ALL ABOUT VOLKSWAGEN – THE EMPLOYEE MAGAZINE FOR OUR LOCATION | NOVEMBER 2020

360° WOLFSBURG

The new issue of the employee magazine!

Malte Treptow thinks less food waste should end up in the trash.

Wolfsburg: Reducing Waste in Restaurants

The Volkswagen restaurant at the Wolfsburg plant has started a project to reduce food waste. In cooperation with the United Against Waste association, 13 company restaurants, the butcher and the central kitchen are taking measures to reduce the amount of food waste by around 25 percent. The project is largely being financed and supported by the Group's decarbonization fund. The project has been scheduled to last for one year. Figures on the amount of waste would provide data to change processes, explains Helena Schmidt from Quality Management at the Service Factory of the activities over the next few months.

ID.4²: The Global Electric Car Has Arrived

At home on three continents: Volkswagen is producing the SUV in Europe, China, and the US

Another milestone in Volkswagen's electric campaign: the company presents the ID.4, the brand's first fully electric SUV. The big brother of the ID.3 is being produced on three continents, making it a truly global car. 360° introduces two employees from the Zwickau plant who will be there for the ride to China and the US.
→ PAGES 8, 9 & 12

On an electric mobility mission in China: Tayfun Sentürk.

On an electric mobility mission in the US: Marco Franke.

Brandstätter: Our Plans for the Brand

In the big 360° interview, Brand CEO Ralf Brandstätter looks back on what has been achieved and provides an outlook of what lies ahead. He thanks employees for their fantastic efforts.
→ PAGE 17

Whistleblower Prevents Massive Damage

A whistleblower has saved Volkswagen from potentially tens of millions of euros worth of damages. In the third quarter of this year, the Group's whistleblower system received a total of 605 reports of potentially severe rule violations.
→ PAGE 2

The Latest News on Digitalization

In a three-page special, 360° takes a look at how digitalization is progressing at Volkswagen, for example in Technical Development and Procurement, and what role IT has to play. Also featured is an interview with Chief Human Resources Officer Gunnar Kilian and a profile on the new programming school, 42 Wolfsburg.
→ PAGE 4–6

ID.3¹: Safety Through Aluminum Profiles

For the first tie using artificial intelligence: together with colleagues, Sarah Brüggemann has developed lightweight components for the ID.3. series.
→ PAGE 7

Coronavirus: Follow the Rules!

Appeal from Gunnar Kilian and Dr. Lars Nachbar: What happens next depends on us

New coronavirus infections are currently on the rise worldwide. For Volkswagen to successfully persevere through the crisis, it is vital that everyone consistently follows the rules. "We need to continue to work together in the fight against the pandemic. We cannot get complacent, especially now in cold and flu cold season," said Gunnar Kilian, Member of the Board of Management for HR and Truck & Bus, in an appeal to employees.

To succeed in responding swiftly and in a controlled, targeted manner, the Group's crisis team is closely monitoring the current situation on a global scale. The goal is to create a safe working environment and avoid a second lockdown.

Every employee can do their part by following the rules. "We are all tired of the added safety measures. But we can only overcome this crisis together if we have the self-discipline to follow the rules," says Lars Nachbar, Head of Group Health and Safety. Gunnar Kilian says, "Following the rules – including during breaks, in team rooms, at our company restaurants, in smoking areas and on the way to work – will be crucial in terms of how successfully we make it through the pandemic."

Follow the safety measures: Chief Human Resources Officer Gunnar Kilian (left) and Dr. Lars Nachbar appeal to employees.

The "hands, face, space" rule remains vital: wash your hands, cover your face and maintain a safe distance from others. And, equally importantly, employees with symptoms should stay at home. If you develop a fever, cough or other symptoms at work, please contact the health department as soon as possible by calling +49 5361/9-33-333. You will be given an appointment for a COVID-19 test.

The editorial team has compiled a list of all the important safety measures in place. Further information, which is updated daily, is also available on 360° Volkswagen Net and on the 360° Volkswagen app.
→ PAGE 3

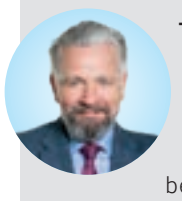
Everything at a glance: The 360° editorial team has summarized all the most important information on one page.

kp-wo

[1] ID.3: ID.3 Pro Performance, 150 kW/power consumption in kWh/100 km (combined): 16.9–15.4 (WLTP); 15.4–14.5 (NEDC); CO_2 emissions in g/km (combined): 0; ID.3 Pro S, 150 kW/power consumption in kWh/100 km (combined): 17.7–15.9 (WLTP); 14.1–13.5 (NEDC); CO_2 emissions in g/km (combined): 0; efficiency class A+ | [2] ID.4 1st: power consumption in kWh/100 km: combined 16.9–16.2; CO_2 emissions in g/km: 0; efficiency class: A+; ID.4 Pro Performance, 150 kW/power consumption (NEDC) combined in kWh/100 km: 16,9–16,2; CO_2 emissions combined in g/km: 0; efficiency class: A+; ID.4 1st max. power consumption (NEDC) in kWh/100 km: 16.2; CO_2 emissions in g/km: 0; efficiency class: A+

Names & News

Wayne Griffiths is the new CEO of Seat. Griffiths will continue in his roles as CEO of the Cupra brand and Chief Sales and Marketing Officer until further notice. According to Herbert Diess, Chair of the Supervisory Board at Seat, "Wayne Griffiths is one of the most qualified managers in the Group. Over the last four years, he has driven Seat sales to record levels and spearheaded the development of the new Cupra brand. He has my full support and I am confident that he will continue to keep Seat moving successfully in the right direction." Griffiths joined Seat in 2016 as Chief Sales and Marketing Officer and has been instrumental in the company's ongoing development. Over the past three years and until the first quarter of 2020, Seat has been the fastest growing brand in Europe.

