-year history of our premium brand, which we continue to build every

day," affirmed Simon Frick, Vice President of Sales IAM Europe at MANN+HUMMEL. "We are taking the anniversary as an opportunity to thank our customers around the world for their many years of loyalty and good and successful collaboration. This development would not have been possible without our customers," added Frick.

As one of the few brands in the automotive aftermarket, MANN-FILTER has managed to become an icon with cult status over the years with its striking yellow-green company colours. For a few years now, they've also been enjoying the same success in motorsports. Here, it is the yellow-green mamba that is generating a lot of excitement among the brands' growing fan base.

### Award-winning worldwide

MANN-FILTER is a big hit which is evident by the many awards they have received worldwide. The fact that customers independently choose their favourites further reinforces this. "Our numerous awards make clear how much our customers appreciate MANN-FILTER. We are very proud

and happy about every single one, such as the "Best Brand" award from ETM Verlag in cooperation with the Automechanika trade show," says Frick. "To receive this award for the tenth time in a row on our 70th anniversary is a great gift and a great honour. It motivates us to continue developing innovative products for vehicles and machines while offering comprehensive service packages."

### A glimpse into the future

"Seven decades of successful brand history also means we bear a great responsibility for the future. And we want to live up to this obligation. To meet the challenges ahead, we are developing the filters of tomorrow in the vehicles and machines of today. After all, we want to still make the same promise to our customers in the future: MANN-FILTER – Perfect parts. Perfect service."

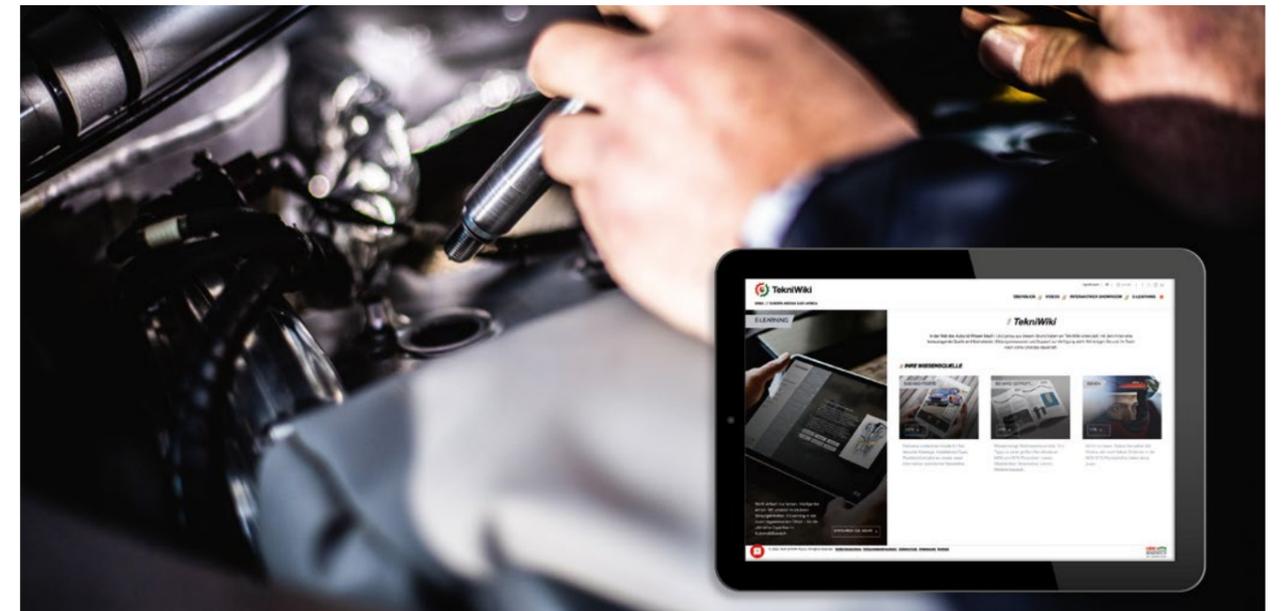
### KEY FACTS

*Platinum jubilee marks the undisputed global success in automotive and industrial filtration technology, and paves the way to succumb the industry challenges of tomorrow.*

## Everything you need to know

**NGK NTK**  
SPARK PLUGS TECHNICAL CERAMICS  
NGK SPARK PLUG EUROPE GmbH

Even the most experienced technicians can't know everything. So many rely on TekniWiki, an NGK SPARK PLUG website full of information and practical tips. The latest update has made the platform even easier to use – on any electronic device.



