360° WOLFSBURG

ALL ABOUT VOLKSWAGEN – THE EMPLOYEE MAGAZINE FOR OUR LOCATION

MAY 2019

Volkswagen

360° New Media Family: Key Details on Page 2

Everything that concerns the Wolfsburg location: employees, cars and much more – all for **360°** readers to find out about.

Wolfsburg Calling: All About the Location in the New 360°

Cars, people, technology, divisions and companies: all in the Local News section!

The new **360°** is more than just a name. The new employee magazine offers, well, a 360-degree view of the Volkswagen Group and its brands – and the Wolfsburg location of course. In the Local News section you'll find personal stories from employees and reports on strategic issues in the various divisions – from Production to Technical Development. But that's not all: articles about vehicles and technology made in Wolfsburg will get just as much space as topics that play out beyond the plant gates – such as at Volkswagen Immobilien, the VfL and the Autostadt.

This issue starts off with stories about the tools being used in the body shop, a logistics planner's responsibilities and a trainee exchange in toolmaking.

360° also reports on two maintenance technicians who have made a strong team for the last 45 years, and presents plans from Volkswagen Immobilien. And Franco Lo Presti from the in-house butcher shop gives colleagues in Wolfsburg tips on grilling in their backyards or on their balconies.

→ PAGES 21 TO 25

An Interview with Group CEO Herbert Diess

Why is Volkswagen on the right track with its electric offensive? How can the Group successfully implement its own structural change? How will cars change in the future – and what does that mean for the employees of Volkswagen? Group CEO Herbert Diess answers these questions in a major interview with the new Volkswagen employee magazine **360°**. → PAGE 3

Answers to Questions About the Diesel Crisis

Volkswagen employees have submitted hundreds of questions to their company about the diesel crisis. Hiltrud D. Werner, Group Board Member for Integrity and Legal Affairs, called for these questions last month in the employee magazine and in the portal.

On a special page, **360°** has summarized ten questions and answers. These include issues such as responsibility for exhaust emissions manipulation, the residual values of the diesel vehicles involved, and completed and ongoing legal proceedings against Volkswagen.

→ PAGE 11

European Elections: The Importance of the EU for the Group

The Group Management Board and Group Works Council join forces to encourage voting

Encouraging voting: Group CEO Herbert Diess (right) and Works Council Chairman Bernd Osterloh.

Europe is voting: In a joint declaration, the Group Management Board and Group Works Council is urging people to vote in the European Parliament elections. "A Europe that is our own, that is ready to face the future, standing strong in the face of international competition, is in all of our interests. The European Single Market, cross-border trade, freedom of movement for workers and the exchange of knowledge are the basic framework that underpins our competitiveness," reads the appeal to vote. Voting locations in Germany will open on Sunday, May 26.

The importance of Europe for Volkswagen, as well as the importance of Volkswagen for Europe, is illustrated by a few numbers: There are 490,000 people working for the Group in Europe – three fourths of the worldwide workforce. The Group sells around 4.5 million cars each year. And the company operates 69 plants within the EU. The Group's products are often produced as a team effort among European countries. The core product from the company – the Golf – demonstrates just how much of Europe is contained in the cars. → PAGE 6/7

ID.3[1] – register now

Starting now, non-binding registrations are being accepted for the first model in the ID. family. Volkswagen is initially offering a limited special edition of 30,000 units. → PAGE 12

Electric cars: How Employees are Being Trained

360° explains: See how Volkswagen is preparing employees for electric mobility in the Zwickau plant. → PAGE 13

Finals: Win Tickets!

360° is giving away 10 x 2 tickets for the DFB Cup finals match between Bayern Munich and RB Leipzig on Saturday, May 25, in Berlin. → PAGE 19

Developments in Employee Vehicle

Between digitalization and face-to-face consultation: An interview with the Sales Manager for Employee Sales, Stefanie Sprenger-Meinhardt. → PAGE 14

The GTI for Wörthersee

18 apprentices work on "their" car for the legendary meeting of fans in Austria at the end of May. → PAGE 13

kp-wo

[1] Concept car.

Dear Employees,

If you're looking to stay informed about goings-on in the Volkswagen Group, we have a range of media available to help you do that. The media landscape at the Volkswagen Group is varied and diverse. It's now easier for employees to get both a comprehensive overview as well as to hear stories about what's been going on in the next hall. And today we're welcoming a new media family. It's called **360°**. *You're holding the first edition of* **360°** *in your hands right now. I hope you enjoy reading it!*

Good to know: A new intranet and employee app are also part of the **360°** *media family. And it's all set to launch in the next few days. You'll receive all the necessary information in due time.*

360° *– the name says it all: The media family aims to help employees gain a full view of what's happening in the world of Volkswagen. The magazine features a clear structure. The most important bits of news from the Group, the brand, the location and departments are carefully sorted and edited.*

Not every piece of news carries the same weight everywhere, of course. That's why several editions of **360°** *will be published: Wolfsburg, Kassel, Braunschweig, Salzgitter, Hanover, Osnabrück, Saxony (Zwickau, Chemnitz, Dresden). Each location will receive its own customized* **360°** *magazine featuring news of particular interest to each location, giving these news items the space and attention they deserve.*

One thing is clear: The only way for a media family like **360°** *to work is through teamwork.*

In that vein, internal communication about brands, locations and departments is now subject to even greater networking. Colleagues have thought carefully and cut out some dead wood, so to speak. They are boldly moving forward and are daring to try new things. But the ultimate goal is a unifying one: to inform the Volkswagen workforce of events, developments, changes and trends in the best way possible. After all, as part of the automotive industry, Volkswagen too is facing substantial change. Only by working together to shape this change will we all be able to secure our jobs in the long term.

The **360°** *magazine is the first step. Many more will follow. The most important thing to remember is that we are all treading a path to the future.*

Gunnar Kilian
Chief Human Resources Officer

The New 360° Media Family

Wind Power: Volkswagen Power Plant Builds in Salzgitter

The Volkswagen Power Plant is building four wind turbines at the MAN compound in Salzgitter. Commissioning is planned for November. "By installing wind turbines, we are taking yet another step towards cleaning up the carbon footprint we leave behind when generating energy," says Michael Heinemann, CEO of the Volkswagen Power Plant.

The wind turbines, which are still under construction, will later generate a peak electrical performance of 3.2 megawatts each, with a combined total output of 12.8 megawatts.

Group Increases Turnover and Earnings

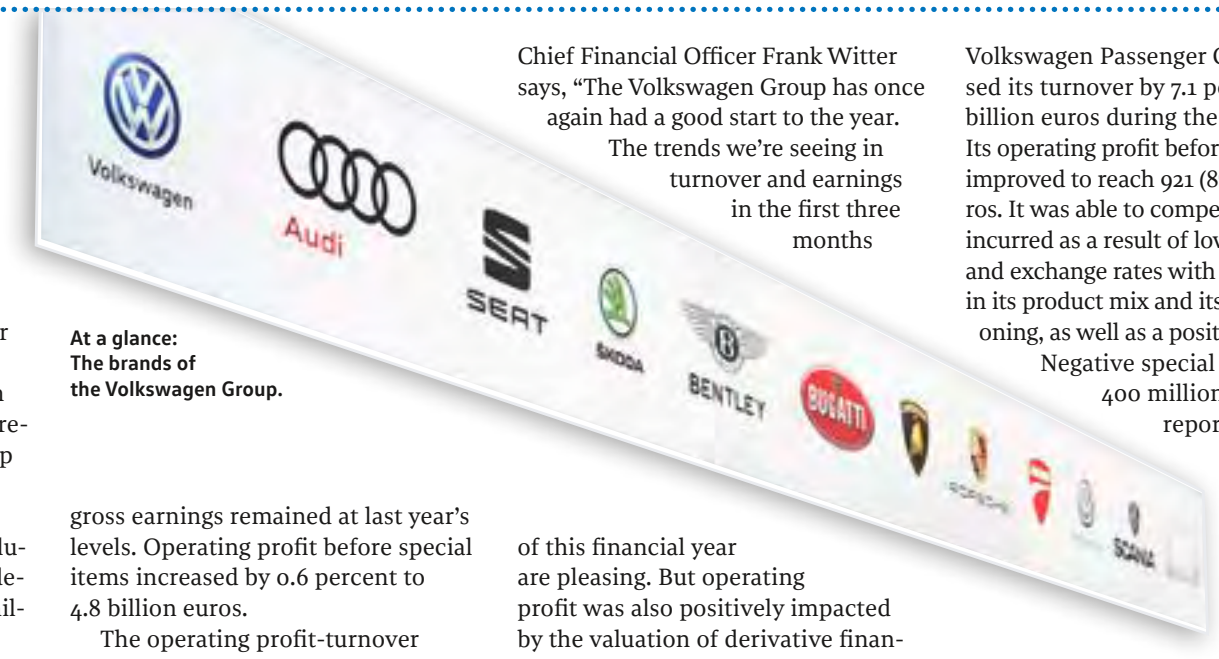
First quarter of 2019: Chief Financial Officer Frank Witter calls it a pleasing development

The Volkswagen Group has confirmed its targets for deliveries to customers, turnover and operating profit before special items for 2019. Turnover increased in the first three months of the current financial year by 3.1 percent to 60 billion euros compared to last year.

Frank Witter, Group Chief Financial Officer

This and other details have emerged from the quarterly report the Group presented in early May.

Despite volume losses in deliveries (2.6 million vehicles, equivalent to -2.8 percent), this growth was due primarily to improvements in the Group's product mix and positive business developments in the Financial Services division. At 11.7 (11.6) billion euros, gross earnings remained at last year's levels. Operating profit before special items increased by 0.6 percent to 4.8 billion euros.



At a glance: The brands of the Volkswagen Group.

The operating profit-turnover ratio before special items increased to 8.1 (7.2) percent. Operating profit suffered to the tune of one billion euros as a result of negative special items relating to legal risks, bringing its total to 3.9 billion euros, 0.3 billion euros less than last year.

Chief Financial Officer Frank Witter says, "The Volkswagen Group has once again had a good start to the year. The trends we're seeing in turnover and earnings in the first three months of this financial year are pleasing. But operating profit was also positively impacted by the valuation of derivative financial instruments – something that can be highly volatile. All in all, we need to keep increasing the tempo of our transformation. The growing economic risks worldwide also pose challenges for us. But we're sticking to our goals for 2019."

Volkswagen Passenger Cars increased its turnover by 7.1 percent to 21.5 billion euros during the first quarter. Its operating profit before special items improved to reach 921 (879) million euros. It was able to compensate for costs incurred as a result of lower volumes and exchange rates with improvements in its product mix and its price positioning, as well as a positive cost trend.

Negative special items totaled 400 million euros in the reporting period.

At 3.3 (2.9) billion euros, Volkswagen Commercial Vehicles improved turnover by 11.8 percent compared to the first quarter of 2018. Higher volumes and improvements to its product mix as well as advantageous exchange rate trends led to a 29.9 percent increase in operating profit, bringing it to 291 million euros.

Herbert Diess on Structural Change, the E-Offensive, and the New Golf

Group CEO: "The car of the future has entirely new qualities" – "Software expertise is becoming increasingly important"

Herbert Diess has been Group CEO for a year now and has already initiated a number of key changes: Improving productivity, focusing on the Group's Chinese operations, enhancing software expertise, and pressing ahead with the electro-offensive strategy are just some of the initiatives he has kick-started to ensure Volkswagen is running at full steam. There's still plenty of work to come, so Herbert Diess is looking to the future in this interview with **360°**.

Herbert, the automotive industry is experiencing fundamental changes right now. How is Volkswagen going to respond to these?
The changes we are already making at Volkswagen are looking bigger and happening faster than ever before. There's simply no alternative if Volkswagen is to remain sustainable and future-proof going forward. The reason for this is simple: The entire history of the car is currently being rewritten, and we are contributing to a significant chapter by launching the greatest electro-offensive the automotive industry has ever seen. Over the next ten years, we plan to manufacture 22 million electric vehicles across the Group. It all starts with the Audi e-tron and the Taycan followed by the ID., which will be showcased in September at the IAA in Frankfurt. What fills me with hope is the fact that we are more committed to change than any other manufacturer.

Why does Volkswagen need this electro-offensive?
A company as large as Volkswagen has a special responsibility when it comes to climate change. We as manufacturers of passenger cars are alone responsible for 1 percent of all CO_2 emissions worldwide. In other words, we have a powerful lever in our hands when it comes to creating a better climate. Volkswagen remains unconditionally committed to the Paris Climate Agreement, and the guidelines of the policy are clear: By the year 2030, we have to reduce the CO_2 emissions of our fleet by 37.5 percent in comparison to the fleet average of 2020. This will only be possible if around 40 percent of the vehicles we sell have an electric drive transmission by this point in time. Failing to meet these climate targets will see us hit with huge financial penalties, so there really is no other option. But what I would also like to say is that we are going to require extensive support from Berlin and Brussels as these changes come into play. This is why I am holding frequent discussions on the matter, and I get the impression that our messages are being received. The signs are positive, in any case.

Volkswagen has a schedule in place for achieving these climate objectives. Can you tell us more about this?
Our aim is to make the Group CO_2 neutral by 2050. By 2025, we want to reduce the CO_2 footprint of our fleet by 30 percent in comparison to 2015 figures. Not only this, but we also want to halve the global CO_2 emissions of our plants. Simply switching from coal to gas at our power plant in Wolfsburg will save 1.5 million tons of CO_2 a year from 2023. Renewable energies are set to play an ever more important role in the plants going forward. Volkswagen in Dresden and Audi in Brussels are testament to the success of this approach, as our manufacturing processes are already carbon-neutral at these sites.

The largest Volkswagen plant in Wolfsburg will continue to manufacture almost exclusively vehicles with combustion engines for the foreseeable future. How does this fit in with the electric offensive?
It actually fits in very well, since one can't exist without the other. The proportion of combustion engines and other types of drive systems will still be around 60 percent in 2030, and these will provide the finances we need to pave our way into the future. Our main plant here in Wolfsburg can focus all of its efforts on the launch of the new Golf. The Golf is the heart of our brand, just like the Octavia is for Skoda, the 911 for Porsche, and the Leon for Seat. The Golf represents progress and technology like no other car. It has even influenced entire generations. With 35 million vehicles sold, the Golf has been in a class of its own for quite some time. Now that's something our employees can be proud of. The Golf 8 is now on the home straight. The teams are doing a fantastic job and making good progress. The new Golf is set to really raise the bar in terms of digitalization and connectivity. It is – and is set to continue to be – the industry standard in the compact class. The Golf sticks to its promise of making cutting-edge technology and pioneering innovations available to the mass market. I am sure that our customers are going to be just as impressed as I am.

Periods of rapid growth are often filled with uncertainty. Is there anything you'd like to say to reassure your workforce?
Many of our familiar competencies and qualities are still going to be in demand in the future. But what we need to be aware of is that 90 percent of car-based innovation going forward will be software-related. This is something we haven't always been in the best position to handle, with nine out of ten engineers still working on components, such as engines or chassis. This is all set to change in the future. Our cars are going to be almost completely digitalized and will form part of the internet. The car of the future has entirely new qualities. The disadvantages it still features today are going to fall by the wayside over the next few years. Our approach to driving is set to be far more sustainable and, thanks to the level of automation, safer than ever before. What this all means is that software expertise is going to become even more important for Volkswagen. This is an area in which we need to make up some ground, which is why we are now expanding the topic massively with a dedicated executive board division. We will be training up even more of our own IT specialists, and even joining forces with companies such as Amazon, Microsoft, and Siemens. After all, we have a clear objective in mind, which is to be at the front of the pack when it comes to developing the cars of tomorrow.

What impact is this essential structural change having on the number of jobs available at Volkswagen?
Structural change isn't something we can simply hide from, but Volkswagen is efficient and strong enough to shape it in a way that suits us. We all know that it takes less time to produce e-vehicles than it does to produce vehicles with combustion engines, so there will be jobs that become redundant along the way, but then we will be creating new jobs in other areas. What's important to remember is that nobody should be worried about their job. As a company, we have given guarantees and assurances that we are going to stick to. We will be offering part-time work for older employees, which will support our demographic development. I am sure that we will be able to shape the structural change in a way that works best for us. Our size will work in our favor, as we already have plenty of expertise, experience, and team spirit here at Volkswagen, and we will continue to train up many more excellent members of our team. Our aim is for Volkswagen to play a decisive role in shaping the future of individual mobility as one of the leading companies in the industry. This is something we have already shown our passion for and is only set to pick up pace going forward.

Annual Press Conference 2019: Herbert Diess has set plenty of wheels in motion at Volkswagen.

HERBERT DIESS (60)
was born in Munich, Germany in 1958. He studied mechanical engineering at the Technical University of Munich. After graduating as an engineer, Herbert became a research associate at the Institute for Machine Tools and Industrial Management, where he earned his doctorate in 1987.

Herbert joined Robert Bosch GmbH in 1989, which saw him relocate to Stuttgart. He later moved back to Munich after taking up a position with BMW AG in 1996. He became Plant Manager in Birmingham in 1999, and, one year later, transferred to become Plant Manager in Oxford. In 2003, Herbert took over as head of BMW Motorrad (BMW's motorcycle brand). He was appointed to the management board of BMW AG in 2007.

On 1 July 2015, Herbert became a member of the Group Executive Board for Volkswagen AG and Chair of the Volkswagen Passenger Cars brand. He has been CEO of Volkswagen Aktiengesellschaft since April 2018. Herbert continues to lead the Volkswagen Passenger Cars brand alongside this role.