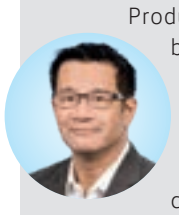


Thomas Zernechel, Head of Group Logistics, is leaving the company. Zernechel had been responsible for Group Logistics since September 2004, during which time the company developed into one of the largest logistics service providers in Europe with more than 800 employees and a strong and valued presence within the Group. Zernechel started working for Volkswagen back in 1979 when he trained as a technical draftsman.

His successor at the head of Group Logistics will be

Simon Motter, who is set to take over the position on January 1, 2021. Motter joined the Group on November 1 and is already preparing to take over the managerial role. The graduate industrial engineer is currently Head of Supply Chain at Audi's Ingolstadt plant, before which he was in charge of international logistics at Audi, operational logistics at the Győr engine plant, and process and concept development in brand logistics.

Tobias Bahr, Head of Environmental Compliance for Group Production, took over as Head of the Environmental department at Group Production on October 1. This move sees him take the reins from **Liendel Chang,** who retired from the company at the end of September.



Digital Workforce Update: Board and Works Council Address Employees

Strong sign in times of COVID-19: ten videos available in the app and on the intranet – speeches by Herbert Diess and Bernd Osterloh

For the first time in Volkswagen's history, the Board and the Works Council have come together to address the workforce on a digital platform. A total of ten videos have been recorded for the new format in the Autostadt in Wolfsburg, which are now available to around 120,000 employees via internal communication channels. Employees had the opportunity to submit any questions in advance of this update, which focused on the company's development and progress in 2020 – the year of the coronavirus.

In the key reports delivered by the Works Council and the Board, Bernd Osterloh (Chair of the Works Council) and Herbert Diess (Group CEO) called on all employees to continue to consistently follow coronavirus rules to successfully steer Volkswagen through this pandemic crisis year.

"We are getting through the crisis relatively well here at Volkswagen," reports Diess in his speech. This is thanks to the excellent crisis management skills of the Corona Task Force headed up by Gunnar Kilian, which has ensured stable supply chains and a smooth restart to production processes. This also includes making sure employees are consistently adhering to all health and safety regulations during the pandemic.

Maintaining an open dialog: The Board and Works Council share their thoughts.

As Chair of the Works Council, Bernd Osterloh thanked all employees for their contribution to combating the wave of infection, saying, "We always want to look out for each other and be considerate, and now that means wearing masks and keeping our distance. Our workforce has always been known for its solidarity. That's something we've always been good at. We talk about being one team, one family, and this has never rung more true. To this day, we have always emerged from crises stronger than we went into them. And this time is no different."

Gunnar Kilian, Chief Human Resources Officer at Volkswagen AG, noted in one of the subsequent rounds of talks, "The coronavirus crisis has presented the company and its employees with unique and unprecedented challenges. But the fact that our production processes were able to restart so quickly using our 100-point plan really is a testament to the special team we have here. On behalf of the board, I would like to thank all of my colleagues once again for their hard work. And from a business standpoint, it is now essential for Volkswagen that we all stick to the measures we have taken so far so that we can bring 2020 to a successful conclusion in spite of the pandemic."

Addressing the workforce: Bernd Osterloh and Herbert Diess.

Some background on the digital format:

The digital workforce update is a first in Volkswagen's history. The aim of the digital information offensive is to continue to provide employees at all German sites with comprehensive information on core Volkswagen issues during the coronavirus pandemic. In addition to the speeches by Bernd Osterloh and Herbert Diess, the workforce can follow a total of nine interactive talks on various topics via internal communication channels. These talks focused on the current business situation, the progress being made in transforming the company in terms of electric mobility and digitalization, and the current situation for Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, Components, and Volkswagen Financial Services AG.

Employees across the German locations have access to all videos via the Volkswagen 360° intranet. In addition, the digital workforce update is also available on mobile devices using the 360° app.

Whistleblower Averts 33 Million Euros in Potential Damages

In the third quarter of this year, the whistleblower system received 605 reports of potentially severe rule violations

A tip-off received through the whistleblower system has saved Volkswagen from over 33 million euros worth of potential damages. According to the report, a manager had deliberately incorrectly valued and recorded services. The whistleblower allowed the experts in the Central Information Office and Group Internal Audit to thoroughly investigate and clarify the facts.

More information

More on this report and the progress of the investigations can be found on the Compliance page on 360° Volkswagen Net.

"This case illustrates that serious rule breaches can cause huge amounts of damage to not only the company, but to all of us," explains Kurt Michels, Group Chief Compliance Officer. "Our whistleblower system helps us quickly identify misconduct and consistently put things right. Anyone who openly points out any wrongdoing – via their boss, via the relevant contact persons or, in the case of serious violations, via the whistleblower system – is doing something very brave indeed and is acting responsibly on behalf of all of us."

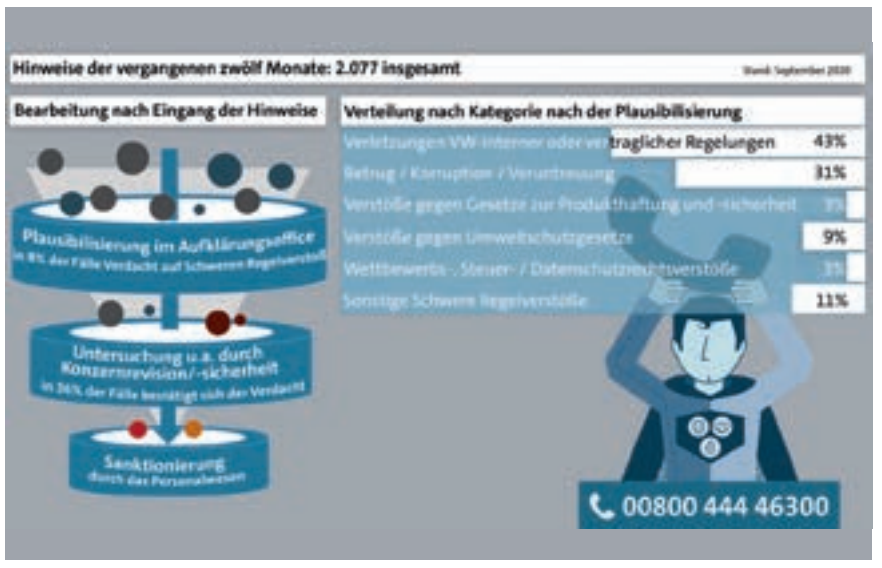
Kurt Michels, Chief Compliance Officer

Statistics on the reports received

During the third quarter, the Volkswagen AG whistleblower system received a total of 605 tip-offs. Three-quarters of whistleblowers submitted their reports using their own name, while 25 percent made use of the option to submit reports anonymously or using an alias.