For anyone who has ever needed quick access to technical information or practical tips on ignition parts and sensors, TekniWiki has quickly become the place to go. The platform presents in-depth technical knowledge on most of the NGK and NTK products. Easy to use, the site is immensely popular with workshop personnel, teachers, educational institutions, or anyone with a general interest in ignition and sensor technology. The attraction of the 'TekniWiki' also comes from the fact that it is much more than just a technical library. The website provides access to the company's popular e-learning platform and how-to videos, as well as other technical videos that are of interest to everyone, from the professional mechanic to the hobby car enthusiast and 2-wheel petrolhead.

### Know-how in just a few clicks

The new, updated TekniWiki makes it even easier to find what you need. Seasoned us-

ers will immediately notice that they only need two or three clicks to get the information they want. What you can't see is that the new structure also makes it simpler for the company to post new content, so that updates are online sooner. Most importantly, the site was re-programmed so that you get the full benefit of the site, regardless of whether you are using a computer, tablet or smartphone.



### Everything on one platform

TekniWiki is made up of four easy-to-use sections: the 'Technical Know-how' area provides e-learning applications. Go here to find interactive courses on spark plugs, glow plugs, oxygen sensors, ignition leads, ignition coils and MAF sensors. There is also a YouTube channel which you can ac-

cess via the site by going to the 'TekniWiki' videos section and you can view them there, without leaving the platform. The 'Download' area provides fast access to the company's catalogues and brochures. Finally, the 'News' section offers up-to-date information from the world of the NGK Ignition Parts and NTK Vehicle Electronics brands.

TekniWiki is available in 15 languages at [www.tekniwiki.com](http://www.tekniwiki.com).



### KEY FACTS

*Technical information and practical tips on ignition parts and vehicle electronics at your fingertips on a re-designed interactive platform.*

# Product updates and highlights from Nissens



Danish thermal and efficiency components manufacturer continues its ambitious development strategies and extends business solutions for the aftermarket.

## KEY FACTS

*Nissens new product portfolio – unveiled at Automechanika in Frankfurt – further growth opportunity in the aftermarket.*

Nissens unveiled new products and essential updates in various product categories and vehicle segments this September at the hybrid edition of the Automechanika trade event in Frankfurt, Germany. As always, the product solutions Nissens offers come from clear business needs and thorough market analysis. The product releases offer a clear advantage for spare part business partners and all aspects of the automotive aftermarket.

### All innovations & updates from Nissens, autumn 2021:

- Truck Turbochargers.
- Electronically controlled Turbos with OE actuators from Hella.
- EGR valve modules with cooler.
- +20 DC/Torque motor-driven EGR valve models for Euro 5-6 motors.
- Expansion tanks for passenger cars and light commercial vehicles.
- Oil coolers with housing – range extension.

### Even stronger turbocharging, now also for trucks

One of Nissens' key releases is a brand new turbo line designed for trucks. The initial program covers 240 OE numbers of the most popular truck models in the European Union. Nissens' proven approach to turbo development is now in use in the commercial vehicle segment, where spare part quality, reliability and performance are even more important. The Genuine Nissens Quality concept ensures that a truck engine equipped with a Nissens turbocharger is a reliable part replacement choice, delivering superior power, lower emissions and better fuel economy.

### OE precision in turbocharging control

Electronically controlled turbos are mainly for premium-segment vehicles and engines with advanced efficiency and emissions control. They offer higher diagnostics capabilities as well as excellent control stability. In partnership with electronics experts, Nissens developed e-Actuator Turbo models, equipped with OE-manufactured electronic units. Several of the latest Nissens turbo models for Euro 5-6 engines are now available with actuators from the German manufacturer Hella.