In an interview: Hiltrud D. Werner (left), Head of Integrity and Legal Affairs, and Kurt Michels, Group Chief Compliance Officer.

New Directive for Gifts

***360°** interview with Hiltrud D. Werner and Kurt Michels:*
Group focusing on integrity and personal responsibility of employees

Is this gift or invitation appropriate when dealing with business partners? From now on, employees themselves will decide: The new Group-wide directive on avoiding conflicts of interest and corruption relies on integrity, personal responsibility, and guide values instead of rigid value limits and bureaucracy. In an interview with **360°**, Hiltrud D. Werner, Head of Integrity and Legal Affairs, and Group Chief Compliance Officer Kurt Michels explain what lies behind the new directive and why it supports the culture change within the Group.

Ms. Werner, the word "corruption" tends to evoke political scandals, unstable regimes, or suitcases of money. What does it have to do with Volkswagen?
Hiltrud D. Werner: Corruption has no place at Volkswagen. We stand for clean business and transparent relationships with our business partners. We've laid this down in our Code of Conduct, which is binding for all 640,000 employees in the Group. Unfortunately, corruption is still a pressing global problem in industry. Our growth markets in particular are located in regions where corruption is still widespread. So we must be very active in addressing this issue, to protect Volkswagen and our colleagues. It's therefore important that we have good guidelines that provide security in dealing with conflicts of interest, gifts, invitations, and benefits. We achieve that with the new Group Directive 39.

There are guidelines regarding invitations and gifts in most Volkswagen brands and companies. What is special about the new Group directive?
Kurt Michels: As described in one of our Corporate Principles, we really are daring to do something new here: From now on, guide values will apply instead of rigid value limits. Employees themselves know best whether a gratuity, invitation, or gift from a business partner is appropriate in their business context. This also applies if they issue an invitation to business partners or give something away on behalf of the company. We know that from the private context: Whether something is appropriate or not is determined not only by its value, but also by the situation, frequency, and relationship between the two people. The same applies when dealing with business partners.
Hiltrud D. Werner: We're giving back responsibility and placing full trust in the professionalism, professional competence, and integrity of our employees on this important issue. With this, we're setting a milestone for a new corporate culture. Executives are particularly responsible here for providing their employees with good guidance and support.

If in doubt, colleagues from the Compliance departments can offer advice.

Freedom often carries uncertainty: "Thank you" or "No, thank you" – go or no-go. What advice do you have for Volkswagen employees?
Hiltrud D. Werner: In principle, the gesture of appreciation should always be in the foreground, not the value itself. What's important is that employees aren't suspected of being influenced in their decisions and work. It is important to ask yourself whether you would still stand by the decision if a critical third party asked you about it.
Kurt Michels: Everyone should follow their moral compass and, if in doubt, ask their supervisor or my colleagues in the Compliance department for advice. When it comes to donations from or to public officials, government authorities, or public mandate holders such as civil servants, I would ask you to contact us in any case. The legal situation in many countries requires us to be particularly careful here. It's important that our actions avoid any appearance of trying to influence our business partners. In addition, we should always make sure that we don't appear to be influenced in our decisions by donations.

The New Group Directive 39

What's changing with the new Group Directive 39:

- When awarding and accepting gifts, invitations, and benefits, the Volkswagen Group relies on guide values rather than rigid value limits.
- The guide values for gifts are 50 euros per gift, and 100 euros per person for invitations.
- Employees judge for themselves and with their managers whether the gift is appropriate.
- The giving and taking of gifts and invitations are documented in the department.
- If in doubt, the responsible Compliance department will advise you.

Important note: In the coming weeks, the Group Directive will be implemented in all Group brands and companies in the form of organizational guidelines (OG) and organizational instructions (OA). Until then, the current regulations remain valid.

More information about the new Group Directive 39 can be found on the Group-Connect pages, at Compliance under #allesklar.

Major Model Initiative in China

The Auto Shanghai motor show: The Volkswagen brand was the only company to celebrate four world premieres – with the proportion of SUVs to double

At the Auto Shanghai motor show, Volkswagen announced a major model initiative in China. The proportion of SUVs will double to over 40 per cent by 2020. Initially, the range is targeting the traditional segment, with the electric mobility market also gradually being covered (see article on the right).

New SUV: The Teramont X² will go on sale in summer (photo above).

The Volkswagen brand was the only company to present five new SUVs in Shanghai, with four of them being world premieres. "Volkswagen is reinventing itself," said Stephan Wöllenstein, CEO of the Volkswagen brand in China. "We are becoming bold in terms of design and are introducing exciting technologies and a greater choice of engines. Volkswagen has always been a strong brand in China, but with the new line-up we are showing that the best is yet to come for us."

The world premiere of the ID. ROOMZZ[1] was a particular highlight in Shanghai. The multivariable all-rounder is a zero-emission SUV in the five-meter class. The series version is initially to launch on the Chinese market in 2021. "As a large SUV it is the next model in our line-up, and it embodies the transformation of our company," said Group CEO Herbert Diess at the presentation, adding: "The ID. ROOMZZ SUV will be our flagship electric car."

Impressive characteristics: The new Volkswagen SUV Coupé Concept[1].

The vehicle boasts an innovative interior concept that includes a cockpit that appears to float in front of the driver. In the fully automatic driving mode, the seats can be rotated inward to create a more communicative, lounge-like atmosphere. Items such as the seat covers are made of renewable raw materials.

There were three other world premieres in addition to the ID. ROOMZZ: The Teramont X by SAIC VOLKSWAGEN was one of the vehicles presented for the first time. The impressive 5-seater version of the successful Teramont in the fastback style will go on sale this summer. And, after FAW-Volkswagen recently added the T-ROC and the Tayron to its range, the new SUV Coupé Concept combines avant-garde design, sporty proportions, and exceptional performance.

There was also a world premiere for the SMV Concept, which offers the prospect of an SUV that is more than 5.10 meters long. "The SMV Concept is the most prestigious car in the history of FAW-Volkswagen," said Klaus Bischoff, Head of Volkswagen Design.

Presenting the new SMV Concept[1] in Shanghai: Klaus Bischoff, Head of Volkswagen Design.

The T-Cross[3] was the fourth SUV by SAIC VOLKSWAGEN presented in China.

Stephan Wöllenstein, CEO Volkswagen Group China

E-Mobility: 11.6 Million Cars for China

As part of its e-mobility initiative, the Volkswagen Group is planning to produce around 11.6 million electric cars in China by 2028 – more than half of the Group's total target of 22 million. "Not only are we keeping our promise of fulfilling the legal requirements in China for reducing emissions, we are also aiming to gradually become completely carbon neutral," says Herbert Diess, CEO of Volkswagen AG. "We are therefore focusing on clean mobility and environmentally friendly production processes. China is of key importance in this regard."

Range of electric cars to grow to 14 models by the end of the year

Stephan Wöllenstein, CEO of Volkswagen Group China, says: "Volkswagen Group China is driving forward the expansion of its range of electric cars in 2019. By the end of this year, we will be offering 14 electric models in China, providing our customers with an extensive choice."

Plans have also been drawn up to further reduce the environmental footprint in the 33 Chinese production sites owned by Volkswagen and its partners. In 2018 alone, CO_2 emissions from the Chinese plants were reduced by 13 per cent, saving 390,000 tons of CO_2.

Charging infrastructure to be developed

A new joint venture has been established to develop the charging infrastructure in China. In order to research future technologies, Volkswagen Group China is bundling the development performance of the Volkswagen and Audi brands and of the Group research division under the umbrella of the new ONE R&D structure.

It will be easier in future for Chinese customers to charge their electric vehicles. As part of the collaboration between Star Charge, FAW and JAC, private wallbox chargers will be offered and a large number of public charging stations set up from late 2019 onwards.

Herbert Diess, CEO

Showcasing the Individual Brands

New products from Skoda to Bentley: The cars that caused a stir at the Shanghai trade fair

Skoda emphasized its electric, innovative, and sustainable side in Shanghai. With the VISION iV[1] concept car, the brand presented its first fully electric model based on the MEB platform. The vehicle will go on sale in Europe in 2020.

The VISION iV has a 150 kW (204 bhp) electric motor and can achieve a top speed of 160 km/h with zero local emissions. It has a range of up to 500 kilometers.

Porsche is expanding its Cayenne family: The brand presented the new Cayenne Coupé[4] at the trade fair in Shanghai. The adaptive rear spoiler, which comes up when speeds of 90 km/h and above are reached, proved a particular highlight.

Two engine options will be available when the model goes on sale at the end of May. The Cayenne Coupé with a six-cylinder turbo engine and 3-liter capacity provides 250 kW (340 bhp), while the Cayenne Turbo Coupé[5] has a 4-liter V8 engine with bi-turbo charging and 404 kW (550 bhp). Both models are available to order now.

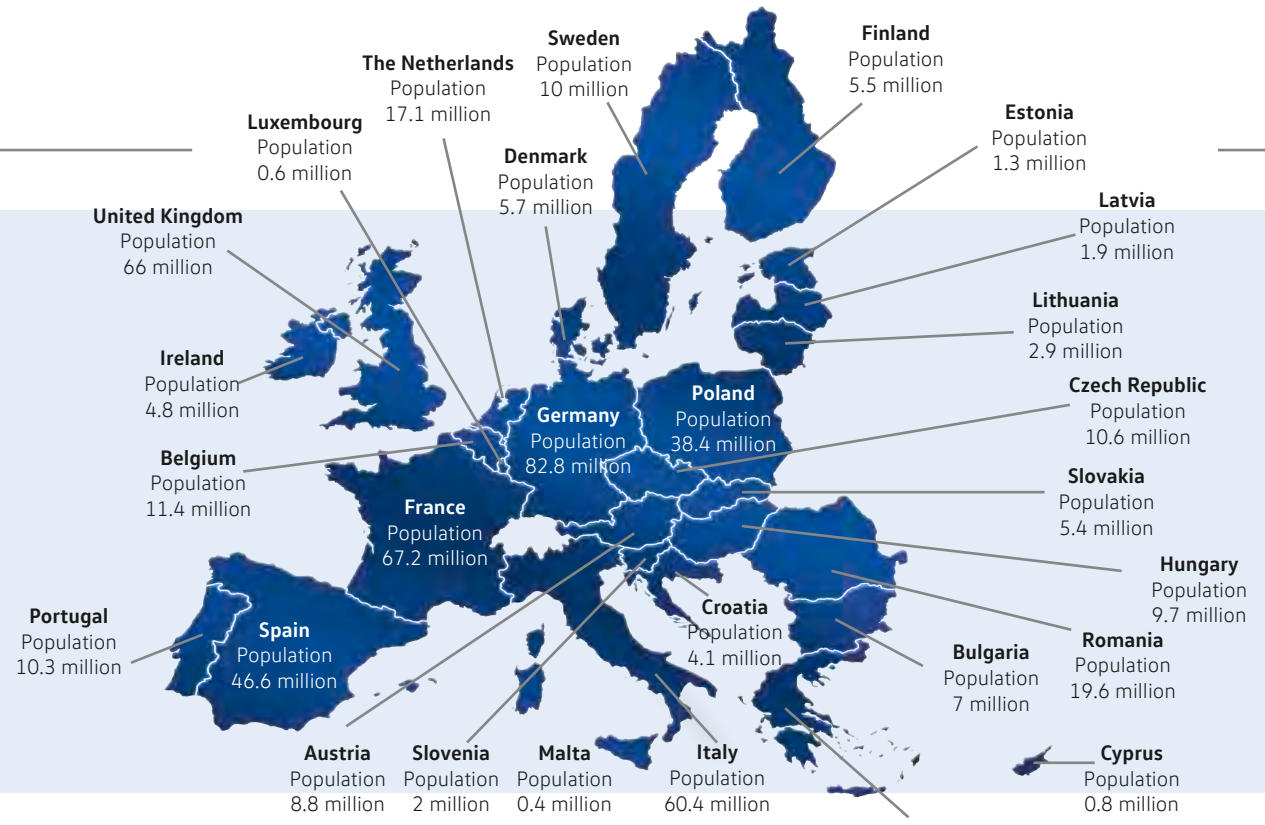
Bentley celebrated its centenary with a very special vehicle: The Mulsanne W.O. Edition by Mulliner[6] pays tribute to W.O. Bentley, the company's founder. The last car designed by him, dating back to 1930, was also on show at the trade fair.

The Mulsanne W.O. Edition production run is limited to just 100 cars. Each one of the vehicles comes with a very special piece of history: The central armrest on the back seat of each car features a piece of the crankshaft from the last vehicle designed by the Bentley founder.

With its Q2 L e-tron[2], Audi presented its first all-electric vehicle designed for the Chinese market. The model will be manufactured in the Foshan plant, with the first vehicles reaching customers in summer.

The Q2 L e-tron is 4.25 meters long, 1.79 meters wide and 1.55 meters high. The battery-driven SUV is powered by an electric motor on the front axle that mobilizes 100 kilowatts and 290 newton meters. The car accelerates from 0 to 100 km/h in 10.2 seconds.

[1] Concept car. [2] Concept car. This vehicle is not sold in Europe. [3] T-Cross for the Chinese market. The vehicle is not sold in Germany.
[4] Cayenne Coupé: combined fuel consumption 9.4–9.3 l/100 km; combined CO_2 emissions 215–212 g/km.
[5] Cayenne Turbo Coupé: combined fuel consumption 11.4–11.3 l/100 km; combined CO_2 emissions 261–258 g/km.
[6] Mulsanne: NEDC fuel consumption, l/100 km: combined 17.8 (15.9); combined CO_2 emissions, g/km: 350.



Volkswagen Votes Europe

Designing the future of Europe: joint appeal to voters by Group CEO and Chair of the Group Works Council

Dear Colleagues,

Elections for the European Parliament are being held from May 23 to 26. This election will set the direction for the future of Europe. Europe is home to the Volkswagen Group.

Alongside you, 490,000 colleagues work for the Volkswagen Group on the European continent. Two thirds of our global workforce. Around half of our sales are generated here in Europe. Our 12 brands originate from seven European countries. We run 69 production facilities here.

A Europe that is our own, that is ready to face the future, standing strong in the face of international competition is in all of our interests. The European Single Market, cross-border trade, freedom of movement for workers and the exchange of knowledge are the basic framework that underpins our competitiveness.

But a Europe that stands united is so much more than that. It has brought peace and prosperity to the continent after centuries plagued by bloody wars and conflicts. Today's Europe stands for solidarity and cooperation between people and States. These are indispensable foundations for peace, freedom, prosperity and economic progress in each and every country on this continent. Only by standing together can we stand our ground in tomorrow's world.

And to do that we need a Europe that is strong, both politically and economically.

Anyone who wants to have their say when it comes to future development in the European Union should take advantage of their right to vote. Europe affects anyone and everyone. That is why we together, the CEO of the Volkswagen Group and Chair of the Group Works Council, are calling on everyone to participate in the elections.

Take advantage of your right to vote! Help shape the future of Europe.

Volkswagen AG
CEO and Works Council Chair

Take advantage of the right to vote: Group CEO Herbert Diess and Chair of the Works Council Bernd Osterloh.

The Volkswagen Group across Europe

12
brands

Europe is crucially important to the Volkswagen Group. Its 12 brands originate from seven European countries.

69
plants

The Group runs 69 production facilities in 20 European countries.

490,000
employees

The Group employs some 490,000 people on the continent, about three quarters of its global workforce. 27 of 28 EU nations are represented.

4.5
million cars

The Group sells around 4.5 million vehicles in Europe every year.

The top 3 Golf components

1 DQ 381 gearbox
The wet starting 7-gear dual clutch transmission has been used since 2017.

2 EA 211 Evo engine
The EA 211 Evo is the next generation of the EA 211 engine series. It includes three and four-cylinder engines.

3 ZSB axle
Depending on the configuration, the rear axle of the Golf 7 is used as twist-beam rear suspension, a multi-link-axle or 4motion multi-link-axle for all-wheel drive vehicles.

Key Facts and Figure

When will European elections be held?

4 days of voting

The European Parliament elections are being held between May 23 and 26, 2019 in every EU Member State. Each Member State sets the precise voting day.

The Netherlands
United Kingdom

Ireland

Latvia, Malta, Slovakia
Czech Republic

Austria, Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovenia, Spain, Sweden

So Much Europe Under the Golf's Hood

Components produced in many EU countries – final assembly in Germany.

It's the top-selling vehicle in Europe: It's hard to imagine many streets in Europe without the Golf – the Group's automotive heart. But the Golf isn't just Europe's top-selling car. It's a true blue European itself. Several of the Volkswagen Group's 69 plants in Europe produce components for the Golf. Who supplies what? Here are a few examples:

Engine Block Assembly
Adam Skrzypczak works as a shift manager in Engine Block Assembly at the Group Components location in Polkowice, Poland.

Engine Assembly
Devin Türkben works at the Salzgitter location of Group Components. There the electronics engineer for automation technology assembles engines for the Golf.

Body Components
Rui Nogueira works at the press shop in Palmela works to ensure that enough parts are available for the body of the Golf. Parts like side components and seat cross-members are produced in Portugal.

Transmissions
Maria Escobar Robles produces one of the transmission types for the Golf at Spanish Seat components plant El Prat de Llobregat.

Bumpers
Ersin Kavak works in Plastics Engineering at the Wolfsburg plant. He works manufacturing front and rear bumpers for the Golf.