- 327 reports (54 percent) were received directly by the Volkswagen Central Information Office in Wolfsburg.
- Around 16 percent of reports were submitted online via the protected website https://www.bkms-system.com/vw.
- Ombudsmen received six percent of the reports.
- The 24/7 hotline (0800) 444 46300 received about 11 percent of the reports.
- A further 13 percent or so were received indirectly by the Central Information Office via other agencies.

In the event of mistakes and rule breaches, a manager is the first point of contact. In the event of uncertainties and questions relating to compliance and the code of conduct, the Compliance InfoPoint at **compliance@Volkswagen.de** and **compliance-vwn@Volkswagen.de** can provide assistance. If a serious breach of the rules is suspected, you can submit a report via one of the whistleblower system's reporting channels.



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Do Your Part – Stay Healthy!

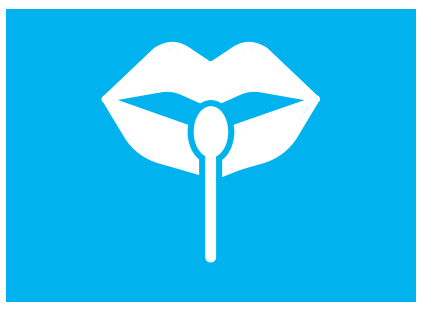
COVID-19: Rules of Conduct

Safely navigating the coronavirus pandemic: The company and the Works Council present additional rules to protect the workforce.

Self-check before going to work

Do NOT go to work if your answer to any of the following question is yes:

- I am in quarantine.
- I am in an exempted risk group and have not been offered a job with the classification “yellow” or “green” during Phase 3.
- My body temperature is above 37.8 degrees Celsius (100 degrees Fahrenheit) before going to work.
- I have a runny nose and frequent sneezing, without any known allergies or hay fever.
- I am coughing frequently, I have an unexpected tickle in my throat and/or I have labored breathing/ shortness of breath.
- I have symptoms of a cold with pain in my head, joints, or limbs, and/or I feel a cold coming on.



Test centers

Employees with COVID-related symptoms should stay home and inform their supervisor! If it is not possible to work remotely, employees can call one of Volkswagen AG’s test centers and take a voluntary COVID test. Important: The test can only be taken after registering and scheduling an appointment via the central telephone number +49 5361 933 333. After taking the test, employees can check the results themselves via a personal QR code on the Corona-Warn-App, and follow any necessary measures.

Corona-Warn-App

Volkswagen supports the official Corona-Warn-App by the German government. The goal of the app: to intercept infection chains early and keep the coronavirus pandemic under control. On company iPhones, the app can also be downloaded from the Volkswagen AppStore.

Working remotely

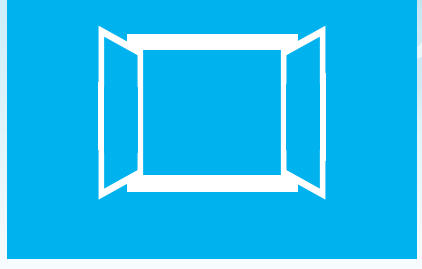
Employees who can work remotely and whose presence in the workplace is not absolutely necessary will work from home until December 31, 2020. This precautionary measure will remain in place until the number of infections tapers off again.

Travel/Commuting

Employees who commute from areas in Germany with a high number of infections (more than 100 cases per 100,000 inhabitants in the last seven days) and are able to work remotely, should only come to work if absolutely necessary and permitted by their supervisor. Employees from areas in Germany with a high number of infections may travel to work on public transport. However, they must wear a face mask at all times during the journey and maintain a safe distance from other passengers. Carpooling should be avoided, if possible. Wearing a face mask is recommended in vehicles carrying multiple people.

Hands, face, space

Hands, face, space: To minimize the risk of infection, employees should maintain a safe distance of 1.5 meters from other people and avoid being in the same room as others, if possible. Avoid handshakes, hugs, or gathering in groups at break times, and observe proper hand hygiene (hand washing, disinfection).

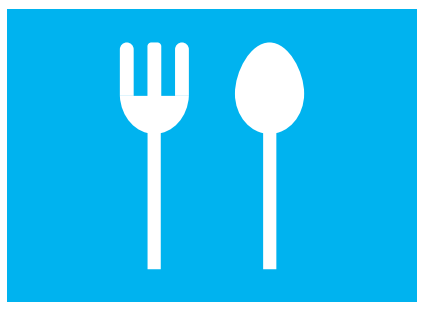


Ventilation

Aerosols are tiny particles that circulate in the room, which may transmit coronavirus. The concentration of these particles, and thus the risk of infection, can be reduced by regular ventilation.

Shuttle bus

Face masks must be worn on the company shuttle buses. Passengers may only use the back doors to enter and exit the bus. To ensure proper distancing, drivers are currently accepting a reduced number of passengers.



Restaurants and self-service shops

Face masks must be worn in the company restaurants and self-service shops. Maintain a safe distance from others and follow the marked pathways. The number of available seats has been reduced.

Events

Events with more than ten people may only take place if they have been verified as “business essential” by a top management circle and agreed with the health department. The legal department (K-ILC-6) must always be notified about in-person events with more than ten participants, so that any necessary official arrangements can be made.