### Even more engine cooling

Nissens has two new updates this season, the first being the expansion tank for passenger cars and light commercial vehicles. While expansion tanks may seem less important at first glance, they play an essential role in proper engine cooling. Nissens' product is a plug-and-play solution and comes with necessary parts like caps and sensors included in the box. With the truck expansion tanks already in the range, the extension for passenger and light commercial vehicles makes Nissens' tanks program available for all vehicle segments.

The other update is an oil cooler assembly with a filter and housing. The complete solution from Nissens ensures that all vital components are delivered in one set, and

all operate in sync. Choosing the complete unit is less risky, and it's essential for proper oil cooling and filtration. It also prolongs the lifespan of the engine and all associated components. Nissens' oil coolers with housing include gaskets pre-mounted on the unit to help mechanics save time in installation.

### Genuine Nissens quality

Spare parts distributors and aftermarket car technicians can expect a premium product offering. Newly launched parts are designed with features improving product performance and durability and are part of Nissens' extensive test and validation program. Nissens parts come as ready-to-install-quickly. Each part is sold as "First Fit", meaning that all the necessary components, as well as extra mounting parts, are included in the box, to make installation quick and easy for technicians.

To learn more about product launches and new components from Nissens, visit the company's showroom at <http://showroom.nissens.com>



# Sustainable development: at the heart of NTN EUROPE's DNA

The approach adopted by NTN EUROPE to Corporate Social Responsibility (CSR) is of the highest level among companies in its sector.

The long-lasting and participatory initiatives taken by NTN EUROPE guarantee sustainable development based on ethics, responsible purchasing, continuous reduction of our impact on the environment, better working conditions and the transfer of knowledge, skills and innovation.

### SAFETY is the priority at NTN EUROPE: we are all responsible

NTN EUROPE wants to be a co-developer of safer, more sustainable and more efficient positive mobility. The social responsibility at NTN EUROPE consists of three pillars:

- Protecting the environment and controlling risks are NTN EUROPE's preoccupations.
- The sustainability depends on the satisfaction of the interested parties, in particular customers.
- Commitment to ethics.

### NTN EUROPE's concrete participation in sustainable development

The group's expertise lies in manufacturing products to meet the most demanding applications by ensuring the ethics of sustainable development.

A sustainable product has to respect the following aspects:

- It must stem from sustainable materials (e.g. recycled material, easy to

recycle material: aluminium strut bearing, recycled plastics in strut bearing).

- It must be produced and/or transformed in manufacturing plants with reduction of environmental impacts (e.g. less CO<sub>2</sub> emissions, offices electrified with solar and wind energies).
- It must contribute to lower energy consumption.
- It must consider the environmental impacts of distribution (transportation, packaging).
- It mustn't go to waste but be given a second life through repair, remanufacturing and/or refurbishment - It must be made, distributed, supplied and sold to companies fairly and honestly, with ethics and sustainable relationships based on customer satisfaction.

The key factors that influence innovation daily are all constraints that must meet societal changes.

To keep up with demand, automotive innovation must take electrification, friction reduction, vehicle lightening, the development of new sensors, simplified maintenance and the use of green materials into account. NTN EUROPE is now focusing its R&D plan on intelligent products with increased reliability. These

parts, which maximise performance and optimise life cycles, must have the lowest possible environmental impact.

### Mobility and electrification

As mobility is now subject to new environmental constraints, NTN EUROPE designs and manufactures products that meet the global standards which aim at limiting the environmental impact of vehicles.

In a more global perspective of respect for the environment, NTN EUROPE is reviewing its industrial processes so that they too are ecologically responsible. For example, non-destructive testing methods based on aqueous products are used to recycle 99% of waste in factories.

NTN EUROPE is aware of the strong growth in the electric and hybrid markets and the constraints linked to electric motors, and the associated gearboxes are on the rise. It is developing high-performance bearings that consider the high operating speed of motors, and the problems of electrical insulation.

## KEY FACTS

*CSR is a key pillar for automotive innovation and must include certain principles in practice.*

# OSRAM – driver of innovation

OSRAM has been turning night into day for over 110 years.