Calling for a vote: Chief Human Resources Officer Gunnar Kilian

European Election: Group Joins Alliance

The Volkswagen Group has joined the Lower Saxony for Europe (Niedersachsen für Europa) alliance, which is dedicated to achieving high voter turnout in the European elections on May 26. Gunnar Kilian, Chief Human Resources Officer, said, "The upcoming elections will set the tone for Europe's future. Volkswagen advocates for and is committed to a strong, democratic Europe. All European Union citizens should take advantage of their right to vote. Europe affects anyone and everyone. Only by turning up to vote can you lend your voice to the future of the European Union."

The Lower Saxony for Europe alliance is calling for voters to participate in the European elections. At the same time, it works to provide information about the European Union and its merits while also encouraging people to get involved in debates about EU reforms.

The Lower Saxony for Europe alliance is comprised of some 150 organizations, initiatives, companies and groups, including the two major Christian churches, the Federation of German Trade Unions (DGB), Lower Saxony Business Associations (UVN), the IG Metall trade union, municipal umbrella organizations, the state government of Lower Saxony and well-known businesses.

The Volkswagen Group will be participating in the alliance's initiatives over the coming weeks. It will also call on the Volkswagen community throughout its other European locations to cast their vote with special campaigns highlighting the European elections.

NIEDERSACHSEN FÜR EUROPA

es about the Election

The minimum age for candidates

18 years
Denmark, Germany, Spain, France, Croatia, Luxembourg, Hungary, Malta, the Netherlands, Austria, Portugal, Slovenia, Finland, Sweden, United Kingdom

21 years
Belgium, Bulgaria, Czech Republic, Cyprus, Estonia, Ireland, Latvia, Lithuania, Poland, Slovakia

23 years
Romania

25 years
Greece, Italy

751
members of European Parliament

The outgoing European Parliament consists of 751 Members of European Parliament (MEPs). If the United Kingdom does take part in the European elections, the number of MEPs will stay the same at 751. Once the Brits leave the EU, some of the seats held by British MEPs will be divided between other EU Member States. There will then only be 705 MEPs serving in Parliament.

5x
compulsory voting

Voting is mandatory in five Member States: Belgium, Bulgaria, Luxembourg, Cyprus and Greece. Compulsory voting applies to both native residents and registered EU migrants.

Lithium: Volkswagen Secures Supply

Letter of intent with Chinese company runs for ten years – demand for raw materials for battery cell production increasing rapidly

The Volkswagen Group and Chinese company Ganfeng have signed a letter of intent for the long-term supply of lithium for battery cells. Ganfeng will supply with Group and its suppliers for the next ten years. This agreement will secure a significant portion of Volkswagen's lithium demand. Stefan Sommer, Chief Components and Procurement Officer, says, "The Volkswagen Group will be bringing more than 70 new purely electric vehicles to the streets over the next ten years. By 2025, around a quarter of our fleet will run on electric. Our demand for raw materials for battery cell production is therefore growing rapidly." This must be secured at an early stage. Sommer says, "Long-term agreements like the one we've now entered into for this crucial raw material, lithium, are therefore of crucial strategic importance for implementing our e-offensive." Background: the electrification of vehicles has a considerable impact on raw material markets. According to studies, the global demand for lithium is set to double over the next ten years.

Stefan Sommer, Group Board Member for Components and Procurement.

A great meeting: employees, experts and team spokespersons from Kassel spoke with Christian Dahlheim (center), Head of Group Sales, about the direction Group After Sales is taking.

Head of Group Sales Meets After Sales Employees

Meeting with Christian Dahlheim about the parts business

Open dialog: Christian Dahlheim, Head of Group Sales, met with ten employees from Group After Sales for lunch at the Kassel plant. They took advantage of the relaxed atmosphere to talk about the future of the Volkswagen Group and the strategic orientation of the parts business. The parts' greater lack of complexity must be compensated for by increased customer loyalty. And the connected car will play a major role in that. Dahlheim says, "A fully networked vehicle is a real gift for After Sales. We'll be able to offer customers better service and we'll be better placed to take their needs into consideration. This will allow us to create a strong bond between our customers and the workshop."

On the Road with the Head of Group After Sales

Employee Rebecca Noder from Kassel trailed Imelda Labbé for two days

Employee Rebecca Noder trailed Imelda Labbé, Head of Group After Sales, as she went about her day. The 33-year-old from the Kassel plant got an insider's look at what it's like to be an executive. The team coordinator for accidental damage management "shadowed" Labbé for two days. **360°** spoke to Rebecca Noder about her experiences.

What is shadowing?
It's when an employee trails an executive as they go about their work. It can be anywhere from several hours to several days.

What was the experience like?
The sheer range of topics she covers is huge, from digital after sales and battery storage to employees' personal matters. It was nonstop verification, deliberating, recommending or making decisions and getting to grips with complex matters in such a short span of time and getting lots of different perspectives on their impacts. And the day is often interrupted by brief, spontaneous conferences.

Would you recommend the experience to other colleagues?
Anyone thinking about a career on the executive track who's interested should take advantage of this extremely intense experience. My tip is to approach your supervisor openly to express your interest.

How will your experiences influence your own work now?
I've incorporated two simple things into my work since the shadowing: quickly drawing a sketch when situations are complicated and – a special tip from Imelda Labbé – asking a lot of questions.

Take advantage of the intensive experience of shadowing: Rebecca Noder (left).

Offered a glimpse into her work: Imelda Labbé (right).

Cruising Around Hamburg in Five Self-Driving e-Golfs[1]

Test drives under real conditions: Volkswagen Group Research is testing automated driving in big-city traffic

The Volkswagen Group is testing automated driving up to level 4 under real conditions in a major German city for the first time. Five e-Golfs have been driving three-kilometer routes through Hamburg for the past several weeks, all decked out with laser scanners, cameras, ultrasound sensors and radar systems. Taking into account all the relevant data protection provisions, Group Research is busy analyzing the findings from these drives. The same findings will be used for the Group's numerous research projects on autonomous driving, testing customer-oriented services and optimizing private transport.

"The tests focus on both the technical possibilities as well as the urban infrastructure requirements," says Axel Heinrich, Head of Volkswagen Group Research. "To make driving even safer and more comfortable in future, not only must vehicles become more autonomous and intelligent, but cities must also offer a digital ecosystem in which cars can communicate with traffic lights and traffic guidance systems and with each other."

Axel Heinrich, Head of Group Research

A nine-kilometer test route for automated and networked driving is currently under construction in Hamburg, with a completion date set for 2020. The Hanseatic city is upgrading its traffic lights for infrastructure-to-vehicle (I2V) and vehicle-to-infrastructure (V2I) communication.

Michael Westhagemann (left), Hamburg Senator in charge of the Department of Economics, Transport and Innovation, and Axel Heinrich, Head of Group Research, pose with the fleet of e-Golfs.

Just to be on the safe side: Test drivers keep an eye on everything and intervene in case of emergency.

Retrofitted: the e-Golfs are equipped with 11 laser scanners, seven radar systems and 14 cameras (pictured here in front of the Elbphilharmonie concert hall in Hamburg's HafenCity district).

The e-Golfs developed by Volkswagen Group Research are equipped with 11 laser scanners, seven radar systems and 14 cameras. Up to five gigabytes of data can be exchanged per minute during regular test drives, each of which takes several hours or more.

To tackle the computing power this requires, the trunk of each e-Golf is kitted out with about 15 laptops. This enormous computing power and precise sensor technology ensures that pedestrians, cyclists, cars, crossings, right-of-way rules, parking vehicles and vehicles changing lanes in free-flowing traffic are all recorded in mere milliseconds at incredibly close distances.

A trained test driver can intervene in case of emergency

For safety reasons, a trained test driver sits behind the wheel during each test drive. Their job is to keep an eye on all of the car's driving functions. They can even intervene in case of emergency.

To make automated driving viable for public roads, Volkswagen Group Research is working together with every brand in the Group. The aim is to be able to offer customers autonomous transport options in the next few years. Autonomous driving will make a long-term contribution to improvements in the flow of traffic and road safety. However, autonomous driving on public roads without a safety driver also requires changes to the underlying legal framework and the incorporation of the necessary infrastructure.

The Five Levels of Automated Driving

1. **LEVEL 1: driver assistance;** example: ACC (adaptive cruise control)
2. **LEVEL 2: partially assisted driving;** example: Travel Assist (combined cruise control and guidance)
3. **LEVEL 3: highly automated driving;** example: Traffic Jam Assist
4. **LEVEL 4: fully automated driving;** example: autonomous parking in parking lots
5. **LEVEL 5: autonomous driving;** example: completely driver less transport

One Driver Controls Two Vehicles

Platooning technology: MAN Truck & Bus is testing digitally networked HGVs on the A9

Practical test passed: MAN Truck & Bus has been testing two digitally networked HGVs on the A9 between Munich and Nuremberg over the past few months, putting them through their paces with logistics work. The vehicles have covered nearly 35,000 kilometers.

The aim of the research project was to optimize what is known as platooning technology for the logistics sector. The project focused on system safety, efficiency potentials and how the technology impacts drivers. Cooperation partners include logistics provider DB Schenker and Fresenius University of Applied Sciences.

Platooning is a vehicle system in which at least two HGVs are able to drive close together in a row on the highway using driver assistance and steering systems. All vehicles in a platoon are linked to one another with a kind of electronic drawbar using car-to-car communication. The leading vehicle specifies speed and direction. The driver in the first HGV almost controls the vehicles following behind in a way. The drivers in those vehicles merely monitor the technology – only intervening in case of emergency.

"It's not just the use of a technology. It's about incorporating it sensibly into the entire logistics chain," says Joachim Drees, Chair of the Board of MAN Truck & Bus AG. "The findings from this joint project are a key step toward series development. MAN is taking on a leading role in the automation and digitalization of commercial vehicles."

Test drive on the A9: Two digitally linked HGVs test out platooning technology. The driver in front controls both vehicles. The driver in the truck behind only intervenes in case of emergency.

University researching effects on drivers

The HGV drivers were specially trained for the project. Fresenius University of Applied Sciences is conducting a study to learn about the psychological and neurophysiological effects of the technology on drivers. This means the project as a whole will take into account the experiences of HGV drivers and expand their job profile.

The results have been positive: There were no safety-related incidents and only 0.5 driver interventions were recorded per 1,000 kilometers. The fuel savings in the specific project were three to four percent for the vehicle driving in the slipstream of the leading vehicle. According to DB Schenker, platooning could be used in large parts of the European cargo network. Drivers rated the system positively and did not consider any situation they encountered critical. Plus, compared to traditional driving, the findings showed that there were no differences in terms of neurophysiological strain on drivers during the project test drives.

Mass customization: Volkswagen presented a concept for autonomous trucks at the Hannover Messe that can be used in a variety of ways. The diagram pictures the exhibition stand.

Trucks, Customized

Concept: One vehicle, a variety of uses

From the mobile charging station to the café to your doctor's office: under the "Build on Volkswagen" motto, the Volkswagen Group presented its vision of the mobility of tomorrow at the Hannover Messe. Volkswagen Commercial Vehicles could soon offer a variety of different options for mobile transport solutions, all based on the modular electric-drive toolkit (MEB).

At the trade fair, Volkswagen showed off what the MEB has to offer in terms of possibilities on multi-use casings, called PODs. "As a manufacturer, the PODs represent the new paths we are forging and technology we are developing, creating a basis for discussion about shaping tomorrow's world," said Alexander Hitzinger, Head of Technical Development at Volkswagen Commercial Vehicles.

For example, healthcare PODs could ensure people in rural areas have access to medical treatment. Users could order retail PODs to have their measurements taken and order clothing.

Volkswagen does not aim to operate these PODs itself, just to provide the hardware and software. Models could be styled after Sedric, Volkswagen's autonomous electric concept car. In case you're interested: the concept will be on display in the foyer at Group Research in Wolfsburg until May 31.

[1] e-Golf: power consumption, kWh/100 km: combined 14.1 with 17-inch wheels – 13.2 16-inch; CO_2 emissions combined, g/km: 0; efficiency class: A+.

VOLKSWAGEN GROUP COMPONENTS

Efficient and Competitive: Looking to the Future

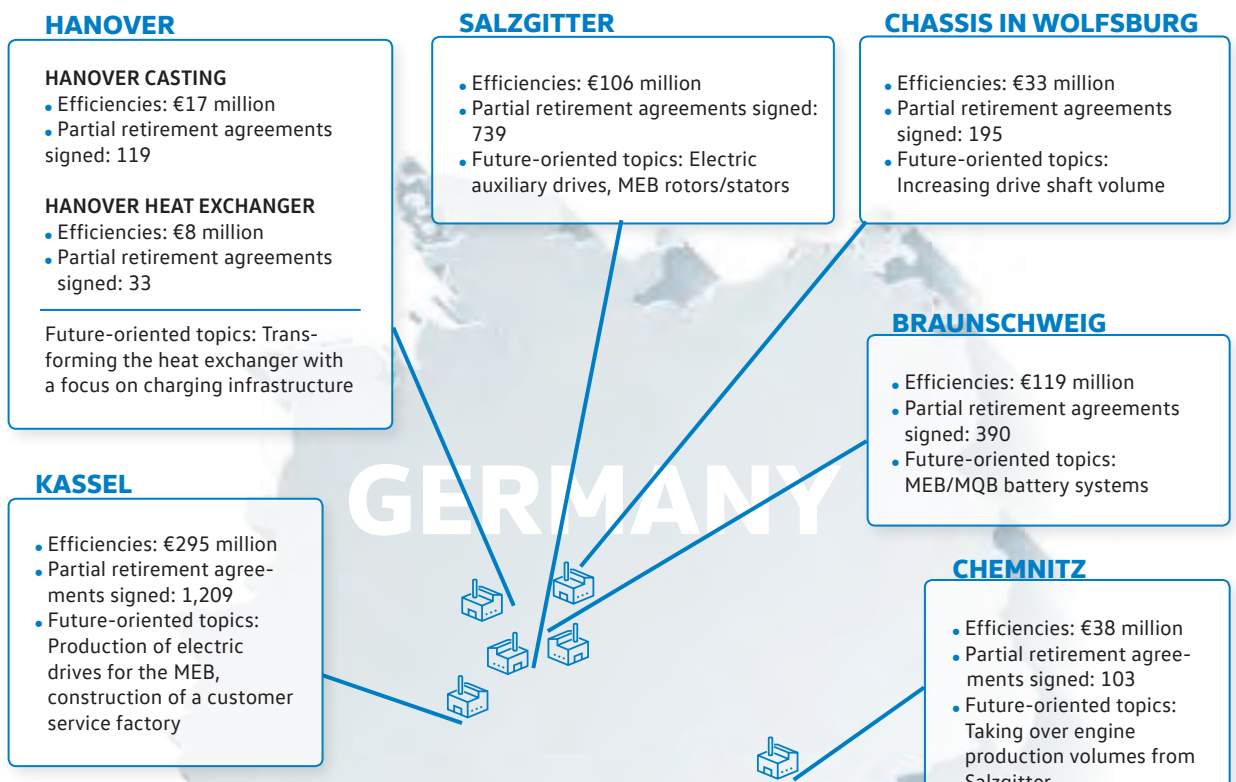
Volkswagen Group Components' German locations have been successfully been working on their competitiveness and sustainability since 2016 as part of the Zukunftspakt (Pact for the Future). The ONE MISSION 2025 components strategy continues along this path.

The Zukunftspakt (Pact for the Future) was adopted by the Works Council and the Executive Board in 2016. Goal: to make the Volkswagen Passenger Cars brand profitable and competitive by 2020. To achieve this, investments are being made in future-oriented topics, more work is being done on efficiency and jobs are being cut in a socially acceptable manner (e.g. through part-time work for older employees).

An interim report on the Zukunftspakt at Components indicates that many colleagues are accepting partial retirement offers and are taking advantage of the opportunity to retire early. This reduces the number of employees in areas where fewer employees will be needed in future. In addition, many colleagues have demonstrated a willingness to change and have taken on new tasks in future-oriented fields, such as rotor/stator production in Salzgitter and the development and production of battery systems in Braunschweig. Components also met the efficiency targets for 2017 and 2018 set out in the Zukunftspakt, even slightly exceeding them.

The map shows interim results on sustainable cost savings for the period from 2016 until the end of 2018 (according to the 2018 financial statements, Volkswagen Group Components' German plants, not including SITECH). Group Components has managed an impressive 739 million euros in long-term savings. You can also see the interim status of signed partial retirement agreements for 1955–1961* as well as examples of future-oriented topics, which were agreed for each location in the Zukunftspakt.

** For employees born in 1961, only employees who will begin partial retirement by 2020 are counted.*



Sustainability

Components is investing in transforming its locations – investments in e-mobility from the 67th planning session (2019–2023):

Kassel: €820 million
Braunschweig: €650 million
Salzgitter: €190 million
Hanover, casting: €23 million
Hanover, heat exchanger: €22 million
Wolfsburg, chassis: €25 million
Chemnitz: €12 million

The amount being invested in e-components has risen from five percent to around 40 percent since 2015.

"Our locations are working consistently to reach their efficiency potential and, in doing so, they are working to improve the competitiveness of Components as a whole. As of now, we've succeeded in achieving the savings potential set out in the Zukunftspakt through a number of efficiency measures and a great deal of commitment. Our ONE MISSION 2025 strategy will protect and build upon what we've achieved already."

Thomas Schmall, CEO of Volkswagen Group Components

Bernd Osterloh, Chair of the Group Works Council

"The Zukunftspakt secures employment and competitiveness. This balance is still our recipe for success. And Components is well on the way. The switch to e-mobility is a challenge, yes, but our workforce is pulling its weight. We need to keep up this momentum. Only by sticking together will we get through this transformation."