Contact management

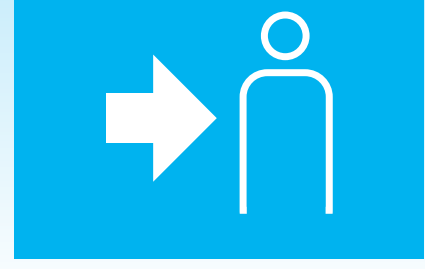
Before an event, a responsible person must be nominated as a contact for the authorities in case of coronavirus transmission. Creating a list of participants for the purpose of documentation on behalf of the health department at internal company events is not permitted for data protection reasons. However, if the event attendees are not known in advance, special rules may apply. If recording of attendance is planned, please consult the Legal department (K-ILC-6).

Work-related/test drives

As of September 1, the TMS Xera approval process is no longer necessary for work-related drives at the plant site. The same applies so that test drives, which start and finish at the plant site within the course of one day and are recorded in the logbook, can be simplified for Research & Development and Quality Assurance. Test drives may not approach any destination with subsequent business contact.

Business travel

Business travel should be reduced to a minimum and only take place if absolutely necessary (“business essential”). Business travel is subject to prior approval by the manager of the respective department via the Xera travel management system. Video conferences, Skype, and Teams remain first preference and are to be used wherever possible. Business travel within Germany is permitted in areas with high numbers of infections if they are “business essential” and the necessary safety and hygiene measures are followed.

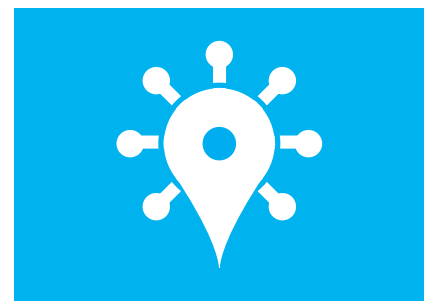


External service providers

Service providers may only enter the company premises if it is absolutely necessary for business purposes. It is essential that service providers are informed about the coronavirus safety measures at the plant by the responsible units, so that they can act accordingly. Here too, remote working is preferred.

Personal travel

Before traveling domestically or abroad, employees should find out the current status of the area they will travel to (Foreign Office, Robert Koch Institute). Any existing travel warnings and subsequent quarantine regulations should be taken into account when planning personal travel.



Returning from high-risk areas

When returning from high-risk areas abroad, employees must report to their supervisor and the responsible health department. Employees who have been ordered to quarantine due to local regulations cannot immediately return to work. Currently (October 30, 2020), there is no requirement to quarantine after a negative test approved by the health department. In this case, employees may resume their regular work.

Extensive information about coronavirus, tips, rules and safety measures can be found on the dedicated page for COVID-19 on the 360° Volkswagen Net.

42 Wolfsburg: An Interview with Gunnar Kilian and Max Senges

Volkswagen Chief Human Resources Officer and head of the new programming school on the extraordinary training concept

Betting on 42 Wolfsburg: Chief Human Resources Officer Gunnar Kilian, pictured here with Max Senges, head of the new programming school.

In the market hall: Future lessons will be taught here.

The new, free programming school, called 42 Wolfsburg, is set to open early next year in the Wolfsburg market hall. The first round of applications is already open for the school's 600 spaces.

Mr. Kilian, why is Volkswagen opening a new programming school?
Kilian: In future, we will largely develop the software in our vehicles ourselves. At the moment, less than ten percent of this development is done in-house. But we want to increase that to 60 percent by 2025. And to do that, we need impeccably trained specialists. But increasing digitalization means these IT specialists are in greater demand than ever, worldwide. So it makes sense to train and consolidate talent in Wolfsburg, right on our doorstep. That is why Volkswagen is using the 42 Wolfsburg association to provide 3.7 million euros of funding for the programming school in the first year, and two million euros a year in the years that follow.

How does the new facility differ from existing options, like Faculty 73, for example?
Kilian: Volkswagen's Faculty 73 trains base software developers over two years, while 42 Volkswagen offers more in-depth programming skills over four years. Training at 42 Wolfsburg focuses on more progressive, project-based learning. Both programs will help us cover our demand in future with top talent. Faculty 73 has already proved to be a successful model. Interest among Volkswagen employees has been and continues to be enormous. The new programming school, 42 Wolfsburg, will complement the educational services our location offers and provide valuable training. The school is working in cooperation with École 42, which is based in Paris. Their excellent training means these graduates are already highly sought-after.

Mr. Senges, how would you describe the concept behind the new programming school?
Senges: The school is centered on self-paced learning, having fun together and individual performance. In the end, our graduates come away with software development skills comparable to what computer science students get out of a Masters degree. We don't teach academic, scientific knowledge. Instead, we help our students become master programmers by completing projects that gradually increase in difficulty. There are no seminars or lectures, no professors and no nationally recognized diploma. But students gain in-depth understanding and experience while paying no tuition and avoiding old-school bureaucracy, without being subjected to outdated teaching material. Our students decide what they want to study and the methodology they want to use.

Who can apply to 42 Wolfsburg?
Senges: What counts with us is talent and ability, not formal qualifications or a perfect CV. Applicants don't need previous programming skills. Being able to learn independently and think logically are, of course, basic prerequisites applicants should have to succeed in our program. Because courses are taught in English, applicants should have at least a good understanding of the language. Students start by completing coursework on the most important aspects of modern programming. This includes various programming languages, building software architecture, and the fundamentals of machine learning.

What makes the school so special?
Senges: Students spend about half of their studies on practical placements at partner companies, similar to typical dual study programs in Germany. What's unique is that our students are paired with experienced software developers who offer extensive support during these practical placements. And what is perhaps even more important to mention: Students "learn how to learn," so that they come away with a natural ability to keep acquiring new skills in groundbreaking techniques and technology.