As the leading supplier for the automotive lighting market with a reputation for pioneering innovation and high-quality German engineering, the lighting manufacturer has recently launched new additions to the performance portfolio.

## OSRAM NIGHT BREAKER® H7-LED

Customer safety has always been a core focus for OSRAM, so it's no surprise that the latest proof of OSRAM's pioneering spirit is the first street-legal retrofit LED lamp: The NIGHT BREAKER® H7-LED<sup>1</sup>. It impresses with up to 220% more brightness<sup>2</sup> and up to 5 times more longevity.<sup>3</sup> The on-road use of H7-LED replacement lamps have long been prohibited by road authorities. While the rest of the industry resigned themselves to this fact, OSRAM were determined to bring the improved technology of H7-LED to more motorists.

Alongside German official authorities, photometric measurements were carried out on actual headlights to determine whether LED replacement lamps are compatible with sufficient existing vehicle models. Based on this result, it became clear that a large proportion of the vehicles comply with the ECE R112 glare values – which corresponds to a market coverage

of 80%. The findings paved the way for OSRAM to produce the first LED replacement lamp approved for use on German roads. After this new milestone, Austria and Croatia followed by approval. More markets are about to follow and brings a promising business opportunity.

The NIGHT BREAKER® LED is currently compatible with many popular vehicles, such as the BMW 2 Series or Audi A3 and A4 or Ford Mondeo, and the list is growing. The installation is to be done by an automotive specialist. To support garages, OSRAM offers a five-year warranty to end customers if the instalment of the H7-LED is completed at that workshop.<sup>4</sup> The list of approved countries and compatible vehicles can be found at [www.osram.de/ledcheck](http://www.osram.de/ledcheck)

## OSRAM takes their halogen portfolio to the next level

Besides LED innovation, OSRAM has also pushed their halogen portfolio to the next level with the NIGHT BREAKER® 200. This is by far the most powerful halogen headlight OSRAM has ever produced – with up to 200% more brightness than the minimum legal standard.<sup>5</sup> Drivers see better and farther into the distance, allowing them to recognize and react to signs and

## OSRAM



obstacles sooner before they become a threat to safety. Considering that millions of Europeans rely on halogen-fitted cars, you can see why this little lamp is such a big deal for the automotive service industry.

OSRAM's history of innovation and reputation for quality has made them the preferred lighting partner for so many car drivers. However, the most impressive features of OSRAM are those you can't see: features like increased customer satisfaction, more trust and an enhanced business reputation. You can depend on the lighting manufacturer to deliver dedicated point-of-sale, training and advertising materials for workshops to strengthen their day-to-day business when consulting end customers. If you want to find out more, visit [www.osram.com/am/](http://www.osram.com/am/)

### KEY FACTS

Osram prevails at the forefront in automotive lighting development.



<sup>1</sup> Only applies to the respective countries in which there is approval and the vehicle models of light functions currently listed in the compatibility list. Exact conditions [here](#).