Seamless Transition from the Zukunftspakt to Components' Strategic Brand Strategy: ONE MISSION 2025

Components will be removed from the Volkswagen Passenger Cars brand's profit boosting program. All measures to increase Components' competitiveness are part of Components' ONE MISSION 2025 strategy. This strategy consists of:

1. four strategic goals: customer and product, people, responsibility, excellence.
2. the 12 action areas derived from the four strategic goals (e.g. digitalization, product portfolio, competence):

these form the basis for more than 30 specific projects, called Group Components Initiatives.

3. the "Road to 6%" with efficiency potentials for Components: the aim is to achieve a yield target of 6% by 2021.

A central transformation team with representatives from Strategy, Finance, HR, Industrial Engineering and all business areas manages all measures to improve efficiency and competitiveness. The aim is to increase long-term cost savings to a total of €2 billion by 2025 – with the engagement of colleagues from the Group Components plants in Germany and Poland (including SITECH).

SPEED+ Award 2019: Audi, Seat, and Skoda Join Components' Efficiency Competition

Three competition rounds will be held with nine participants and two new categories

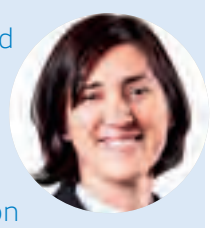
23 plants from four Group brands are taking part in Components' 2019 SPEED+ Award. This is the third time that Components plants are competing in a friendly efficiency competition. This year, teams from Audi (Györ), Seat (Prat) and Skoda (Mladá Boleslav) will also be competing for gold, silver and bronze.

But it's not just the competition that's increased – there are also two new categories: lead time and C-HPU. C-HPU (Components Hours Per Unit) is one of Components' most important productivity figures. It indicates how many direct and indirect staff members are involved in producing a standard Components part. C-HPU takes into account the specific production program and therefore takes greater consideration of more complex products over simpler ones. In addition, the teams are continuing to compete in the existing categories: plant efficiency, assembly efficiency, shop floor management, process excellent and reducing tool costs. The competition enables plants to demonstrate their expertise, efficiency and teamwork skills. The eighth category, networking, seeks to honor the best collaboration between two locations. The aim is not just to optimize assembly lines but to encourage networked thinking as well: plants should engage with one another and learn from each other. Doing so benefits Components as a whole.

Ready to go: The Gearshift 1 team for gears and tool preparation from Prat (Seat).

Plant tours are an important part of the awards. The tour allows scans to be taken on a plant's participating lines so different teams' performance can be compared for the award, ensuring a fair competition. The first plant tour took place at Audi's Györ plant in Hungary in March. With just shy of two million units produced in 2018, Györ is Audi's largest engine plant. Györ benefited from an above-average starting point in the plant and assembly efficiency categories. The plant distinguishes itself by its technical progress in using human-robot cooperation and the competitive spirit of its employees.

"We are entitled to strive for perfection. The award gives us an outside perspective on where our strengths lie and how we can work on them sustainably."



Gyorgyi Kaiszne Csehi, Head of Audi Györ Production Systems

Chemnitz Focuses on New Production Target

It was decided in the Zukunftspakt (Pact for the Future) that the Chemnitz plant's engine capacity should be increased from 800,000 to 900,000 units per year. With the help of colleagues from Poland, Zwickau and Dresden, significantly more engines will be produced at the plant than before starting this year. A new four-shift system was put in place back in April for this purpose. An eighth production line is being built in Assembly and a new production procedure is being incorporated.

Diesel Crisis: Answers to Employees' Most Frequently Asked Questions

Hiltrud D. Werner, the member of the Board of Management responsible for Integrity and Legal Affairs, called on employees to submit questions on the diesel crisis

Dear colleagues,

In the last issue of inside in April, I asked you to submit your questions on the diesel crisis.

Thank you that so many responded to my request. Hundreds of questions reached the mailbox and we sorted and summarized them. As promised, you can now read the answers in today's issue of our new employee magazine. You can now find even more questions and answers on the Volkswagen portal, as well. We simply had more space for a detailed response there.

Best regards,

Hiltrud D. Werner

? Who is responsible for manipulating the emissions and what measures is the Volkswagen Group taking to hold them accountable?

! We are making good progress in dealing with the aftermath internally and externally, but we have not completed this process.

The number of employees against whom Volkswagen AG has so far taken or initiated disciplinary measures is in the double digits. The nature and extent of these measures were chosen to reflect the individual case and agreed with the Works Council's personnel committee.

Volkswagen AG assumes that the employees who were instantly dismissed committed a particularly serious breach of duty and so has initially claimed damages against them in the related proceedings. What will happen in the course is still open at present. *

? How does the legal situation of manipulation relating to emissions differ in the U.S. and Europe? Have we committed fraud under the law in the EU?

! In Volkswagen's view: No. The switch logic, such as was used outside the U.S. and Canada in vehicles with type EA 189 diesel engines, is not an illegal defeat device under European law.

Outside the U.S. and Canada, the vehicles fully meet the emission standards even after the updates or after other approved technical measures. *

? What compensation is Volkswagen offering its customers for the loss in value of their diesel vehicles?

! There is no fall in residual values in connection with the existence of the switch logic or the updates. However, any legal claims for damages can be substantiated only if this causal connection is established.

The change in residual values for vehicles with type EA 189 engines compared to other diesel vehicles does not indicate that the existence of the switch logic or revisions to the affected vehicles reduce their value. The market value of the affected EA 189 vehicles has not been negatively impacted by the switch logic or updates.

In particular, the residual values of the affected vehicles were stable for two years after September 2015. That has been confirmed by numerous court-appointed experts and extensive internal analyses by Volkswagen AG. Independent service providers, such as DAT or Schwacke, come to the same conclusion based on their extensive data.

It is correct that there is a fundamental uncertainty as regards how the residual values of vehicles with diesel engines will change, in particular due to the political debate about driving bans. However, that affects vehicles from all manufacturers and so is not connected to the switch logic or the updates at Volkswagen.

There can be no claim for compensation for possible damage for which Volkswagen is not responsible.

? When will customers be able to retrofit hardware at the cost of Volkswagen?

! Such retrofitting has not been offered to date. There is a lack of mature technical solutions and the required approvals from public authorities.

The Volkswagen Group offers its customers from particularly impacted regions a financial contribution of up to €3,000 for hardware retrofits.

? Which Group brands and other car manufacturers are facing legal proceedings and who are the plaintiffs?

! There are various proceedings here. First, there are lawsuits by car owners against dealers, individual brands and the Group. Second, there are lawsuits by investors.

At the Volkswagen Group, the brands Audi, Porsche, Seat, Škoda, Volkswagen Passenger Cars and Volkswagen Commercial Vehicles are affected by lawsuits by car owners. The plaintiffs are private customers, large customers and government agencies that have acquired vehicles.

The lawsuits by investors are directed against Volkswagen AG and Porsche SE. The plaintiffs are very predominantly experienced, large institutional investors. They are claiming most of the speculative losses (totaling around €9.6 billion) they have allegedly suffered.

In addition, the are investigating a number of accused parties.

? At what Group brands was the software for manipulating emissions developed and who was responsible?

! We cannot comment on that since the investigations are still ongoing. We know that is not a satisfactory answer. However, pre-empting the results of our efforts to deal with the crisis and the investigations by the public prosecutor's offices will not help clarify the issue.

? What measures is Volkswagen taking to ensure that serious management and strategic mistakes do not occur again, also with regard to electric mobility?

! Emission tests of relevance to certification at the Volkswagen Group are now examined externally and independently as a matter of policy. What is important: The department responsible for developing the vehicle model is not involved in testing it.

Volkswagen also endeavors more intensively to make the technical workflows and processes transparent and so more understandable on a lasting basis. For example, the Group-wide system for managing field campaigns has been modernized. They are service campaigns with active customer notification for vehicles already on the market.

Last but not least, we have now established robust processes so that critical issues can be escalated quickly and the company can respond quickly and appropriately.

? What further risks and proceedings does the Group face?

! The judicial investigations on the diesel scandal are still ongoing. In particular, the Group faces class action lawsuits, as well as proceedings under competition law and by public authorities, worldwide.

In Germany, there are a large number of different legal disputes: The collective model case proceedings, lawsuits by individual customers and investors, labor court proceedings and criminal investigations. *

? What future do combustion engines have at the Group?

! The Group's entire fleet is to be CO_2-neutral by 2050. Taking into account a car's normal lifecycle, the company will probably still be selling vehicles with highly efficient combustion engines until the beginning of the 2040s. Development work will continue into the 2030s, since we will keep on working to increase the energy efficiency and reduce emissions of all combustion engines until their market launch.

? Where can employees obtain information on all publicly accessible facts on manipulation of the emissions?

! There has not been a place for that up to now and we will change that. The information is also available in the Volkswagen Net, but not in a sorted or collected form. You can find the most important facts and the latest statements on the diesel scandal there in the section "Diesel questions". We are also planning to open the mailbox dieselfragen@volkswagen.de to questions on a regular basis.

*** More detailed answers to these and other questions can be found in the new section "Diesel questions" in the Volkswagen-Net (see also the right-hand box).**

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VOLKSWAGEN PASSENGER CARS

ID.3[1] – We're Off!

Registration for the First Edition of the all-electric Volkswagen is now open

Still a well-camouflaged prototype – but soon to be seen on the road: the Volkswagen ID.3.

The future of electric mobility at Volkswagen is becoming tangible: Pre-booking for the new ID.3 began on May 8. With immediate effect, it is possible to get a non-binding option on a production slot of the first model of the ID. family. Production will start at the end of the year. At that time, the pre-bookers' models will be built first. This is an exclusively configured special edition – the ID.3 1st. Employees interested can register online at: **www.volkswagen.de/id-prebooking.**

The special edition has a battery with an output of 58 kW/h (net) and a range of up to 420 kilometers, according to WLTP. The ID.3 1st is limited to 30,000 vehicles and will be offered in Germany at a base price of less than 40,000 euros. More information can also be found on the Volkswagen Net.

Zwickau Prepares for E-Mobility

Conversion during ongoing series production

It's a launch – and what a launch! For the first time in the world, a large car factory is being completely converted from combustion engine to electric motor manufacture. The Volkswagen plant in Zwickau will be transformed into the largest and most efficient e-vehicle plant in Europe. The first fully electric ID. models will come off the production line before the end of 2019. In the final expansion stage from 2021 on, 330,000 purely electric cars can be built per year. Then six models for three brands will be produced in Zwickau: Volkswagen, Audi, Seat. The Group is investing a total of 1.2 billion euros in the ultra-modern site in Saxony. The mission is clear: Volkswagen is building the attractive, affordable electric car for everyone.

All jobs will be retained

The Zwickau team has the know-how and the passion to build high-quality electric cars. "We planned the conversion of the Zwickau site very carefully. Detailed preparation and planning are the most important aspect of such a mega-project. After all, we're talking here about the beginning of a new era in the automotive state of Saxony and this transformation is taking place without interrupting production," says Reinhard de Vries, Managing Director Technology and Logistics at Volkswagen Sachsen GmbH.

The conversion will last a total of three years. Until mid-2018, the Passat ran off the production line here; currently the Golf and Golf Variant[2] still do. Production of the ID. will commence in late fall. The Golf Variant will continue to be produced in parallel until mid-2020.

The future all-electric models from Zwickau will be based on efficient, stable, and sustainable production. The plant's maximum utilization will be increased from the current 1,350 vehicles to 1,500 every day. And since the Zwickau-based company is also increasing the number of models from three to six, employment at the site will remain stable. All 8,000 employees are trained to specific qualifications, which gives them a long-term perspective. The environment will also benefit, because manufacture of the ID. will be completely CO_2-free on the balance sheet.

The Golf and Golf Variant models continue to roll off the assembly line in Zwickau: Employee Mirjam Chlouba installs a side window.

Reinhard de Vries, Managing Director of Technology and Logistics at Volkswagen Sachsen GmbH.

The conversion began in summer 2018

The conversion began in the summer of 2018 with the modernization of the production lines. The first of two production lines will be set up step-by-step by the planned start of production of the ID. in November 2019. To this end, body shop, paint shop, assembly, and infrastructure are being extensively modernized and renewed.

The second line of the location will be converted according to the same pattern by the end of 2020, and will go into operation in the same year.

9,000 metric tons of steel will be newly installed, 50,000 square meters of hall space erected and 1,625 robots put in place. 50 partner firms are supporting the conversion. 30 percent of existing equipment will continue to be used. "Production launch for the ID. will mark the beginning of a new era for Volkswagen. We want to take e-mobility out of its niche and make the e-car affordable for millions of people. This is based on large production numbers and efficient production.

Head of E-Mobility: Thomas Ulbrich.

That's why we are bundling e-car production in Zwickau and making this location the nucleus of our major e-mobility offensive," says Thomas Ulbrich, Member of the Board of Management for E-Mobility at the Volkswagen brand: "The Volkswagen brand has always stood for making progress and innovation achievable for many. That was the case with the Beetle, that is the case today with the Golf – and that will also be the case in the future for the fully networked electric vehicles of the new ID. family." Zwickau is ready.

mp

3 Questions for

Trains employees of the Zwickau location in the E-Mobility Training Center: Uwe Becker.

Becker: "Making Electric Mobility a Tangible Experience"

The Volkswagen plant in Zwickau is preparing for its electric future. In addition to construction measures, the focus is on qualifying the workforce.

1 Mr. Becker, you are currently preparing the workforce for the future of Zwickau as an e-car-only location. How long will the training courses last and which employees will participate?
We started in the middle of March. For more than a year, we will train 16 people a day. Employees from Assembly and Quality Assurance will undergo all-day training. This will be their preparation for their future duties. Interested parties from indirectly related areas can also take part in two-hour crash courses.

2 What is so special about the E-Mobility Training Center?
We hold our training sessions in what is known as the E-Motion Room. The name says it all: Instead of standing at the front of the classroom and lecturing, we actively involve the participants. We use touchscreens to train them virtually in all the steps involved in assembling an electric car. The components of an ID. can be experienced with the help of virtual-reality glasses. In addition, the participants drive an electric motor with a hand crank and thus generate electricity themselves.

3 What is the first interim conclusion?
The participants are enthusiastic about our experience-oriented program. We're making electric mobility a tangible experience through active training. It's being received very well. Employees find the content to be particularly quick and easy to memorize. That's because they work everything out for themselves.

Experience-oriented learning instead of passive instruction: e-mobility training for employees.

[1] Concept car.
[2] Golf Variant: fuel consumption in l/100 km: urban 9.0–4.3/extra-urban 6.3–3.5 /combined 7.3–3.5; CO_2 emissions combined, g/km: 166–95; efficiency class: D–A+.

The We Charge Charging Service: Try It Out Now!

Electric car drivers will, from the end of May, have the opportunity to try out the new Volkswagen charging service We Charge before its official launch. During the test phase, participants will be able to charge their car for free. You can apply via e-mail: **wecharge-support@volkswagen.de**.

What exactly is We Charge? The new charging service will be available from the end of this year and enables charging at more than 150,000 charging points in Europe – irrespective of the operator of the station. Payment is made automatically via We Charge and is no longer tied to contracts with individual charging station providers.

Employee André Scholz: "With We Charge, we want to offer our customers the security of always finding a functioning charging station and thus driving without fear of running out of range. In addition, the new service also offers route planning optimized for e-vehicles: We Charge automatically calculates charging stops, finds the best route to the charging station, and, in the future, will be able to reserve it too."

In addition, the Volkswagen charging service gives the customer access to charging statistics and special offers for the Ionity fast charging network. It will also be able to control the Volkswagen Wallboxes in the future.

Electrified: The We Charge team led by André Scholz (front).

Still cloaked: The apprentices' GTI rolls onto the stage at the end of May at Lake Wörthersee. Holger Schülke (standing, from left), Betty Zimberg, Dominik Metzig, Nicolas Heße, Patrick Münchberg, Henri Vespermann, Patrick Marten, Kira Stöhr, and Kevin Behnsen, as well as Daniel Butz (squatting in front), Lea Radmann, Estelle Fassonge, Lorenzo Canu, Jonas Schatz, Maximilian Neubauer, Luca Lesse, and Claudio Lindner are involved in the project.

Apprentices and Their Wörthersee GTI

A fan meeting in Austria: Junior staff will unveil the dream car they designed at the end of May

Eighteen apprentices from nine areas of vocational training in Wolfsburg and the component will unveil their dream car at the end of May at the GTI meeting on Lake Wörthersee. From the engine to the rims to the seat cover: For the twelfth time, young people will gather in Austria to present their own GTI, which they have designed according to their own ideas in less than ten months.

The up-and-coming carmakers have adapted components such as the engine and have even designed other parts such as the interior trim of the vehicle themselves. They don't want to reveal beforehand what the highlights of this unique work will be. All we know as that the GTI will be digital and particularly sporty.

"Something that many car enthusiasts would like to see, but which has not yet been implemented," is the only clue that Nicolas Heße, an office manager, will give. He is helping with the coordination of the units and manages the budget.

The first planning work started last August. Each of the trainees worked on a specific task in his or her specialist department. The team met twice a week to discuss the project. Some ideas worked only in theory; others worked in practice too. Heße reports that the design phase was a dance between euphoria and disappointment. In the end, joy prevailed: "I remember above all the moment when the engine was started for the first time. That was unique and made us all proud."

It remains suspenseful until the very end: The 18 apprentices are currently putting their new GTI through its paces. There is still time to tighten a screw here and there before their big appearance at the lake. Project manager Holger Schülke, who has managed the project since 2013, is already satisfied with the results. He says, "I, too, am excited until the end and look forward to the presentation of the finished vehicle."