Mr. Kilian, are 42 Wolfsburg and Faculty 73 both signs of what's to come in terms of future training at Volkswagen?
Kilian: Yes, we can say with certainty that models like our Faculty 73 and the tuition-free 42 Wolfsburg programming school represent the future of software training. Both examples are indications that, in future, work and jobs will no longer focus exclusively on diplomas and qualifications, but instead on the skills you acquire. So I have no problem classifying graduates of these two institutions. Students of Faculty 73, which was founded by Volkswagen in the middle of last year, who hold no previous professional qualifications can also use the training they receive toward a qualification from the Chamber of Industry and Commerce (IHK). We are currently in talks with the Works Council regarding how to classify the first graduates of 42 Wolfsburg. And there will be clear guidelines.

For more information and to apply, visit www.42wolfsburg.de

Symposium: IT's Plans for Driving the Digital Revolution

Event held under unusual conditions due to coronavirus – Group Board Member Witter praises employees

What is Volkswagen IT doing to consistently promote the Group's path to becoming a digital business – transparently and efficiently across all brands? That was at the heart of the IT Symposium, which was held at IT City in Wolfsburg and digitally broadcast via Skype due to the coronavirus pandemic. Beate Hofer, Head of Group IT, also addressed the issue of adapting the Volkswagen's IT strategy for the future.

Frank Witter, Chief Financial Officer and Chief IT Officer, stressed the crucial competitive role digitalization plays in transforming the Group into an extensively networked, digital business. Witter praised IT's outstanding performance during the unprecedented situation with the pandemic. He said that, thanks to a stable infrastructure and a great deal of commitment, IT employees had ensured some 40,000 employees were able to work remotely and the company could continue functioning.

Beate Hofer talked about the core elements IT wanted to harness to shape the roadmap for Volkswagen becoming a digital business. "We are working together with all company divisions to proactively and strategically push ahead with digitalization. We are relying on our universal, platform-based IT landscape, rooted in an overall development plan, to achieve the speed and synergistic effects needed here. And we are pooling our strengths within the Group and taking advantage of all the skills within the company around the world."

IT Symposium in IT City's company restaurant: Beate Hofer (right), Head of Group IT.

Chairman of the Works Council Bernd Osterloh said, "This event to showcase the achievements of our colleagues in IT is awe-inspiring. Building up more in-house expertise in software development is the only way forward. Between 2017 and 2019, we created 600 new IT jobs for the future as part of the Zukunftspakt (Pact for the Future). This is now clearly paying dividends. IT is our future! Cutting corners in IT means jeopardizing the success of our company."

The presentations on the stage and at the marketplace stands made clear that the results are good for future-focused IT. Strolling around the marketplace, visitors were treated to things like demonstrations of how a mobile charging robot charges an ID.3 with an AI-controlled robotic arm.

Well received: IT Symposium attendees, including Group CEO Herbert Diess, Works Council Chair Bernd Osterloh, and Group Board Member Frank Witter, learned about IT projects in the marketplace.

The symposium

The IT Symposium was somewhat pared down this year compared to years past, due to the coronavirus pandemic. Some 25 people, including Group CEO Herbert Diess, Group Board Member Frank Witter, Volkswagen Brand CEO Ralf Brandstätter, and Works Council Chair Bernd Osterloh, attended the symposium in person, which was held in the company restaurant at IT City. Another 35 people attended via Skype.

Procurement Goes Digital

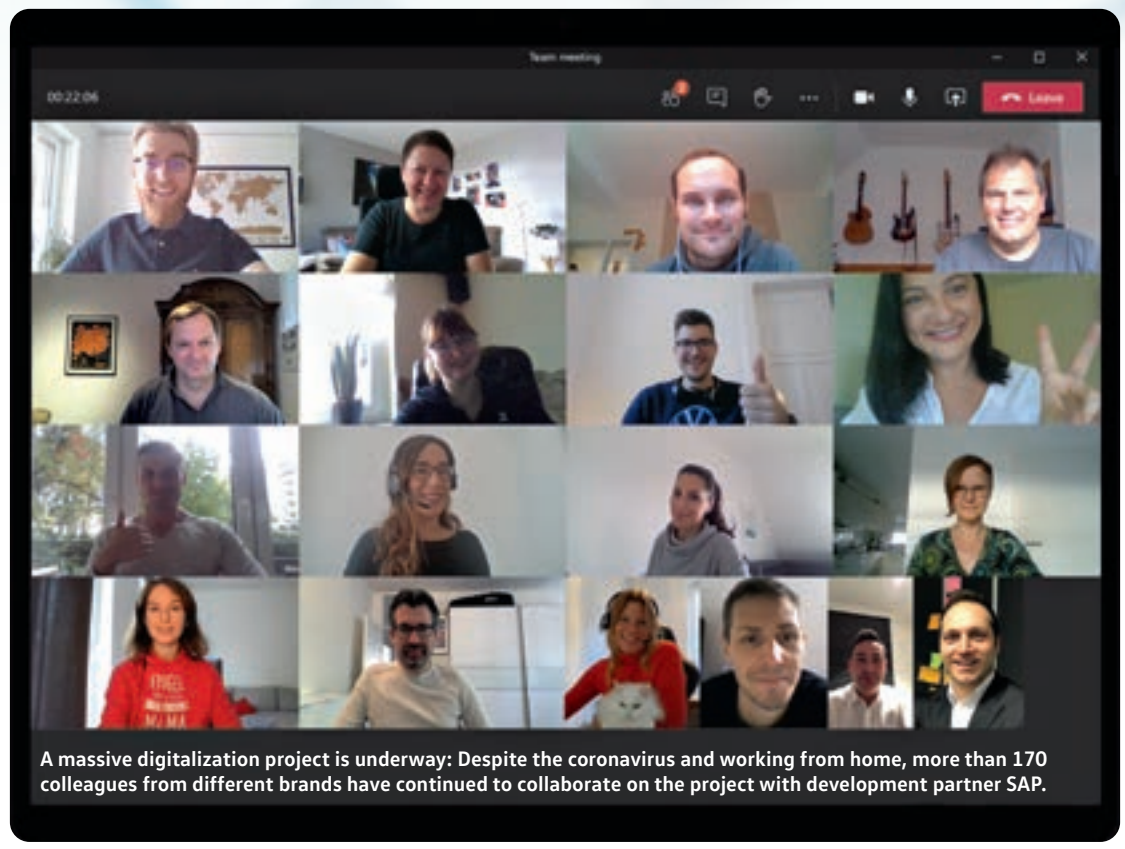
Across brands and divisions, experts are working on new computer systems for Procurement

Procurement is kicking the journey toward digitalization into high gear: Across brands and divisions, experts are working on completely new computer systems for buyers. This is just one of the contributions made by Procurement on the Volkswagen Group's digitalization roadmap.