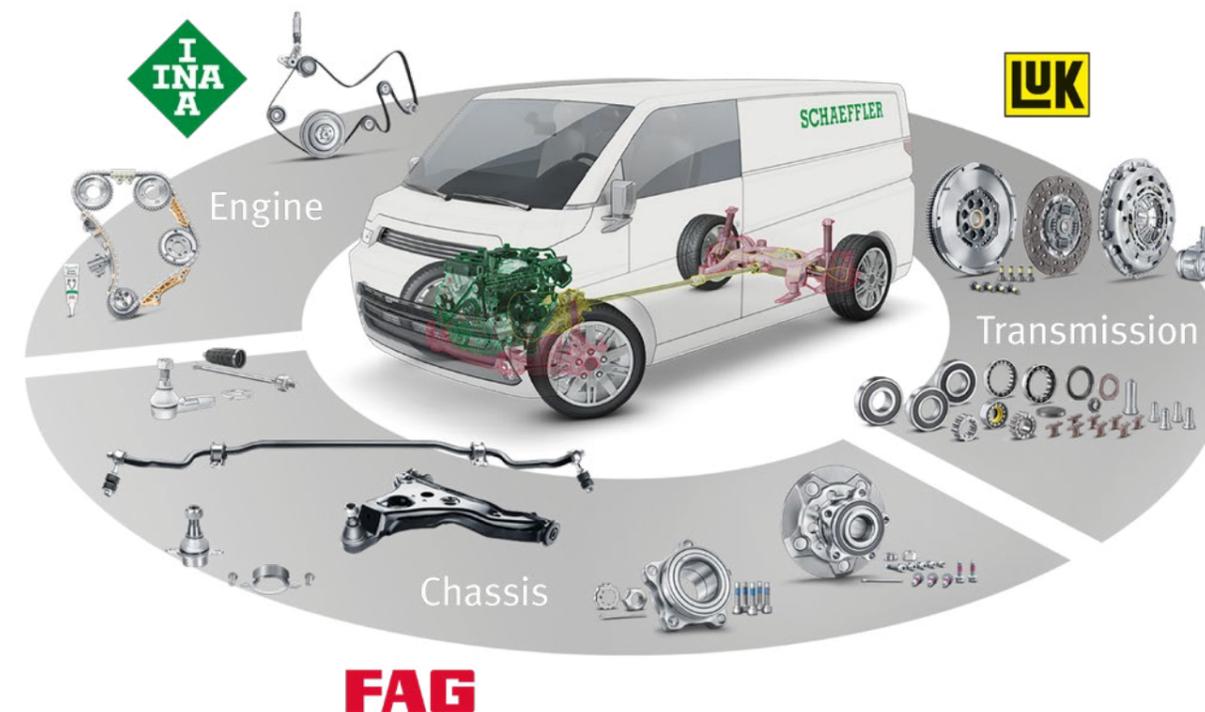
<sup>2</sup> Compared to minimum ECE R112. On top with 50% less glare

<sup>3</sup> Compared to halogen lamps

<sup>4</sup> With online product registration. Refer to [www.osram.com/garage-guarantee](http://www.osram.com/garage-guarantee) for precise conditions and registration

<sup>5</sup> Halogen (200%/150%/100%): Compared to minimum ECE R112/R37 requirements

## SCHAEFFLER



# An expanding segment: the light commercial vehicles market

### KEY FACTS

Schaeffler refines its portfolio for the commercial transport environment and develops wheel bearing repair solutions, keeping on solid ground in the aftermarket.

These days, light commercial vehicles (LCV) are an integral part of our everyday lives. All kinds of LCV are more in demand than ever before.

With an estimated annual growth of 8%, LCV represents the fastest-growing vehicle segment and are the backbone of the commercial transport business. The trend here is for even more growth, as the popularity of online business continues to grow rapidly. Customers expect an even faster delivery right to their front door.

Schaeffler's Automotive Aftermarket division has been offering repair solutions to LCV for years and is refining its portfolio for the commercial transport environment. The comprehensive 'Vehicle Solutions' approach from Schaeffler always looks at the complete vehicle with the target of maximising mileage and keeping repair

time to a minimum. That's why the company offers vehicle-specific complete solutions for the transmission, engine, and chassis of today's most common models. The LCV segment offers ideal conditions for distributors to position themselves as experts for this additional business that is on the rise.

### Spotlight on FAG WheelSet: By experts, for experts

As a leading developer of technical innovations with 130 years of bearing expertise, Schaeffler prides itself on an uncompromising approach to quality: Every element of Schaeffler's FAG wheel bearings is developed and tested by Schaeffler engineers in line with the most stringent quality standards. The experts of the Automotive Aftermarket division at Schaeffler always

have the customer benefit in mind when it comes to developing new repair solutions.

Schaeffler's latest wheel bearing repair solution for light commercial vehicles demonstrates this: A single Generation 1 FAG WheelSet for front and rear axles of the popular models Peugeot Boxer, Iveco Daily, Fiat Ducato, Citroën Jumper, Renault Master, Opel Movano and Nissan NV400. This new repair solution enables customers to cover a large LCV parc with only one article number (713 6911 50). The FAG WheelSet offers advantages for dealers, garages and fleet operators as it contains all relevant parts in OE quality for a highly professional and safe repair job.