GTI Meeting at Wörthersee

The fan meeting at Wörthersee takes place from Wednesday, May 29 to Saturday, June 1. For the twelfth time, the otherwise tranquil area around Reifnitz in Austria will be transformed into a hotspot for GTI fans and horsepower enthusiasts.

The ID. R 2019: Ready for More Top Marks

Adapted aerodynamics for planned track record for electric vehicles on the Nürburgring's North Loop

Ready to set new records: the ID. R 2019.

The new ID. R: Test on the North Loop.

Volkswagen Motorsport is advancing the ID. R. It is set to become even more efficient. The team is not only working on the drive and the battery, but also on the aerodynamics. This will prepare the all-electric racing car for a new challenge: The ID. R intends to break the track record for electric vehicles on the Nürburgring's North Loop this summer.

François-Xavier Demaison, Technical Director at Volkswagen Motorsport

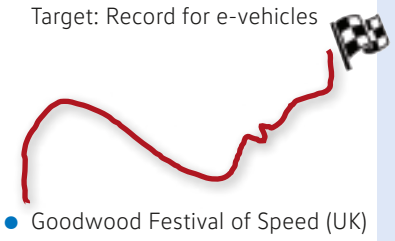
François-Xavier Demaison (Technical Director, Volkswagen Motorsport): "So far, we've focused on advancing the drive technology and battery management." The focus is currently on an adapted performance and recuperation strategy. The North Loop is very different from the Pikes Peak mountain track in Colorado, where Volkswagen set an overall record last year. Many details of the zero-emissions ID. R are being adapted accordingly.

One clearly visible change to the 500 kW racing car is in the aerodynamics. Demaison: "In the thin air at Pikes Peak, where the finish line is at an altitude of 4,302 meters, we used a very large rear wing on the ID. R to generate maximum downforce." The North Loop, on the other hand, calls for maximum efficiency. "In addition to a smaller rear wing, this also applies to the front splitter and the vehicle underbody," explains Demaison.

Technical Development in Wolfsburg supports the motorsport team with know-how from series development and computer capacity for simulations requiring a high level of computing power.

ID. R Record Attempts in 2019

- Nürburgring's North Loop (GER)
  Target: Record for e-vehicles



- Goodwood Festival of Speed (UK)
  Target: Overall record

- Tianmen Mountain (CHN)
  Target: Overall record

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[1] e-Golf: power consumption, kWh/100 km: combined 14.1 with 17-inch wheels – 13.2 16-inch; CO_2 emissions combined, g/km: 0; efficiency class: A+.

KundenCenter direkt (CustomerCenter direct): This is how the Employee Sales department advertises its digital customer center.

WA Sales: Appointment Allocation Means More Time for Customers

The Sales Manager has something to say to employees in her **360°** *interview: Stefanie Sprenger-Meinhardt on digitalization and personal advice*

Volkswagen is undergoing a far-reaching change – including the sale to employees, who are more likely to be known to every employee as WA sales. **360°** spoke to Stefanie Sprenger-Meinhardt. The mother of two has been in charge of sales to employees and internal direct customers of Volkswagen AG since March last year.

Ms. Sprenger-Meinhardt, what exactly are WA sales and where are they headed?
Enabling employees to be mobile with special conditions – that is the "heart" of sales to employees. Until the 90s, doing business with employees was purely a purchase arrangement. In the 90s, the need for flexibility and simultaneous financial security increased. This led to the first employee leasing offer in 1996 – at that time for the Passat sedan.

Today, more than 80 percent of our customers make use of employee leasing. In the future, new products, distribution channels, and mobility concepts will also influence and change the employee business.

How do you make sure that you can keep up?
We are involved in central projects

In charge of sales to employees: Stefanie Sprenger-Meinhardt.

such as a more modern ordering system in order to remain fit for the future. We are also continuously improving our offerings and services – with direct access to our pool of new vehicles, for example. With immediate effect, our customers have direct access to this pool via KundenCenter direkt and can order an existing vehicle online. This was previously only possibly via customer advice.

How do employees find out about these new functions and about current offers?
We use various communication channels. One of these – aktuelle notizen – is currently celebrating its 45th birthday (see the article below). For employees without access to a computer, in particular, this format is an important source of information – for example, as a notice on the bulletin board or flyer to take away.

Our digital customer center has been called KundenCenter direkt since June of last year – it was previously known as WA@Web. KundenCenter direkt runs on all mobile end devices. 28,000 employees have activated their personal mailbox there to date and around 10,500 employees have subscribed to KundenCenter news.

The "online order change" function is new. It means that customers can use KundenCenter direkt to change employee leasing orders conveniently – this saves time and a journey. Soon we will also be represented in the new Volkswagen 360° employee app and on Group Connect under KundenCenter direkt.

A very clear digital focus – what does that mean for face-to-face consultations?
New car purchases, follow-up orders, scheduling, or order changes for employee leasing can increasingly be handled digitally. A personal consultation in the Customer Center is primarily intended for consultation-intensive matters – with appointment allocation in order to really have time for the customers. We are well aware that not all of our customers are online; others are unsure of their needs or they have a more complicated request. This is quite a difficult balancing act, because we are always caught between the economic interests of the company, our resources, and the satisfaction of our customers.

Sales to Employees

Sales to employees and internal direct customers offers Volkswagen Group employees vehicles at special conditions. The services: employee leasing, new car purchase, used car purchase, trade-in, and end-of-life vehicle recycling. Another task is the handling of company vehicles.
WA sales can be contacted at kundencenter.volkswagen.de

For 45 Years: aktuelle notizen, Especially for Employees

Since May 1974, Employee Sales has presented exclusive offers for purchase and lease more than 2,000 times

Time flies: On May 13, 1974, exactly 45 years ago, the first issue of aktuelle notizen was published. Every employee is probably familiar with it. Since then, sales to employees have regularly kept active and former employees of Volkswagen AG informed about exclusive offers, above all regarding vehicle purchases and employee leasing – and not just that.

The publication also includes little gems of wisdom, always referred to as the "Schlusslicht" (taillight). "We also include those to lighten up the information a little bit and give our customers something to smile about, or even to think about. There are even people who collect the sayings," says Joachim Grußendorf, who has been in charge of aktuelle notizen within Employee Sales for 33 years. He will be going into early retirement in a few weeks' time.

Production completely in-house

Grußendorf is proud of the fact that aktuelle notizen is made completely in-house. "We supply the texts and the design proposals," explains the employee. The MultimediaCentrum at the Wolfsburg plant then develops the layout. If there is a print edition, the company's own Printing department is charged with the task.

However, most of the aktuelle notizen are now made available online in KundenCenter direkt (CustomerCenter direct), which has been further developing WA@WEB for almost a year now.

Familiar, established, and reliable

The name aktuelle notizen has stuck, however. Grußendorf recalls: "Around twelve years ago, we carried out an employee survey on that very question. The agency then advised us to stick with the name because it is extremely well known and established among the staff, and represents fast and reliable information." And how many aktuelle notizen have there been since mid-May 1974? Grußendorf has counted together with Harry Wolf, the first man in charge of the medium, who has long been retired. The result? There have been more than 2,000 special offers and pieces of information for employees, either as flyers, notices, or supplements to payslips.

The faces behind aktuelle notizen: Joachim Grußendorf (left) and Harry Wolf.

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3 Questions for ...

Jürgen Stackmann, Sales Director of the Volkswagen brand.

"The T-Cross Is a Real Multi-Talent"

After the delivery start of the SUV: **360°** *interview with Sales Director Jürgen Stackmann*

1 Mr. Stackmann, you delivered the T-Cross to the first customers in mid-April. What are your expectations of this new model?
The T-Cross is an important model for the Volkswagen brand. It completes the Volkswagen SUV family as it is a versatile, practical, and flexible vehicle, and it also rounds it off at the bottom. We are thus occupying an important growth segment in which we have not previously been represented.

2 How many T-Crosses do you hope to sell?
The segment of these little urban crossovers is growing all over the world. In the small-car segment in Europe, we expect SUVs such as the T-Cross to outperform short-rear vehicles such as our Polo over the next decade. This vehicle class is also very popular in our most important market – China – and in South America. That is why we are offering the T-Cross there too. It really is a global car.

3 What target group do you intend to reach with this vehicle?
Thanks to its versatility, the T-Cross appeals to different target groups. Young families may appreciate its variability and modern connectivity, while over-50s enjoy the higher seating position and the low fuel consumption. Due to its cool design, the T-Cross has a high recognition value. It is a real multi-talent with many facets. This also applies to Cara Delevingne, whom we were able to win as a spokesperson for the vehicle. The international marketing campaign and the market launch in Europe will start shortly. From the beginning of May, the T-Cross will be available in the showrooms of our German dealers.

The new T-Cross: Available to view at dealers since the beginning of May.

VOLKSWAGEN GROUP COMPONENTS

A LOOK INTO COMPONENTS

Modern technology: Tino Herwig equips the prototype of a base electric drive with additional measurement sensors.

Handiwork: Electric Drives from Kassel

Every product from the Kassel Pre-Series Center (PSC) is unique. The 285-person team manufactures prototypes and small series of gearboxes and electric drives for Components. They work closely with the Development departments in Kassel, Wolfsburg, and Ingolstadt.

Like all his colleagues from the PSC, Tino Herwig is an expert through and through. He alone has to master what, in series production, is divided between multiple workstations. He manually assembles an electric drive base – whose individual parts have previously been manufactured in the PSC's machine park or by service providers.

There are no mass-produced goods

Serial or mass-produced goods are virtually non-existent in the early stages of construction. Each gear wheel is milled specifically for its purpose, each lamella is laser cut and glued together by hand to form a "package." Even the light metal housings are custom-made. This outlay is important: This is the only way developers can test their computer models in real life.

Drives equipped with sensors

With the prototypes produced in this way, they collect enormous amounts of data, which are then evaluated and converted into improvements. Then the game starts all over again: build prototype, test, further optimize. In order to carry out these tests as efficiently as possible, the drives are equipped with sensors. These wires, probes, and chips cannot interfere with the drive itself during operation.

On average, roughly 1,300 transmissions and electric drives leave the PSC every year, each as valuable as a small car. At the end of an almost two-year development period, there is a finished, mature drive for series production. At the same time, the planners create an efficient production line that incorporates the experience gained from the PSC. And if required, the prototype forge can also provide support during product start-up.

Thomas Schäfer: Our Pl

The Sub-Saharan exec on goals, challenges, and the qualification

Thomas Schäfer is Chairman of the Executive Board at Volkswagen South Africa. He's also responsible for business in the entire sub-Saharan region (49 countries), where the Volkswagen brand is now also active in Ethiopia, Rwanda, Kenya, and Nigeria, and will soon be in Ghana.

At the factory gate in Uitenhage: Thomas Schäfer has been CEO of Volkswagen South Africa for almost four and a half years.

360° spoke with Thomas Schäfer about...

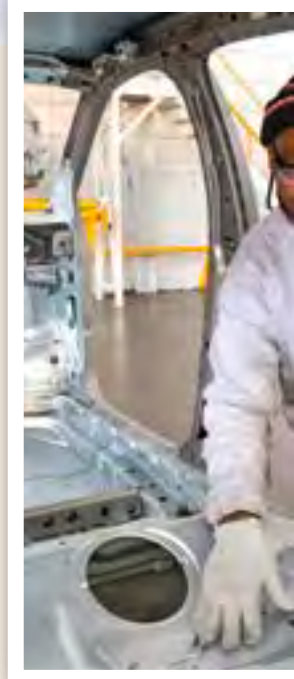
... the start of large-scale commitment in Africa:
At the end of 2015, the Volkswagen brand decided: We want to approach Africa differently than before. For example, we won't decide where we're active based on market size, but rather clarify: Who is the most advanced on the road? We came up with four countries: Kenya, Rwanda, Ethiopia, and Ghana. I then presented our plans in South Africa at the respective embassies of the four countries. They've been positively received – and the first results can already be seen after a short time. For this, we needed very pragmatic decisions. We work like a start-up. Group CEO Herbert Diess is giving us free rein.

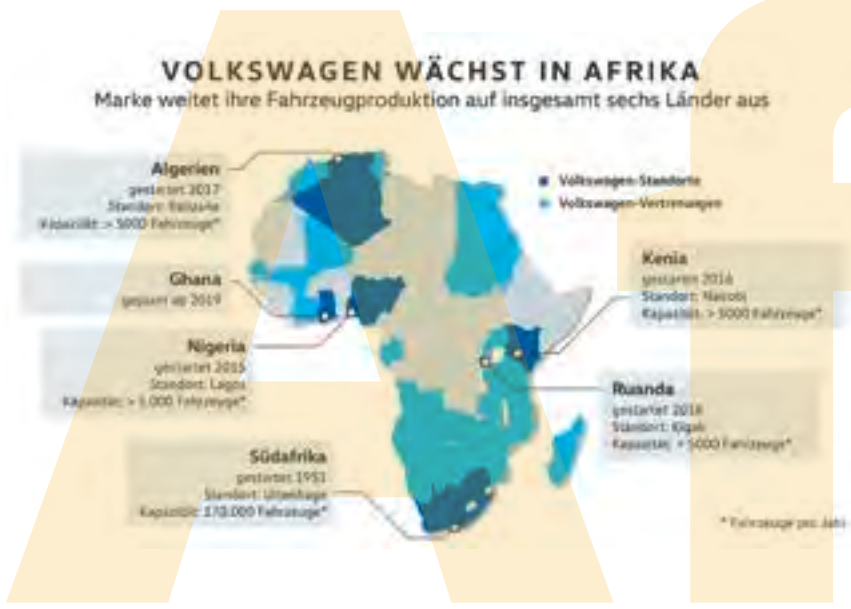
... challenges for automakers in Africa:
There are three main ones:

1. There is a huge used car market. It's inundated by mostly ancient, poor-quality, and therefore cheap vehicles from the Middle East, Japan, and the US.
2. Fuel quality is poor in many places, which is partly due to its high manganese content. We have to be prepared for this when choosing the engines.
3. There are hardly any financing options like leasing: In Africa, people usually pay for cars in cash. The beautiful thing, and what gives us courage: it can be done differently. South Africa, for example, bans the import of used cars. There are better fuel and financing options there. We've been part of South African society since as far back as 1951. Now we want to use the experience we gained there in other countries as well.

... the reasons for Volkswagen's AFRICA commitment:
Africa has largely overcome the post-colonial phase and is no longer a hopeless continent. On the contrary: There's a spirit of optimism. Africans want to industrialize because they know it's their future. This is another reason why I'm convinced that Africa will develop faster than many expect. Nothing holds back the young, fully digitized population that's grown up with the smartphone and has an average age of less than 20 years. They want to change things. And Africa is by no means lagging behind in everything. Rwanda, for example, has reunited after the genocide in 1994 and is a leader (not just in Africa) in digitalization and the generation of energy from renewable sources.

A Passat on the streets of Kigali: Volkswagen launched a local production and car-sharing service in Rwanda last summer.





Another aspect that speaks in favor of our stronger commitment to Africa is population development. Nigeria, for example, already has 220 million inhabitants today, almost four times as many as South Africa with our Uitenhage plant. And Ethiopia, where we also want to assemble vehicles, has 120 million inhabitants, almost 50 percent more than Germany, for example.

In addition, the framework conditions are set to change: If what many modern and committed African heads of state are planning is successful, a free trade area like the European Union will emerge in Africa. It comprises almost 50 states. And then we will have a barrier-free market with more than one billion people, which will grow to 2.5 billion by 2050.

...the work in Africa so far:
We're laying the groundwork. If things really get going in Africa, we want to be able to start right away – like in China 30 years ago. We are also dealing with the question, 'What needs to be done to create a market for our products?' This process is also different: So far, we as a company have mostly looked at where there's a market and have entered there. Now we're trying to create a market: In Rwanda, for example, we rely on ride hailing, a kind of ride-sharing service, and car-sharing with 600 to

From 1951 to Present: How Vol

In its "Transform 2025+" strategy, Volkswagen is strengthening the regions and focusing on new, emerging markets. The sub-Saharan region is playing an increasingly important role in this. Although the African car market is currently relatively small, the region could develop into a growth market. The Volkswagen brand has therefore significantly expanded its commitment in the recent past.

August 1951, South Africa: The Uitenhage plant is Volkswagen's first outside of Germany. Today, around 4,000 employees build about 160,000 Polos and Polo Vivos there each year. In South Africa, Volkswagen is the market leader by far, with sales of around 70,000 vehicles per year. This is also confirmed by the latest numbers: In March of this year, the company sold 6,754 vehicles at the Cape – that's a market share of 20.5 percent! Volkswagen enjoys an excellent reputation in the country because the company is involved in more than 100 aid projects.

Vehicle exhibition at the factory: Thomas Schäfer with the legendary Beetle made in South Africa, built in 1951.

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[1] Polo GTI: fuel consumption in l/100 km: urban 7.7 / extra-urban 4.9 / combined 5.9; CO_2 emissions combined, g/kg: 134; efficiency class: C.

an for the Africa Region

of new employees in Ghana, Nigeria, Rwanda, Ethiopia, and Kenya

Socially committed: The Blue Bike aid project is one of about one hundred that Volkswagen supports in South Africa. With these bikes, children and young people can get to school faster and more safely than on foot.

View of the plant: Around 4,000 employees work in Uitenhage.

Full of pride: The employees in South Africa build the Polo and Polo Vivo.

Everything comes from South Africa: All employees at the Uitenhage site are highly motivated for us to successfully create a regional market on our doorstep. They all know Africa and have taken it to heart. And they are excellently trained and are happy to pass on their knowledge to their new colleagues in Ethiopia, Rwanda, Kenya, Nigeria, and soon also in Ghana.