Nico Feirer, Head of Purchasing

Procurement's digitalization strategy revolves around the Group Procurement Suite (GPS). The goal with GPS is to develop a long-term software solution for Procurement. It combines innovative technology, a database, and modern user interfaces – for every one of the brands and regions in the Group.

Procurement is prioritizing cross-divisional collaboration, starting with the development process. Nico Feirer, Head of Global Production Control at Volkswagen Group Procurement, says, "Our team is made up of many different players. We truly consider digitalization a team sport here." These "players" are actually experts from Procurement, IT, and other divisions, plus development partner SAP.



A massive digitalization project is underway: Despite the coronavirus and working from home, more than 170 colleagues from different brands have continued to collaborate on the project with development partner SAP.

For a bit of background, GPS was created in co-innovation between Volkswagen and the Baden-Württemberg-based software company. According to Feirer, "What co-innovation really means is that both sides invest, bring their own knowledge to the table, and use all of this to develop a new software standard." The result is a real win-win. The division head says, "What we develop during this process will become SAP standard. This means the Volkswagen Group will benefit from regular SAP updates, while SAP will be able to learn from our outstanding procurement expertise."

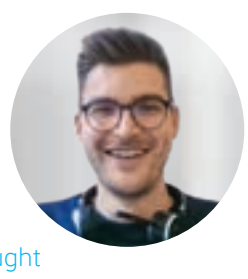
No man is an island when it comes to the development process, Procurement included. This is because so many processes involve liaising and interacting with other divisions. According to Feirer, "Working closely with neighboring divisions like Finance, Logistics, and Components is crucial to the whole process running smoothly." One advantage in doing so is that other divisions, including Logistics and Finance, are also using SAP as part of their own digitalization initiatives.

Users are the focus

Another key tenet of the GPS program is for every employee to be included in the changes. "Users are always our focus. That's why we invite our buyers to help us shape this digitalization process," says Feirer. This employee outreach is done through formats like "A Peek at the Workshop," where buyers get the opportunity to learn a few things about GPS's current development status and provide honest feedback.

Employee Voices: What Makes the GPS Project So Special

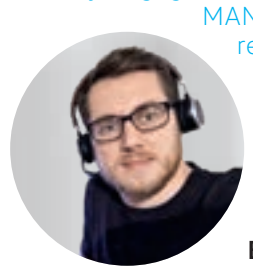
PROCUREMENT AND IT WORKING TOGETHER



"The close collaboration between Procurement and IT is what makes GPS so special in my opinion. The project is so complex that it is extremely important that we work together. The joint project headquarters at the GPS Campus in Wolfsburg-Sandkamp has really brought us together and helped foster trust between employees. This great teamwork is particularly important now that we are working together virtually."

Ruben Symalla, Group IT GPS Project Manager

WORKING WITH BRANDS AND REGIONS



"Including the brands in the project work is what makes GPS so special to me. For example, my Audi colleagues and I actively engage with Volkswagen, Porsche, and MAN on a project team, with us representing the core brands. The good thing about it is that we not only benefit from the knowledge of everyone else there, we are also elevating user acceptance."

Stefan Prüller, Business Owner at Audi

AGILITY

"I consider GPS to be the first project we have approached with agile methodology. For example, we are developing GPS step by step. To put it in the terms of agility: sprint by sprint. During development, user stories are crafted to identify users' needs. These needs are prioritized based on our professional feedback and a reasonable development process. It's really exciting, but it requires a lot of discipline."

Maria Alt, Product Owner GPS Sourcing at Group Procurement

Digitalization: What Chief Human Resources Officer Gunnar Kilian Has to Say

3 Questions

Gunnar Kilian, Member of the Group Board of Management for the HR and Truck & Bus divisions

1 GPS project colleagues explain what's happening with digitalization in Procurement above. What are your tips for keeping up with digital transformation?

Two key things are essential: patience and flexibility. Our industry is and always has been under constant development. What's new is the incredible speed of change, the rapidity of transformation. For example, it took just four years or so for the ID.3 to go from the design stage to market launch. With other vehicles in the past, that process usually took six or seven years at least. That's just one example of how the speed of change is increasing exponentially – and this will only continue. Transformation will become a permanent job. That means we need to proceed with patience and flexibility. We need to be continuously reviewing and updating our processes if we want to continue to succeed.

2 In addition to the "Peek at the Workshop" format, the GPS project also covers change management to get employees on board. How important is it for employees to take this digital journey with you?

Making sure our employees are on board in fundamental. As paradoxical as it may sound, the more technological the world becomes, the more businesses need to focus on people. After all, in a world nearing technological perfection, our employees' skills will be the deciding factor that will determine our economic success in future. If our colleagues are not on board with this process, it simply won't work. That's why transparency is so important – especially in times of change. Transparency provides security and orientation.

3 In spite of the situation with the coronavirus, the GPS team has continued to work on the project from home. Will the current situation bring about permanent changes to employment at Volkswagen? And what role does digitalization play?