For further information on Schaeffler's offer for light commercial vehicles in the automotive aftermarket, please visit <https://aftermarket.schaeffler.com>

## KEY FACTS

ZF has got its strategy spot-on to spearhead the Next Generation Aftermarket.

## Together in motion: ZF Aftermarket shapes new era of collaboration

ZF Aftermarket wants to enable an attractive mobility experience for everyone. Innovative ZF technology for cars, commercial vehicles, trucks, trailers and buses will make a decisive contribution to this. New products such as the WABCO Modular ABS Sensors and the TRW Electric Brake Booster for e-vehicles exemplify a future-oriented and convenient product portfolio which was presented at the Digital ZF Aftermarket @ Automechanika 2021.

The digitisation of mobility is picking up speed. As a result, customers' demands for flexibility, speed and comfort are increasing. Together with its partners, ZF Aftermarket wants to enable attractive mobility experiences for everyone.

### Empowering workshops through knowledge and coverage

ZF Aftermarket's objective is that all market participants understand Next Generation technologies as well as the challenges they bring along with them and can therefore prepare at an early stage. With workshop concepts such as ZF [pro] Tech, independent workshops are offered a comprehensive service package including training courses on Next Generation Mobility topics. Trusted brands, such as Lemförder, Sachs, TRW and WABCO, along with technical innovations & future-oriented services complete the unique offer.

### TRW Electric Brake Booster for electric vehicles

More efficient combustion engines, hybrid- or purely electric drives require modular and scalable solutions for the braking system. The TRW-branded Electric Brake Booster (EBB) uses a specified electronic system to provide improved brake actuation: replacing the vacuum brake boosters and, if necessary, the vacuum pump with its associated cables, sensors, switches and control units. With the TRW system, the ZF Aftermarket can genuine OE innovation early on that meets high comfort requirements and safety standards and supports the recovery of braking energy and thus the range of purely electric vehicles.

### Resource-saving, and cost-effective: WABCO modular ABS Sensors

The latest WABCO product solves a common problem: when commercial vehicles come to the workshop with a defective ABS sensor, a specific version of this part has to be ordered, which may not be in stock at the dealer. A modular ABS sensor concept which counteracts this problem has been developed: It consists of a short ABS sensor with the standard KEA connector that is attached to the wheel, an extension ca-

ble in various lengths, and a range of adapters that cover the main electronic control units (ECUs) available on the market. Depending on three parameters (sensor type, length, and connector), workshops can replace hundreds of variants with just a few products.



### Partnerships as the key to success

Partnerships with other companies are also gaining importance when it comes to spearheading the Next Generation Aftermarket.

"What one cannot do alone, many can do together." This almost 200-year-old quote is more relevant today than ever before," underlines Dr. Holger Hättich, Head of Customers & Strategy at ZF Aftermarket. "Overarching goals such as a more sustainable economy, dissolving digital silos or even the design of Next Generation Mobility in the aftermarket require the efforts of many. ZF Aftermarket is open to all cooperations that do not close their minds to innovation and transformation, but – like us – want to enable an attractive and sustainable mobility experience for everyone."

## Electrification and the future of the aftermarket

The most significant and rapid technological change the automotive sector has ever seen, electrification is reshaping the entire industry. However, what does it mean for the aftermarket?

Through bold legislation, the colossal €3.3-trillion global automotive industry has rapidly pivoted towards electrification. With many countries intent on banning new internal combustion engine (ICE) powered vehicles, electric vehicle (EV) sales are predicted to make up 56% of new light vehicles sales in Europe by 2030<sup>1</sup>.

While the European Automotive industry contracted 22% in 2020, new EV registrations more than doubled to 1.4 million – 10% of the sales market – encouraged by emissions standards and subsidy schemes. Globally, there were more than 10 million EVs on the world's roads in 2020, a 43% increase year-on-year with a total of 4.5 million EVs in China and 3.2 million in Europe<sup>2</sup>.