... goals in Africa:
We at Volkswagen want to do our part to democratize mobility in Africa and mobilize as many people as possible – in part out of self-interest, we'll freely admit. This task is a lot of fun for me: My team and I can create an infinite number of things. This requires courage, energy, perseverance, and a certain love for Africa and knowledge of its history, in order to understand the individual countries and the people.

Thomas Schäfer (50) has been Chairman of the Executive Board at Volkswagen South Africa since 2015, and Head of the Sub-Sahara region since 2016 In 2012, the engineering graduate joined Volkswagen from Daimler, where he was responsible for the planning and support of overseas plants, among other things. He initially took over the management of the foreign production group. Schäfer is married to a South African, and says, "By now, Africa is more my home than Germany."

800 cars in the capital Kigali. These vehicles will have to be replaced at some point, and the fleet might get larger, too. We assemble pre-produced cars in Rwanda with about 30 employees. In addition, we need 1,000 drivers – and have thus created additional jobs.

... models preferred in Africa:
The African market is a gasoline market. Otherwise, it's inconsistent – there is no one car for Africa. Pick-ups, large and medium-sized SUVs, and even small limousines are in demand – and we offer all of them.

... the qualification of new employees:

lkswagen Has Evolved in Africa

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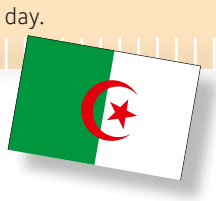
July 2017, Algeria: Under the leadership of Seat, the Volkswagen Group and a local partner open a multi-brand joint venture in Relizane, some 280 kilometers southwest of Algiers. In the assembly plant, employees can produce up to 200 vehicles a day.

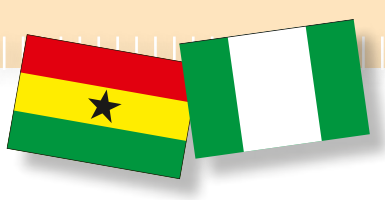
June 2018, Rwanda: The Volkswagen brand launches an integrated mobility concept. This includes vehicle manufacturing, mobility services, and a sales and service center. The focus is on car-sharing and ride-hailing offers that enable individual mobility for broad sections of the population. In addition, local production of the Polo and Passat has begun.

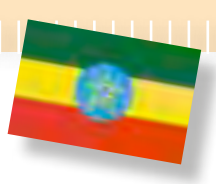
August 2018, Ghana and Nigeria: Volkswagen signs letters of intent with the governments of Ghana and Nigeria. The goal is to build new assembly plants in both countries. In Ghana, the development of new mobility solutions will also be studied.

February 2019, Ethiopia: The Volkswagen brand signs a letter of intent to develop the automotive industry in Ethiopia. This involves vehicle assembly, component production, mobility concepts (e.g. app-based driving services such as car-sharing and ride-hailing), and the establishment of a training center.

2016 2017 2018 2019







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Nutzfahrzeuge

LOOK TO VOLKSWAGEN COMMERCIAL VEHICLES

Transporter 6.1 Debuts at the bauma

After the **world premiere** of the Multivan 6.1, Volkswagen Commercial Vehicles presented the new Transporter 6.1. The framework for the debut of the commercial vehicle bestseller with its far-reaching new technical design: bauma 2019. It's regarded as the world's largest trade fair for construction machinery and equipment.

The new Transporter 6.1 made its debut with a variety of body variants unique in its competitive environment: as a panel van and station wagon, as well as a single and double cab with platform.

Much more than model maintenance

Volkswagen Commercial Vehicles has deliberately chosen the new additional designation 6.1 for the in-depth update of the sixth Transporter generation. After all, the technical measures implemented go far beyond the usual model maintenance. This is illustrated by the change from hydraulic to electromechanical power steering. A system exchange this complex usually only takes place within a series during a complete generation change.

Increased safety through new assistance systems

The electromechanical steering system has brought a new range of assistance systems, and thus an increase in safety and comfort, into the series. The new assistance systems include Lane Assist (active lane departure warning system), Park Assist (enables the car to steer itself when parking), Side Protection (warns when getting dangerously close to obstacles and people), Back-Out Assistant (protects when reversing out of a parking space), and Trailer Assist (makes maneuvering with a trailer child's play with automatic steering).

The new Crosswind Assistant is also standard on board in panel vans and station wagons. It stabilizes the Transporter 6.1 if, for example, the wagon is caught by a gust of wind on a bridge. Also fitted as standard: multi-collision brake and Hill-Start Assistant.

At the T6.1's debut in Munich: Volkswagen Commercial Vehicles CEO Heinz-Jürgen Löw (right) and Chief Designer Albert Kirzinger.

Congratulations: Christoph Nieschwietz, Group Head of Energy and CO_2 Management (left), and Mario Blank, Head of Logistics and Planning at the Transparent Factory.

Dresden Becomes First Climate-Neutral Location

Now it's official: The Transparent Factory in Dresden has become the first location of the Volkswagen brand to become climate-neutral in terms of financial results. This was certified by Christoph Nieschwietz as Group Head of Energy and CO_2 Management, who noted: "The Transparent Factory meets all of Volkswagen's internal criteria. All e-Golf models to come out of Dresden are manufactured locally on a CO_2-neutral basis. This amounts to savings of 3,600 tons of CO_2 each year."

To make this achievement clear, four plaques have been mounted in and in front of the factory. "We really wanted to emphasize the climate-neutral status of our production processes in Dresden, and we are still welcoming 400–500 visitors on a daily basis. In 2018, we counted a total of 135,000," recalls Mario Blank, Head of Logistics and Planning at the factory.

This all stems from the factory power supply being CO_2-free thanks to Volkswagen Naturstrom®. In addition, the CO_2 emissions from the heat supply are fully offset by climate protection projects. Generally speaking, the development of e-mobility solutions is an essential building block on the road to financial CO_2 neutrality. This is why the key word in the Volkswagen sustainability strategy is decarbonization, which refers to stepping away from fossil fuels. Dresden is now implementing an all-important first step in this process.

The world's top mid-range model: Emden manufactures the 30 millionth Passat.

One million Sharan models – production milestone at Volkswagen Autoeuropa in Portugal. The millionth Sharan has rolled off the production line in Palmela.

FASZINATION PRODUKTION #prouduction

Happy team: The eight-millionth Polo has now rolled off the production line in Pamplona.

Production Milestones in Emden, Pamplona, and Palmela

Passat, Polo, and Sharan: Teams in the plants proud of production volumes

Three at a time: Cause for celebration is now sweeping across three separate locations. A total of 39 million vehicles have now been manufactured in Emden, Palmela, and Pamplona.

The 30 millionth Passat has rolled off the production line at the Emden plant, the team in Pamplona (Spain) has been delighted to see the Polo pass the eight-million mark, and staff in the Portuguese Palmela plant are celebrating the production of the millionth Sharan.

Whether they're handling the launch of a new model or commemorating a production milestone, these are events that fill the

Andreas Tostmann, Head of Production

120,000 production employees around the world with pride and give them a reason to celebrate. "It is always reassuring when we reach a production milestone, as it just goes to confirm that customers are happy with our vehicles and know they can count on the quality of our workmanship. What's more, every milestone demonstrates exactly what we have already achieved together as a team," explains Andreas Tostmann, Head of Production for the Volkswagen brand.

Volkswagen is one of the most successful high-volume manufacturers in the world, with over 160 million models already rolling off the production line for the Group's core brand.

Production Meets IT

With the Volkswagen Industrial Cloud, which has been developed in conjunction with Amazon Web Services (AWS), Volkswagen is laying the foundations for integrated digitalization in production and logistics. This cloud provides a space for all essential production data to be stored together and managed. Around 30 digitalization experts from the Production and IT divisions of the Volkswagen brand have been working on the solution since the start of 2018 in six skillful, interdisciplinary teams. Their task has been to work together on shaping the digital and fully networked plant automation of the future.

"This has seen them develop apps and services based on production data from the Volkswagen Industrial Cloud," explains Sebastian Volk from the Digital Production Management (DPM) team. Machines, production systems, and plants make production and logistics processes incredibly efficient. Controlling plants and machines in a real-time network not only creates more transparency, but also makes it possible to exploit the potential of the resulting data accordingly.

Light Technology Minimizes Follow-up Work

Application in the T-Roc

A team of employees spanning the Assembly, Body Shop, Product Management, and Planning divisions at the Palmela plant has developed a portable, contactless measuring device capable of taking automatic spacing measurements for the new T-Roc. This new technology is set to reduce follow-up work on the T-Roc by ten percent.

The new development is based on a principle known as optical triangulation, which is a process used for optical distance measurement. This involves measuring and comparing the distances between the trunk lid and the tail light that are established in the Body Shop and Assembly processes.

At present, the required correction values are determined by means of visual inspections and mechanical measurements. If any recording is required in digital format, this process is performed manually. With the new measuring device, it is now possible to take automatic and digital measurements of spacings and inclusions (gaps and cracks) in all glass types. It can even be used to measure surface elements made of plastic or metal, and the process of managing and archiving past measurements is now performed automatically. The newly developed device is being used to analyze the alignment of the T-Roc roof. This measuring device costs far less than other technologies currently available on the market. This innovation has come about as part of the Good Man Project, which is dedicated to the development of smart inspection tools and is registered and approved as part of the international Horizon 2020 program. The aim of this European program is to develop production technologies with zero manufacturing faults that prevent the occurrence and proliferation of logical defects.

The team: Gisela Garcia (Product Management and Planning), Hélder Vicente (Assembly), and Joaquim Dias (Product Management and Planning) present the newly developed device.

New tool: This measuring device makes it possible to take automatic and digital measurements of spacings and inclusions in all glass types.

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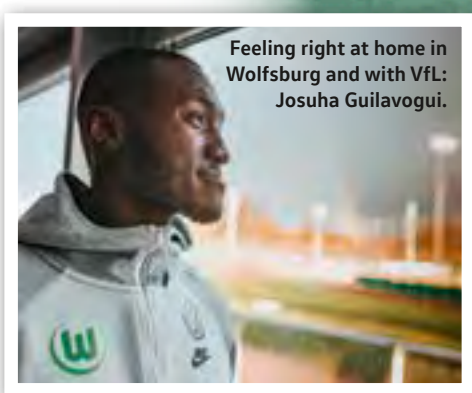
Josuha Guilavogui: "I'm Proud to Be a Wolfsburger"

***360°** interview with the captain of the Bundesliga side VfL on industrial towns, travel, and Europe*

Josuha Guilavogui (28) is the captain of VfL Wolfsburg. **360°** caught up with the midfielder to talk about the upturn of the Bundesliga side, industrial towns, his greatest role, and a united Europe.

Dynamic: Josuha Guilavogui (right) surges ahead.



Feeling right at home in Wolfsburg and with VfL: Josuha Guilavogui.

"It's a great feeling to be a part of the European community."

Josuha Guilavogui

Visit to the academy training complex where this photograph of Guilavogui was taken.

You have been playing at VfL for almost five years now. Did you ever imagine back in summer 2014 that you would stay in Wolfsburg for so long?
To be honest, it never crossed my mind that I would one day be playing in Germany at all. Back when I was still playing at Saint-Étienne, I always saw myself playing in the English Premier League as it seemed to suit my style of play. But then I transferred to Atlético Madrid. After a year plagued by injury, I had the opportunity to transfer to Wolfsburg. We've been through plenty of highs and lows here over the years. I'm proud to be a Wolfsburger; my family has settled down here nicely, too. Plus since my son was born, the next generation of Guilavoguis is an official Wolfsburger.

Are there any parallels between Saint-Étienne, Madrid, and Wolfsburg?
Wolfsburg and Saint-Étienne are both cities with a real 'blue-collar mentality,' which is great for me because it's a mindset I can identify with. Madrid, on the other hand, isn't really comparable to Wolfsburg or Saint-Étienne at all. It's the capital of Spain, isn't it, so there's plenty going on. The whole culture and lifestyle there are completely different. One of the things I did like, though, was eating late at night. Wolfsburg is a quieter city with a low crime rate. It's the perfect place to watch your children grow up.

Why is this season going better for VfL than last year and the year before? After the 4–1 win in Hoffenheim, the team moved up to eighth place in the table with international competitions in its sights.
The atmosphere in the locker room is different to other years. Players like Jérôme Roussillon, Wout Weghorst, and Daniel Ginczek have had a positive impact on the team both on and off the pitch. We've also had Bruno Labbadia and his team of coaches to make sure we were ideally prepared for the season ahead: We're noticeably fresher and fitter than we were last season, plus every last player from the starting eleven to the bench knows exactly what his job is on the pitch.

You've captained the team since the start of this season. What does this accolade mean to you?
It's a huge honor for me! Plus my friends and family are proud that I'm captain of VfL, too.

Oliver Glasner (45) from the Austrian First League team from Linz will be following in the footsteps of Bruno Labbadia next season. What do you know about the new VfL coach?
I've chatted with our keeper Pavao Pervan about the new coach, as he has worked with him for a number of years in the past. Glasner is renowned for his offensive mentality, similar to that of Adi Hütter from Eintracht Frankfurt. But what I'm hoping first of all is that we qualify for Europe. Once we're playing in Europe, we will be seeing what Oliver Glasner can do twice a week.

You're a Frenchman living in Germany. How is life here different to how it was back home?
I miss the French baguettes and croissants [laughs]! Deciding how to spend my free time is also much easier in France. If I go to the cinema here, for example, it's pretty challenging to follow an entire film in German. But that's not to say that I absolutely want to move back to France right away. I feel at home in Germany.

You're 28 and still have plenty of good years ahead of you. Have you started thinking about what you might like to do once you stop playing?
I'm not worried at all about what I'll do once my playing career is over. There are plenty of things I could do. I love to travel and discover new cultures. One of my greatest ambitions is to go to the Olympic Games as a spectator. Since my whole life has revolved around soccer, I would still love to come back to it one day and share my experiences from France, Spain, and Germany with the next generation of players.

You became a dad for the second time just a few weeks ago. Is being a father the best job you could have?
When I come home and see my daughter and newborn son, that's just the best feeling in the world for me. People really should appreciate the opportunity to be a parent, especially since some people don't get the chance. To me, it really is the best thing in the world.

The European elections are coming up at the end of May. What does a united Europe mean to you?
A united Europe is a special and important topic for me. It's a great feeling to be a part of the European community. It's this community, for example, that makes it so easy for us to travel from one country to another. Of course, there are always people who have a different opinion on the subject, but I think we need to be more interested in looking out for each other in the present world and helping each other out with our problems.

Remainder of the season for VfL Wolfsburg

Saturday, May 11, 3:30 p.m.:
VfB Stuttgart – VfL Wolfsburg

Saturday, May 18, 3:30 p.m.:
VfL Wolfsburg – FC Augsburg

Tickets available at www.vfl-wolfsburg.de

JOSUHA GUILAVOGUI (28)

has been playing for Bundesliga side VfL since summer 2014, making him one of the longest-serving pros at Wolfsburg. He has been captain since the start of this season. The midfielder transferred to Wolfsburg from Atlético Madrid. Prior to this, he primarily played for AS Saint-Étienne in his native France. Guilavogui is married with two children.

PARTNER DFB-POKAL

WIN TICKETS TO THE FINAL!

Soccer fans, listen up! Sports Communications and Internal Communications are giving away 10 pairs of seated tickets for the DFB-Pokal knockout final between Bayern Munich and RB Leipzig on Saturday, May 25. It all kicks off at 8 p.m. at the Olympiastadion in Berlin. The giveaway has been organized to celebrate Volkswagen's partnership with the DFB-Pokal competition.

Record-breakers versus Rookies is the unofficial tagline for the match between the 18-time cup winners from Munich and the Leipzigers, who have reached the final for the first time in their young club's history. If you would like to be in with a chance of winning tickets for the final in Berlin, email us at sportkommunikation@volkswagen.de by 2 p.m. on Thursday, May 16, with your name, team number, and contact telephone number.

Sports Communications and Internal Communications wish everyone the best of luck!

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Well-deserved success: VfL Wolfsburg celebrates its fifth successive cup title.

Record Holders: VfL Celebrates

Bundesliga side VfL Wolfsburg Women beat Freiburg 1–0 in the DFB-Pokal final

VfL Wolfsburg Women have won the DFB-Pokal competition for the fifth year in a row: After a well-earned 1–0 victory against SC Freiburg, this even makes Stephan Lerch's team record holders. The crucial goal was scored in front of 17,000 spectators by striker Ewa Pajor with an assist from top goal-scorer Pernille Harder.

"It makes me proud that we have won the cup for the fifth time in a row," reports Harder. Teammate Alexandra Popp was keen to stress: "The game was so exhausting. I'm delighted to bring the cup back home with us once again. It really was a well-deserved victory for the team."

Visit from Swedish Royalty: Carl Philip in Wolfsburg

The prince tests the new generation of e-vehicles

Prince Carl Philip of Sweden came to Wolfsburg to find out about Volkswagen's electric-mobility strategy. He also tested the Group's new generation of e-vehicles, including vehicles from the ID. family. Sweden is one of Europe's largest markets for e-vehicles.

Andreas Renschler, Head of Traton and Member of the Group Executive Board: "Sweden is a role model when it comes to protecting the climate. Today, more than half of the electricity generated already comes from renewable sources. This is an essential prerequisite for making electric mobility sustainable both for cars and for trucks and buses."

Renschler continues: "We have a number of innovative electric-mobility projects in Sweden and will soon be testing self-driving e-buses in public transport with Scania."