Digitalization is the linchpin of this rapid transition to a more advanced career landscape. The pandemic has only underscored that. For example, we were able to make our 100-point plan to combat the coronavirus available to the public for digital download. More than 40,000 of our suppliers took advantage of that. And if you want to draw some other positives from this time of crisis, the coronavirus seems to have been a breakthrough in digitalizing work, including for our office workers at the moment. This has been proven by remote working alone, which we have massively ramped up. If we look at the Wolfsburg plant alone, more than 70 percent of indirect employees have been working from home. When we look at Volkswagen AG, the number of employees working remotely has now increased from roughly 18,000 to 33,000. That happened quickly and unbureaucratically, while remaining legally compliant and technically efficient. We must now turn our attention to shaping working life in the long-term using these positive findings. Whether we term this the new normal or call it something else, I believe that we are lagging behind in terms of the realization that we can't afford to slow down this digitalization push with bureaucratic hurdles.

We Stay Digital: How Work Has Changed in the Divisions

In the midst of the coronavirus pandemic, many departments are focusing on online solutions to make Volkswagen a more digital and sustainable company

For developers working remotely: Agnese Riemere-Birk relies on new digital media.

New Digital Dialog Formats in TD

In Technical Development (TD) in Wolfsburg, working remotely was the order of the day for over 11,000 employees after the coronavirus lockdown in March. Skype and other services kept the teams connected electronically, allowing development projects to continue. There was one challenge: new dialog formats were a must. "Early on came the requirement to introduce digital formats for dialog with and among TD employees," reports Agnese Riemere-Birk, who is responsible for "Change Communication" in the TD Transformation department.

TD Skype dialog supplements TD media

Employees working from their home PCs kept busy with several questions regarding health protection, work organization, processes and projects. In early June, the TD Skype dialog "Together Against Corona" and its 350 participants provided the first answers. Over chat or microphone, the participants asked questions about their work situation under COVID-19 conditions. "The new digital dialog formats are a good complement to our media, such as the monthly newsletter 'TElegramm' and the FE website," explains Michael Esders, responsible for TD internal communications.

Before the coronavirus pandemic, communication events were held with about 100 participants in the TD lecture hall. More than three events would have had to be organized to reach the 350 employees reached with the TD Skype dialog. With the online format, employees also saved on travel to and from work. If they had come from home, they would have covered more than 12,000 kilometers by car – with estimated CO_2 emissions of 1.8 tons.

Online meetings help with climate protection

The online meeting's carbon footprint is considerably better – with 350 participants, only 35 kilograms of CO_2 are generated per hour. The transformation in TD is therefore one of many examples that demonstrate how Volkswagen is becoming a more digital and sustainable company.

After the first digitalization push, demand continued to grow. "We're preparing a whole package of digital formats that we can use to provide employees with information and conduct dialog with them," says Egon Feichter, responsible for TD strategy, product data, and services.

Electronic Design Engineers: Digital Welcome

New employees and managers introduce themselves virtually

Roughly 40 engineers, software developers, and IT specialists have made themselves comfortable in front of their laptops. "Welcome!" appears in seven languages on the start screen of their digital meeting. If they had started working at Volkswagen a few months earlier, they would have gathered in a conference room in Wolfsburg to welcome them. But coronavirus won't allow that. Since April, our new colleagues have been getting to know each other in virtual welcome meetings.

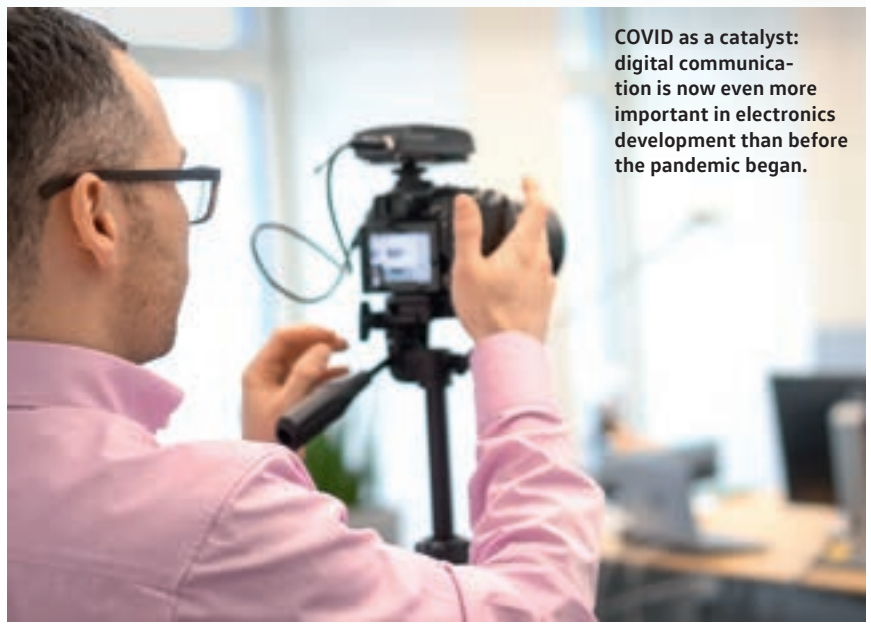
Even in times of crisis, experts are in great demand – which is why the Electronics Development (ED) department brings around three dozen new experts onto the team every quarter. Margit Burkhard and Gian Carlo Brunetti from the "Change & NewWork" team now have a lot of practice planning and moderating online formats. The welcome meetings always begin with a quick greeting from the boss – then it's the newcomers' turn. Each person has 30 seconds to introduce themselves with five keywords.

Technology films: Margit Burkhard from the "Change & NewWork" team helped develop the new communication formats.

The virtual meetings don't just benefit the new employees – they're also better for the environment. When 40 participants travel to Wolfsburg for an in-person meeting, they cover an estimated 2,000 kilometers by car. CO_2 emissions: roughly 300 kilograms In a two-hour online format, only a few kilograms are incurred from the laptops' power consumption. That's not just true for the welcome events, but for every day our new coworkers work from home.

Electronic design engineers are focusing even more on the digital than before the pandemic for other dialog events as well. A few weeks ago, for example, new division head Axel Heinrich introduced himself in a virtual plenary meeting via webcast: he talked about his resume and goals, followed by questions from employees.