### Maturing technology

In Europe, EV adoption is being stifled by the higher purchase cost of EVs and consumer uncertainty about EV capabilities, including performance, longevity and range anxiety. However, the technology is maturing quickly as OEMs race to be leaders in this rapidly growing market segment. It is expected that, with continued investment in charging infrastructure in combination with improved EV technology and a greater number of models available, prices will decrease and the rate of adoption will increase.

This has already been realised in China, where the latest EVs are incredibly affordable and attracting many younger buyers. The Wuling Hongguang Mini EV, for example, is just €3,880 and therefore tops the charts as the nation's best-selling EV. In June 2021, it surpassed 158,000 units sold – doubling the sales of its closest rival, the Tesla Model 3.

### Future challenges

While a conventional ICE car may have 2,000 moving parts, an EV has around 100 times fewer – about 20. Fewer moving parts means less wear and tear and reduced need for repairs and maintenance. In fact, the total drop in component sales due to EVs could be as high as 30% and a typical dealer will lose around 35% in maintenance and service revenue over a five-year period<sup>3</sup>.

When you consider that two of the top three maintenance items – oil changes and brake servicing – are eliminated or significantly reduced by the switch to EVs, it is clear that the aftermarket will need to adapt.

But while the outlook may sound bleak, there are also many opportunities. Perhaps the most important step is the upskilling of technicians and developing a robust BEV and PHEV aftermarket supply chain.

With a high volume of EV sales in the past two years alone and warranties averaging 3-5 years, many of these vehicles will soon filter through to the aftermarket. Technicians and workshops must be prepared to cater for them. If the capability does not exist in the aftermarket, EV owners may rely on dealer servicing long after their warranty has elapsed, further compounding problems for the aftermarket.

Establishing new supply chains to support EV systems in the aftermarket will therefore be critical and the industry must ensure that it does not get digitally 'locked out' from accessing and servicing EV systems. Although it is currently a very small part of the aftermarket, Advanced Driver Assistance Systems (ADAS), electric powertrain and electronics will be some of the highest growth parts categories.



One positive sign for the aftermarket is an increase in tyre sales. Due to the increased weight of EVs and the instant torque of their electric motors, they consume tyres at a faster rate than their ICE counterparts<sup>4</sup>. Equally, with batteries expected to last 8-12 years, end-of-life disposal concerns will present the aftermarket with a substantial opportunity in the form of battery remanufacturing.

While the long-term view is of substantial change, data indicates that around half of the 2030 car parc will still use an ICE powerplant and rely upon conventional servicing. With automotive technology evolving rapidly, the development of clean biofuels or hydrogen technology could also prove disruptive to predictions. While it is impossible to prepare for every eventuality, the aftermarket must be proactive in upskilling and addressing driver requirements as the world aggressively pursues decarbonisation.

## KEY FACTS

Promising opportunities to go electric go hand in hand with future challenges in the global EV forecast and this means winning the battle in the electric vehicle aftermarket.

<sup>1</sup> [https://www.ey.com/en\\_mz/automotive-transportation/why-evs-dont-spell-doom-for-the-aftermarket](https://www.ey.com/en_mz/automotive-transportation/why-evs-dont-spell-doom-for-the-aftermarket) <sup>2</sup> <https://www.iea.org/reports/global-ev-outlook-2021/trends-and-developments-in-electric-vehicle-markets> <sup>3</sup> <https://insideevs.com/news/521728/china-wuling-ev-sales-june-2021/> <sup>4</sup> <https://techcrunch.com/2020/03/06/electric-vehicles-are-changing-the-future-of-auto-maintenance/>

# Zukunftswerkstatt 4.0

The innovation lab for workshops and car dealers.



An open platform for networking people and technologies: Zukunftswerkstatt 4.0

**Professor Maier, the Zukunftswerkstatt 4.0 (Future Workshop 4.0) was launched in Esslingen in November.**

**Where exactly was the idea born?**

**B. Maier:** The idea of the Zukunftswerkstatt 4.0 arose within the framework of the Strategy Dialogue Automotive Industry Baden-Württemberg. Here, politics, business, science and civil society work closely together to support companies in the automotive industry during the transformation. The goal is to further develop supposedly traditional business models to secure employment and prosperity. A very concrete project that emerged within this framework is the Zukunftswerkstatt 4.0.