In the Smart Production Lab of the IT-City in Wolfsburg, Carl Philip accompanied 34 Swedish start-up entrepreneurs who also visited the Hannover Messe. The start-ups participated in an innovation day at Volkswagen. The goal was to intensify Swedish-German cooperation with a view to innovative manufacturing technologies and Industry 4.0.

Signing the Volkswagen guestbook: Prince Carl Philip of Sweden (left) with Andreas Renschler, Head of Traton and Member of the Group Executive Board.

Exciting: Jan Wipke (right), head of the IT-City's Smart Production Lab, shows Prince Carl Philip of Sweden (left) the technology of a driverless transport vehicle.

Fun with the race simulators: Maximilian Arnold (from left), Yannick Gerhardt, Renato Steffen, and Phillip Menzel. Afterwards, everyone lined up on the winner's podium for a souvenir photo.

VfL Professionals Test New Race Simulators

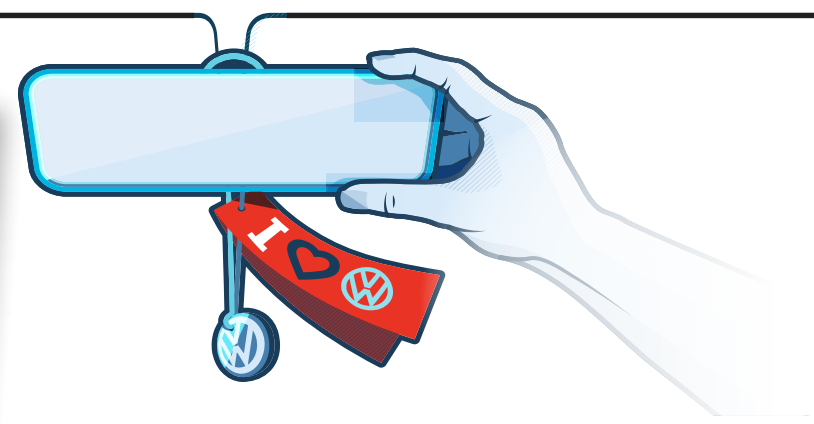
Maximilian Arnold and his colleagues at the Autostadt

Sports steering wheel instead of soccer boots: That was on the agenda for four players of the Bundesliga soccer team VfL Wolfsburg on the new virtual race track (SIM Mobility) of the Autostadt in Wolfsburg. The midfield players Maximilian Arnold, Renato Steffen, and Yannick Gerhardt, as well as goalkeeper Phillip Menzel, tested their driving skills in the new race simulators and also lost no time in challenging each other – adrenaline rush guaranteed! In the end, Arnold prevailed over his teammates. The experienced VfL professional had this to say: "I'm all sweaty and now I know how professional racers feel. What a feeling!"

Visitors to the Autostadt can experience the SIM Mobility daily from 11 a.m. to 6 p.m. With a valid daily or annual ticket, the price for a 20-minute simulator ride is 12 euros.

REARVIEW MIRROR – *A look at the history books of the Volkswagen company*

Convertible based on the Beetle: The Hebmüller enjoys cult status in classic car circles.



70 Years Ago:

The Height of Elegance – The Hebmüller Convertible

One of the Volkswagen brand's most elegant cars is celebrating its 70th birthday - the two-seater Beetle Cabrio type 14, built by the body works Joseph Hebmüller and Sons in Wülfrath in North Rhine-Westphalia.

In 1948, Karmann in Osnabrück and the Wülfrath-based body works Hebmüller develop convertibles based on the Volkswagen Beetle saloon. While Karmann designs a four-seater version, Hebmüller creates a sportily elegant version with a long rear and an emergency bench. Volkswagen Managing Director Heinrich Nordhoff likes both designs – and so he places orders for the construction of 1,000 units with Karmann and 2,000 with Hebmüller.

In April 1949, series production starts at Hebmüller. But, after only a few months, in July 1949, a major fire destroys almost the entire production facilities in Wülfrath. The company never recovers from this severe economic loss. After the fire, convertibles are again produced, but in 1952 Hebmüller has to close because of financial difficulties. For this reason, only 696 units of this car, preferably painted in the black-red color combination, are produced – the last twelve of them at Karmann in Osnabrück.

45 Years Ago:

The Golf Arrives

As the successor to the Beetle, the Golf did not have an easy start in 1974. A new design and a water-cooled front-wheel drive spell a complete departure from the concept behind the predecessor. This makes press promotion even more important during the model launch: On April 30, 1974, the Press department provides journalists with the first pictures of and information about the Golf. And, only a few days later, on May 20, the department gives media representatives their first look at the car in Munich. During the presentation, the Volkswagen employees underline that the Golf is a car that represents progress. The high expectations placed on the new model series are fulfilled: With more than 35 million units sold, the Golf, of which there are now seven generations, is one of the most successful models in the history of automobiles.

New design, water-cooled front-wheel drive: the Golf in 1974.

Sales slump: Around 44 years ago, Volkswagen reduced the number of employees – amicably and socially sustainably.

44 Years Ago:

Oil Crisis Causes Difficulty for Volkswagen

Volkswagenwerk AG finds itself in a difficult phase in the mid-1970s. The global oil crisis is leading to a slump in the automotive business, which is also palpably felt at Volkswagen. At the board meeting of April 22, 1975, plans are adopted to reduce the number of employees.

After initial conflicts between the general works council and the company management, the reduction in staff takes place amicably and in a socially sustainable manner. But with the new generation of the water-cooled Passat and Golf models, Volkswagen manages to emerge from the crisis: In 1976, the company again increased sales by a good 15 percent. One of the reasons is the modular principle behind the new manufacturing concept.

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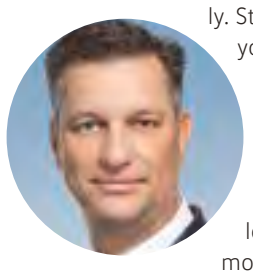
Dear Colleagues,



You are holding the first edition of **360°** in your hands.
After publishing more than 40 issues of Components News since 2015, we are now part of the Group-wide **360°** media family. Starting now, you'll receive an overview of the most important issues for the Group, the brand and each location every month with **360°**.

In this first issue, we'll provide you with an interim report on how our locations are doing with the Zukunftspakt (Pact for the Future) in the Group section (p. 10). We're well on our way – we have been working consistently on our competitiveness over the past few years, and have been making progress on future-oriented topics like rotor/stator production in Salzgitter and battery systems in Braunschweig. Components' ONE MISSION 2025 strategy is based on what we've achieved so far and aims to build on these successes.

Another important decision for the future: starting in 2020, PPE steering systems will be produced in Braunschweig. This is yet another step toward making the location future-proof in the long term.
And this is the right decision. Our colleagues have impressed us with their expertise, which is why they will be manufacturing the steering systems for the electric vehicles by premium brands Audi and Porsche.

The SPEED+ Award and the Plant Award also contribute to our competitiveness – with sporting ambition and clever ideas. Both awards have now progressed to the next round and the SPEED+ Award in particular will be even more challenging this time around with new teams from plants run by other Group brands, including Audi Györ. In addition, these new participants will help us make even better use of cross-brand expertise.

Value engineering is all about cross-linked thinking. The goal? To create effective interfaces for development and production, thereby optimizing processes and products. We are working with the Group to start a program to train value engineers at Volkswagen Group Components.

The Transform Minds serve as ambassadors for our transformation. These 12 colleagues presented projects they've been developing over the past several months at an ideas pitch in late March. From 3D printing for maintenance processes to components made of recycled PET bottles – these colleagues are contributing to this transformation with their different approaches, demonstrating Components' potential for innovation.
Happy reading!

All the best,
Thomas Schmall
CEO
Volkswagen Group Components

From Puebla to Kaluga: The Lines Are Ready for the 2019 SPEED+ Award

The first plant tour is complete – the 2019 Plant Award is entering the second round

All of the initial plant tours have now been completed. The teams are now waiting in suspense to find out the initial rankings, compiled on the basis of the methodology scans that have been carried out. The first key figures will be issues in May following the April analysis of the lines. This will provide a view of the change in these figures compared to zero.

This was the first time the plants in Puebla, Kaluga and Györ have taken place in the plant tours. The first plant tour was held in Kaluga in late March. The Russian components plant produces the EA211 1.6L MPI engine variant. Colleagues at the plant showed off the strengths and specifics of their production lines and are pleased to be able to start competing for the SPEED+ Award this year.

2019 Plant Award

The Plant Award will also be presented again this year – with the participants and rules remaining unchanged for the second round. FYI: lines are assessed for the Plant Award similarly to the SPEED+ Award. A line's final points total indicates whether a team has earned bronze, silver or gold status or whether it has missed out on medaling. Unlike the SPEED+ Award, more than one team can win gold, silver or bronze medals.

The organizational team from Kaluga with colleagues from ROI and the SPEED+ team in Wolfsburg.

Clear and Concise: The Plant Efficiency Category

In future, we'll be presenting one of the eight different SPEED+ Award categories in each issue. The first category to be showcased is plant efficiency:

What is being measured? The relative improvement and overall equipment efficiency (OEE) figures.
Who won the last two years? Braunschweig (2017) and SITECH Polkowice (2018).

Factors for success? The factors for success in the first two years the award was given out included reducing cycle times, optimizing transport systems, high levels of data transparency and systematic cause analysis when faults occur.

Further information
More information is available on the location pages

News from Córdoba: success is motivating – and colleagues from Córdoba are ready to hit the ground running for the 2019 award

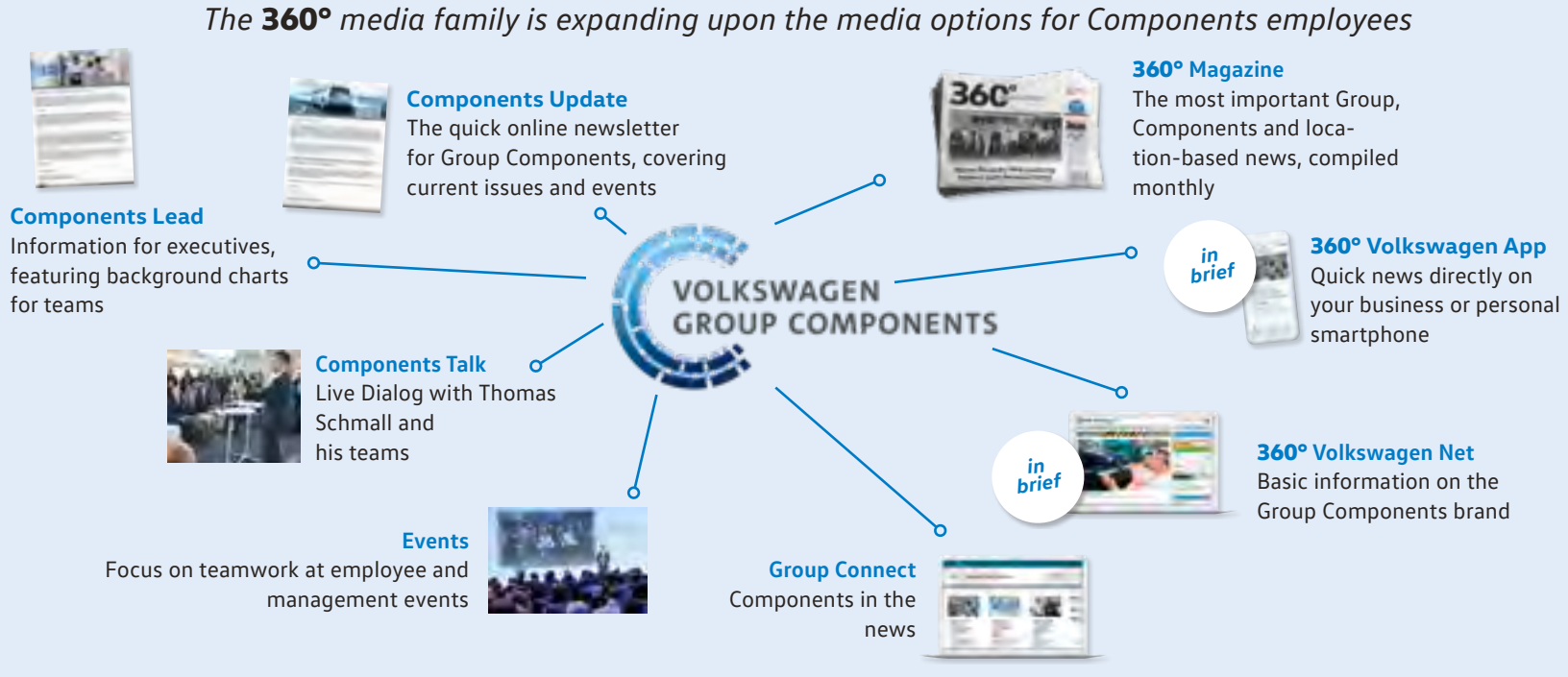
Colleagues from Córdoba won silver in the plant efficiency category at the big SPEED+ Award ceremony held in March. The team is clearly proud of their success and aims to at least defend their second-place ranking this year...

Cross-Functional Thinking – Starting Shot for Value Engineering Transformation Process at Components

How can resources be used optimally during development and production? How can we lower the cost of materials? How can we optimize processes? These questions and more are what the Value Engineering team is working on. The aim is to think cross-functionally at an early stage of development and production. Only optimum early cooperation between the Development, Production and Procurement departments will enable us to achieve the best results together – and reduce costs in the process. The Volkswagen brand has already used value engineers successfully on previous occasions, as demonstrated by billions of euros in savings. And Components is now taking advantage of this potential for savings: it launched a training concept in early May. From May 2019 to April 2021, some 40 employees will be trained as certified value engineers and receive further qualifications.
The first basic training course has already begun. Suitable participants will be notified of upcoming rounds of training within their divisions over the coming weeks. More details on the program and interim results will be featured in one of the forthcoming issues.

News, Dialog, and Networking – Employee Media at Volkswagen Group Components

*The **360°** media family is expanding upon the media options for Components employees*



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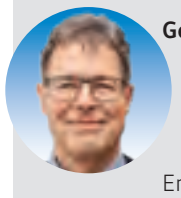
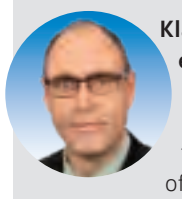
Names & News



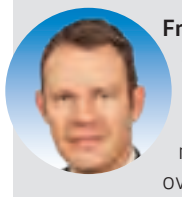
Gerd Hahn, previously Head of Casting (CMK) at the Kassel plant, took over as Head of Production Engine and Casting (CM-3) in Wolfsburg on April 1, 2019.

Jörg Grams, previously Head of Preproduction Series Bus at MAN Truck & Bus AG, took over as Head of Planning In-line Transmission (CGK-GP2) in Kassel on April 1, 2019.

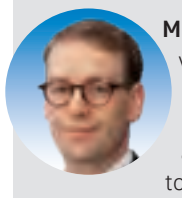


Klaus Schmeckenbecher, previously Head of Planning (CMS-P) at the Salzgitter plant, took over as Head of Planning Engine & Casting (CM-2) in Wolfsburg on May 1, 2019.

Christian Otto, previously Subdivision Head Project Lead Gasoline Engines EA211 Region West and Special Fuels (EAOP/2) at the Wolfsburg plant, took over as Head of Auxiliary Units (CMS-E2) in Salzgitter on April 1, 2019.



Frank Wildschütz, previously Head of Central Controlling at SAIC Volkswagen Automotive Co. Ltd., took over as Head of Finance in the Engines & Casting division of Volkswagen Group Components (CF) in Wolfsburg on April 1, 2019.



Mirco Wöllenstein, previously Head of Casting and Processing Production 2 (CMK-2) at the Kassel plant, took over as Head of Casting (CMK) in Kassel on April 1, 2019.

Volkswagen Group Components Builds New Steering System for PPE Platform

From 2022, the steering systems for the electric vehicles of the Group's premium brands will be produced in Braunschweig

The PPE Steering project leads (from left): Dr. Frank Schöttler, Michael Barnstorf, Matthias Glück, Christoph Losch, Bernhard Weiler, Dr. Lars Gottwaldt.

Volkswagen has the MEB as a platform for future electric vehicles – Audi and Porsche have the Premium Platform Electric, or PPE in short. Cars built on the PPE platform have different requirements in terms of performance, acceleration, range, and charging times compared to electric vehicles using the MEB platform. In comparison with external providers, only the PPE steering system from the Braunschweig component plant was able to meet these high requirements. Our colleagues there impressed with their expertise and high process quality in the field of steering systems.

Failsafe performance: A prerequisite for autonomous driving

The PPE steering system is based on the tried-and-tested electro-mechanic APA steering system (axially parallel drive). Autonomous driving functions that are particularly relevant for the premium segment call for special, fail-safe steering systems.

The steering system makes it possible to effortlessly control the greater steering forces common in the larger and heavier cars typical of the premium segment, and SUVs in particular. The new steering system stands out as a result of its fail-safe performance, which is a prerequisite for future applications of autonomous driving. The control unit and the electric servomotor for the steering system are designed to be functionally redundant. This means that a second system kicks in should the first fail. However, the individual components are not simply duplicated. The control unit houses two interconnected control units, each of which controls one half of the servomotor. Normally, the two halves together have 100 percent steering force. If there is an electronics fault, the steering continues to work because the system's failsafe feature means the driver still has 50 percent of the steering force.

Software expertise from Braunschweig

The software architecture for that also comes from the Braunschweig Components plant. "This electronic architecture, including the software, forms the core of the highly available steering system," explains Christoph Losch, Overall Project Lead on the PPE project, with pride. It is an important milestone on the road towards automated and autonomous driving. A steering system of this level of development is the basis for future steer-by-wire applications in which there is no longer a physical connection to the steering gear via a steering column.

Further information

More on PPE on page 23

Mastering Transformation Through Diversity

Volkswagen Group Components supports the Diversity wins @ Volkswagen pilot project

What's the key to optimal collaboration and a successful transformation within the company? Diversity! Evidence shows that companies that put a strong emphasis on diversity get better results. However, a corporate culture that promotes and advances diversity must be designed with the long-term in mind and with an example set from above. A workshop on the training concept of Diversity wins @ Volkswagen was held on April 17. The training concept is a pilot project by Group Diversity and the Advancement of Women, which is to be rolled out across the whole of Volkswagen AG.

It fits in perfectly with the workshops and pilot projects already held by Components, one example of which would be the Equal Opportunities and Diversity workshop last year, which was attended by around 100 managers and employees.

The training workshop was attended by 15 Components managers from various management levels, as well as HR managers from Wolfsburg (Chassis and Central Units), Braunschweig, Salzgitter, Kassel, Chemnitz, and SITECH.

Participants discussed how diversity and equal opportunity could be given more prominence in the workplace from day to day.

Plant history and product pride – this time the Maintenance Management Meeting was held at the Audi site in Győr, Hungary.

"Isten hozott!" – "Welcome!" Maintenance Managers Meet in Győr

Components' maintenance managers gathered at the Hungarian Audi site at the beginning of April

From Poznań to Prat – 25 maintenance managers from 16 international Components plants gathered in Győr on April 3–4 for their regular conference. After a tour of Technical Services, the group headed over to the electric motors manufacturing hall, and our colleagues gained a valuable all-round impression of maintenance activity at the plant. Afterwards, networking, discussing, and learning from one another was the order of the day. The topics under discussion included shared, effective communication channels about repair work on pumps and motors, and an innovative maintenance app that supports their day-to-day work. The participants also defined the next steps for compiling a catalogue of best practices for optimal maintenance. The goal: to develop shared ideal processes for four major action fields (e.g. replacement parts management) and to gradually collect all the best practices in one place. In this way, expertise is bundled across locations, allowing the whole of Components to benefit. All the maintenance managers gather at one Components site twice a year to exchange ideas. The next meeting is scheduled for October. For those who are interested, maintenance employees also have a dedicated Group Connect page called "Instandhaltung Komponente" (Components Maintenance), where you can find further information about their work.

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[1] TS Roadster (right) combined fuel consumption l/100 km: 8.1–8.0; combined CO_2 emissions g/km: 183–182*; efficiency class E.
[2] TTS Coupé (left) combined fuel consumption l/100 km: 8.0–7.9; CO_2 emissions g/km: 181*; efficiency class E.
*Where a range is given, the data on fuel consumption and CO_2 emissions is dependent on the tires/wheels used and the selected features.

From Inspiration to Ideas: Transform Minds Present Their Projects

As "Transform Minds," twelve employees from various levels and plants inject new ideas into the Components strategy. At the end of March, our colleagues presented their project ideas to Thomas Schmall.

The "Transform Minds" are twelve employees from all the plants and hierarchy levels of Components who successfully applied for the twelve action fields of the "ONE MISSION 2025" Components strategy last year. The action fields include Digitalization, Product Portfolio, and Competence. The network's aim is to help shape the transformation of Components, to function as multipliers boosting dialog between the management and the workforce, and to realize their own ideas in projects.

The Transform Minds with Thomas Schmall, colleagues from his management team, and the organization and project team.

From idea to project

To achieve this, the colleagues involved have completed a learning journey over the last six months. As part of that journey they met various introductory speakers at five stages, and developed and discussed ideas together. In groups, the Transform Minds then further developed the ideas generated into projects, and presented them to Thomas Schmall and his management team at the end of March. You can read a short report on what were probably two of the most exciting days of Transform Minds here:

DAY 1

Thursday, March 28: Dress rehearsal and network talk

On the Thursday before the pitch, the teams meet at 1 p.m. for a final "deep dive": The pitch topics are developed and rehearsed until they are ready to be presented to the board.

At 7 p.m., they go to the Kunstmuseum Wolfsburg for a network talk – this is the last "impulse" of the learning journey. Together with Ludwig Fazel (Head of Strategy Volkswagen Group Components), Creative Consultant Hans Reitz, and the "Future Heads" Daniela Blaschke and Christian Kiefer, the topics of Network and Capital Market are examined and discussed. The Future Heads are the Group-wide network on future and innovation topics. Transform Mind Katrin Tessmer-Rost (SITECH Project Engineer) explains: "The Future Heads Network currently includes more than 300 employees from the Group. There are many parallels between us and the cross-location and cross-hierarchical future project." Sebastian Sauer (Subdivision Head Salzgitter) adds: "We also discussed how Components can benefit from the knowledge and the vision of the Future Heads. In the future, Christian is going to help us with networking and interlinking."

Transform Mind Katrin Tessmer-Rost

The last impulse of the journey is the talk with the Creative Consultant Hans Reitz, Head of Strategy Ludwig Fazel, and the Future Heads Daniela Blaschke and Christian Kiefer.

The Four Pitch Topics:

1 AFTERMARKET COMPONENTS
- Sales of components after the expiration of manufacturer warranty via the aftermarket
  → New revenue models for Components
- Next steps: Joint meeting with Sales and After Sales has been scheduled

2 MAINTENANCE CONCEPT WITH 3D PRINTING
- Rollout concept for the implementation of 3D-printing technology in maintenance
  → Faster and cheaper maintenance processes
- Next steps: Will soon be presented by the Transform Minds to the Volkswagen Group Components board

3 PROTOTYPES FOR SUSTAINABLE SEAT MANUFACTURE
- Blinds made of bioplastics
- Seat covers from recycled PET bottles
- Only the visible areas of seat structures painted
  → Resource-saving and more sustainable seat manufacture
- Next steps: Will soon be presented by the Transform Minds to the Volkswagen Passenger Cars board

4 TRANSFORM MINDS AS MULTIPLIERS
- The first round of Transform Minds also support other Components activities and projects
- Help establishing additional networks
  → Better networking in Components
- Next steps: The concept is being developed with timelines, and presented in detail to the Volkswagen Group Components board for approval

The seat made of sustainable materials: Katrin Tessmer-Rost, Tomasz Niewadzi, and Daniel Chodorowski (all SITECH) present their project to SITECH Managing Director Sebastian Patta (from left).

DAY 2

Friday, March 29, 9:45 a.m.: Here we go!

On the Friday morning, everyone attends the pitch meeting on the third floor of the brand's high-rise building. The four Transform Minds are about to present four topics to the CEO Thomas Schmall and his management team. Each of the themes belong to one of Components' four strategic goals: "Customer & Product," "Responsibility," "Excellence," and "People." They kick things off with a project on the strategic objective "Customer & Product." 1 The focus here is on what's known as the aftermarket: E-commerce has simplified the direct sale of replacement parts enormously. However, Components is still not taking advantage of this possibility. The Transform Minds project aims to exploit this aftermarket potential for Components.
2 The "3D printing in maintenance" project comes under the "Excellence" objective. The aim is to utilize 3D printing in maintenance processes in order to cut costs and save time. The three Transform Minds from SITECH present a very environmentally friendly project.
3 For the topic "Responsibility," they have brought prototypes for blinds made of bioplastics, seat covers made of recycled PET bottles, and seat structures with only the visible areas painted. Following that, the ideas on the topic of "People" are presented:
4 The focus here is on a dedicated community, communication approaches that overlap into the direct area, and the furtherance of the network philosophy. The Transform Minds, as multipliers, are keen to keep supporting projects and drive forward the network with the next round of Transform Minds.

The aftermarket concept is being pursued (from left): Dr. Karsten Küper (Braunschweig), Sebastian Sauer (Salzgitter), and Klaas-Simon Jenke (Braunschweig) present their project.

"It was clear for all to see how important it is for our board that our ideas are actually implemented!"

Transform Mind Sebastian Sauer

Transform Mind Sebastian Sauer

Friday, 12:30 p.m.: Made it!

After almost three hours, the Transform Minds have made it – and the result is clear: "The Transform Minds have not just met our expectations, they've exceeded them. The impulses and project ideas generated are an exciting contribution to our strategy process. This is what you can achieve with cross-hierarchical and cross-site transformation," says a happy Head of Strategy Ludwig Fazel. The day culminates with the board's decision: "Thomas Schmall set up an appointment with Sales straight away for our aftermarket idea," reports Sebastian Sauer. The Transform Minds will also present the 3D printing and the sustainable seat manufacture projects at one of the next brand board meetings. The projects in the "People" strategy field are being further developed and will soon be presented to the board for approval.

Further information

More on Transform Minds on pages 22 and 24

"The Transform Minds presented future-oriented projects which we will now drive forward resolutely together."

Thomas Schmall

Animated discussion and good feedback: CEO of Components Thomas Schmall (right) and Heiner Lanze, Head of Procurement, at the pitch on Friday morning.

The Work Continues

The current Transform Minds will continue to support the themes of the Components strategy until the end of the year. After that, they will be on hand as contact persons and communicators, functioning as multipliers of the transformation all the way into the individual sites.
The next round of Transform Minds begins in the summer, when there will be 40 new Transform Minds and a slightly adapted program. Application details will follow

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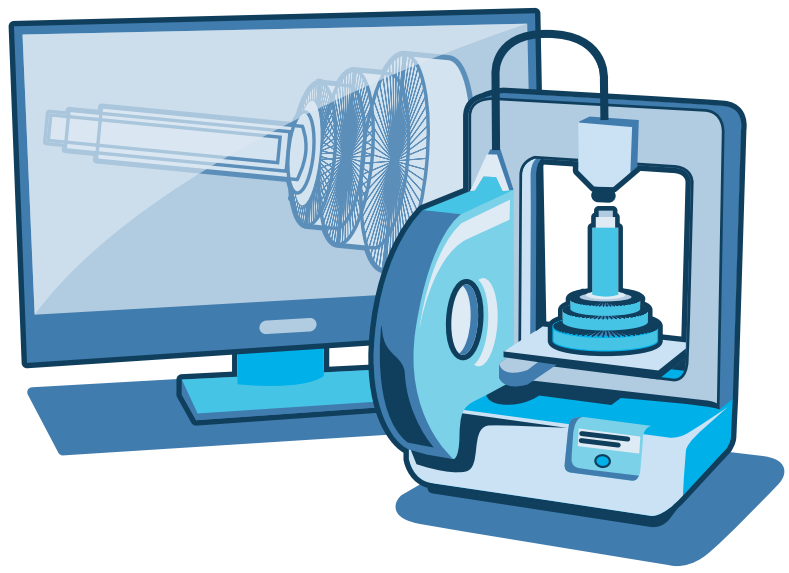
3D Potential

So much for dreams of the future: 3D printing is already being used successfully at many locations – an overview of Components and Group activities



From Medicine to Car Racing:

3D printing is also used in other sectors:

… in medicine

- Dental crowns, hearing aids, and implants are already being manufactured with 3D printing.
- Doctors and medical students can practice demanding operations on 3D-printed models to better prepare for surgery.

… in Formel 1

- Racing teams save on costs when they produce complex shapes using 3D printing. The Alfa Romeo team (Sauber Group), for example, prints their exhausts and turbo pipes in titanium and their charge air pipes in aluminum, among other materials.

… in aviation

- Although the wings and fuselage of an aircraft may not be printed in 3D today, smaller components such as hinges are already being produced this way.
- The cost-efficient and tool-free production of lightweight components reduces material costs and weight, as well as fuel consumption and CO_2 emissions.

3D printing saves time and money. For this reason, Components already relies on the process in some manufacturing processes. The Transform Minds have also recognized the potential of the technology and wondered, 'Where in Components can 3D printing be used more intensively?' The three Transform Minds – Rica Siedler, Shiping Chen, and Marcus Jäschke – presented their maintenance concept with 3D printing to Group Components CEO Thomas Schmall and his management team in late March. Components and Group are already using the technology:

3D printing in Components – an overview

In the **Hanover foundry**, sand cores are printed in small batches in 3D. The corresponding 3D printer was put into operation in 2017 and has a volume, i.e. a printing speed, of up to 400 liters per hour. Important: The printer sponsored by the Innovation Fund II works with a low-emission, inorganic binder.

The Components plant in Braunschweig develops high-performance printers for Group production. Among other things, there are two pilot projects for mass production printers, for example for sand cores for foundries or in plastics. Cooperation across locations is a top priority: **Braunschweig** develops the 3D printing systems for the production of sand cores, which can then be printed in large series at the **Hanover foundry** and subsequently cast.

3D-printed inductors are a topic for **Wolfsburg Chassis**. These can be used in the future for hardening axle taps. One major advantage here is the elimination of time-consuming, manual work steps. This decreases the production time of an inductor significantly, while increasing the geometric accuracy of the construction. This reduces manufacturing costs and increases service life.

3D printing in the Volkswagen Group

Within the Group, a Group technology circle for 3D printing was defined as a cross-brand structure. Specifically, 3D printing is used, among other things, in the construction of prototypes, equipment, and series components (e.g. DQ381 coupling casings, front flap openers in final assembly, or VR6 cylinder crank housings).

In addition, the innovative method is already being used in Wolfsburg in a 3D printing center in the toolmaking facility. There are large numbers of printers at the Wolfsburg location; printing orders from the Group are placed and processed.

We Want Your Ideas!

Where should 3D printing be used or expanded in Components in the future? Send us your ideas at the following e-mail address: **Komponenten-News@Volkswagen.de**. We look forward to your suggestions and will report on the best ideas!

"I also use 3D printing outside of work: When a Venetian blind in my apartment broke, I bought a 3D printer and printed a spare part easily. I'm convinced that 3D printing can offer us completely new design possibilities."

Transform Mind Rica Siedler, Assistant Plant Manager Chassis Wolfsburg

Volkswagen

A look into the Volkswagen Passenger Cars brand

1. New era of electric mobility begins for Volkswagen: Pre-booking for the ID.3[1] has started! Production of the ID.3[1] will begin in the reconstructed Zwickau plant in late autumn. Key information can be found at www.Volkswagen.de/id +++

2. Electric car drivers now have the opportunity to try out the new Volkswagen charging service "We Charge" before its official launch. Applications at wecharge-support@Volkswagen.de +++

3. Wörthersee GTI: preparations are in full swing, and Components trainees are also involved. +++

4. WA sales: special conditions for employees for leasing, new car purchases, used car purchases, trade-ins, and end-of-life vehicle recycling. More information at kundencenter.Volkswagen.de +++

5. What is the Sub-Sahara strategy for Volkswagen Passenger Cars brands? You can find more information on pages 16 and 17 in the Volkswagen Passenger Cars brand 360° issue.

Poznań Colleagues Redesign Break Room

Colorful walls, beautiful furniture, and a clock with cast iron hands: This is the new break room of the Die Casting and Machining division in Poznań. What's special about it: The employees manufactured the chairs and tables, and even took the wallpapering work into their own hands. The campaign is part of the "Cooltur im Alltag" ('Coolture' in Everyday Life) program, in which employees redesign and renovate common rooms. In workshops, the colleagues jointly designed a break room according to their ideas. More difficult repairs, such as replacing the ceiling or electrical installations, were carried out by craftsmen. The projects are coordinated by Anita Plokarz, who works in the location's Logistics department.

Colorful and creative furniture in the break room of the die-casting foundry invite you to enjoy a relaxed lunch.

Mood Barometer and Group Essentials – Talking About Them Together

Employees discuss results in their teams

One important instrument to gauge the mood in the teams is the Mood Barometer. Until late March, all Components employees had the opportunity to discuss the results of the 2018 Mood Barometer with their manager. For the first time, a team dialog on the Group Essentials, the cross-brand moral values of the Volkswagen Group, was also held. Wolfgang Fueter, Head of Human Resources Volkswagen Group Components,

has a positive view of the proceedings: "We've conducted the discussions in Components with great commitment and agreed on more than 3,000 measures. In the coming weeks, it's important to fill these measures with life and follow them up, in order to bring about real improvements."

Want to share best practices from your department as part of action tracking? Feel free to contact your Stiba coordinator!

Dates

05/09/2019 **Hanover:** Foundry Cost Center assembly
05/22/2019 **Martin:** Party to celebrate 500 million manufactured components
06/06/2019 **Kassel:** Site symposium

The Start-Up Check team in front of the battery housing production facilities: Harald Wilke, Thomas Richter, Uwe Herr, Steffen Müller, Daniel Weidemann, Ann Kathrin Könnecker, Stefan Blumrich, Thorsten Koch, and Iskender Dogan (from left to right).

Start-Up Check for New Battery Systems in Braunschweig

Colleagues from headquarters and the location ensure smooth start-up

When a product as important and complex as a new battery system for completely new vehicles starts up, nothing is left to chance. Colleagues from the central departments check with the colleagues at the location whether everything is ready for a smooth start-up. These "start-up checks" ensure that the optimization potential for all processes and employee qualifications is identified from the outset, and that solutions are developed promptly. The Battery Start-Up Check team, consisting of colleagues from Start-Up Control in Wolfsburg and the Braunschweig location, works together with the colleagues at the respective location, for example from Project Management, Production, Planning, Quality Assurance, and Logistics. The first start-up check for the production test series (PTS) status for the MEB battery has now taken place in Braunschweig. This enabled the expert knowledge at the site to be supplemented by experience gained from other time-critical projects.

[1] Concept car.