**Who is the offer specifically aimed at – the large car dealer group or the family-run independent workshop?**

**B. Maier:** First of all, it should be noted that the motor trade – unlike the automotive industry – is characterised by small business structures. This often places tight limits on the companies' ability to test new technologies and applications. Not to mention conducting independent research. While the automobile trade

groups, in cooperation with their manufacturers/importers, the associations – and also on their initiative – are already providing innovative answers to technological change, the small companies are concentrating primarily on surviving in the operative business. Against the background of the financial possibilities in the framing business model, this is hardly surprising. These small and predominantly manufacturer-independent companies can therefore be said to have a rather insufficient digital maturity and a hesitant attitude concerning the upcoming transformation process. These companies must be careful that they do not displace the overarching development towards electrification and digitalisation due to a currently functioning business model. The high speed of the transformation that is currently taking place harbours the danger of being left behind. This is where the Zukunftswerkstatt 4.0 can provide orientation and valuable impulses. It is therefore an offer to employees and managers in car dealerships and workshops – this applies equally to brand-affiliated and independent businesses.



**How can I imagine Zukunftswerkstatt 4.0 in concrete terms and how close to practice is it?**

**N. Wild:** The Zukunftswerkstatt 4.0 is an innovation showcase, training centre and test laboratory in equal measure. Within a space of 500 m<sup>2</sup>, we present innovative applications for designing the car dealership processes of tomorrow and the day after tomorrow. It was clear to us from the very beginning that this cannot be achieved solely in theory. The top priority in the Zukunftswerkstatt is the full functionality of the integrated applications. Visitors are therefore invited to touch, compare and try out everything from vehicle scanners and exoskeletons to AR glasses. We are therefore extremely close to the real world, and in our opinion, this is one of the decisive factors for the success of the concept.

The conceptual framework is the customer journey in sales and aftersales. Along this customer journey, we position innovative solutions for the implementation of car dealership processes. Put simply, the Zukunftswerkstatt 4.0 is a car dealership of the future.

#### KEY FACTS

*Car dealership and workshop managers and employees to reap the benefits of the innovative applications offered by the Zukunftswerkstatt 4.0.*



Prof. Dr. Benedikt Maier and Niclas Wild (right side)



As a guest of the Zukunftswerkstatt 4.0: Dr. Nicole Hoffmeister-Kraut, Minister of Economic Affairs, Labour and Tourism of the State of Baden-Württemberg

**You said at the beginning that the Zukunftswerkstatt is an innovation showcase for the industry. How do you ensure that the innovators are represented?**

**B. Maier:** We see ourselves as an open platform and want to network people and technologies. The core of this is certainly our extremely extensive partner network. Currently, Zukunftswerkstatt 4.0 can look back on 95 contractually fixed company cooperations. These range from small start-ups to established suppliers or manufacturers to testing organisations. All these companies are committed to presenting the latest solutions in the Zukunftswerkstatt 4.0. The Zukunftswerkstatt 4.0 is therefore not a still image, but is alive and constantly being updated. What may be innovative today may already be standard tomorrow.

**How can the Zukunftswerkstatt 4.0 be used in concrete terms?**

**N. Wild:** We should differentiate between innovation partners and workshops or dealers. For innovation partners, the Zukunftswerkstatt 4.0 is on the one hand a valuable stage for presenting their solutions to industry practitioners. On the other hand, practically checking the applications and evaluating the cooperation with other innovators in the industry is facilitated. Additionally, the fully equipped workshop workstations offer a wide range of possibilities for implementing product presentations or customer events. In addition, seminar rooms with state-of-the-art conference technology are available and allow the implementation of workshops with a smooth transition between theory and practice.

We invite the employees in the work-

shops and trading companies to the Zukunftswerkstatt 4.0 to get an overview in a very concentrated form of how they can innovatively implement their everyday activities – trying things out and comparing is expressly encouraged. The doors of the Zukunftswerkstatt 4.0 are open daily and the team is trained in the integrated applications.

#### Info Box

**Prof. Dr. Benedikt Maier**  
CEO Zukunftswerkstatt 4.0



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