ED has digitalized several other formats too. Employees report on their work topics by video – for example, a developer introduces a new feature in the navigation of the ID.3[1]. "The technology films are very popular with our colleagues – it's not unusual for them to spark discussions in our ED community," reports Burkhard.



COVID as a catalyst: digital communication is now even more important in electronics development than before the pandemic began.

Developers can also present their projects in "ED Insights": they talk about their work for twelve minutes, with the rest of the half-hour reserved for questions.

Participation is important. The "Change & NewWork" team wants to know what its coworkers are working on and how the mood in the home office is faring. A common piece of feedback: the developers miss lunch breaks with their colleagues, but not the commute to work. Quite a few also appreciate the ability to schedule their day more flexibly. They prefer variety to eight hours of work in a row.

A large portion of these digital solutions will benefit electronics development beyond the pandemic period. Most assemblies with several hundred employees will remain digital. The online welcome meetings are going so well that it's hard to imagine life without them. Preparation is easier, and participants save on travel time. Division head Heinrich has already made it official: "There will be a dial-in option at every meeting in the future." Digital work will remain a matter of course, even after coronavirus.

Formats Used by ED

Electronics Development organizes a large portion of its digital formats in Microsoft Teams. For more information, check the ED news site and the ED Community.

Contact:
Margit Burkhard/
Gian Carlo Brunetti

Cloud Solution for Working Remotely

TD sets up over 1,000 digital workstations for CPU-intensive tasks

Strength simulations, 3D component design, or virtual vehicle construction in the home office – all made possible in the era of the coronavirus for more than 1,000 TD developers. They've been carrying out their CPU-intensive tasks at their desks at home since the end of March 2020. The means: a cloud connection. A four-person team from TD and corporate IT set it up in just a few days. "We had an urgent need to catch up on remote developer workstations, especially because of the COVID-19 restrictions," says Christian Mandel, who takes care of IT at the Pilot Series Center.

Developers in pre-development, series construction, simulation or virtual safeguarding deal with huge amounts of data and need considerable computing power. It's why their workplaces had previously been in the factory, as well as to guarantee data security and protect the developers' expertise. The COVID-19 virus has changed everything: computer-aided development in TD became impossible and a solution had to be found quickly. Fortunately, there was a pilot project that the TD taskforce was able to expand: a cloud solution had already been in place since the end of 2019.

"The cloud solution enables us to work effectively, even in the home office."

Leon Kocherscheid, Preliminary Drive Train Development

The task: facilitate CPU-intensive applications for the home office in the shortest possible time. However, it wasn't just the technology, which had to be provided to many internal developers or engineers by suppliers, that was challenging. "Carefully and at a fast tempo, we were also able to sufficiently ensure data protection during the transition to digital working methods for remote work. The data remains on our servers and the Citrix Cloud ensures secure access wherever you may be," explains Luigi Morreale of Corporate IT.

It only took 14 days for the team of experts to procure temporary licenses for Citrix-Cloud use and ensure adequate data protection. In addition, the team around Morreale and Mandel developed a process to digitally connect employees and provide them with support.

The cloud team (from back to front): Robert Schulte, Frank Friedrichs, Christian Mandel, and Luigi Morreale.

In May, 179 surveyed users were highly satisfied with the cloud solution. Oleg Schleining from Data Management Services explained: "Thanks to the digital connection, I can now work from home as if I were at the factory. He's one of roughly 1,000 TD developers who save plenty of time with the cloud solution, having no need to travel to and from the factory. Now, they travel about 700,000 kilometers less per month. This also saves more than 100 tons of CO_2, assuming an average round-trip distance of 35 kilometers.

"The biggest advantage is that we're able to fully work from home."

Patrick Conrad, Virtual Vehicle Construction

The TD team is now working with IT to evaluate the cloud solution as a digital work technology and possibly establish it for remote work in the longer term. "At least as long as the pandemic lasts – and maybe even beyond," says Mandel.

[1]ID.3: power consumption in kWh/100 km, combined (NEDC): 15.4–14.5, CO_2 emissions in g/km: 0; efficiency class: A+.

Interview with Thorsten Nicklass, CEO of green electricity provider Elli, on building private charging infrastructure

The new funding program is taking to the starting line: In an interview, Thorsten Nicklass, CEO of green electricity provider Elli, talks about the German government scheme.

Mr. Nicklass, the German government is now offering grants to set up private charging infrastructure. How do you rate the support they're offering?
It truly is a great sign for electric mobility in Germany. The transformation of our current system is picking up speed so offering support for setting up private wallboxes is a logical step. It makes buying an electric car that much more attractive and removes one of the key hurdles to making that leap to electric. In existing buildings in particular, installing charging points can be a considerable investment. So it's a big help when the state steps in to offer support.

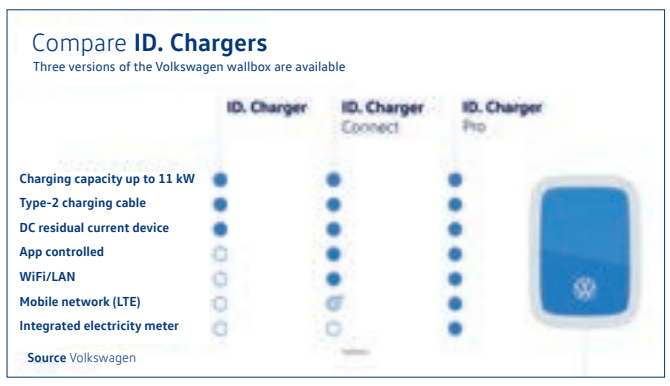
What do we know about the grant?
The German government's new program will provide 900 euros in funding for the purchase and installation of networked wallboxes. Here's a sample calculation: If you buy an eligible wallbox including installation for 1,500 euros, you will only pay 600 euros of that in future. Only networked, internet-ready wallboxes are eligible for the grant. The wallbox purchase must also include installation by a certified professional. Purchases of wallboxes without installation are not eligible for funding. The wallbox must also be supplied by green electricity. The program officially launches through the German Development Loan Corporation (KfW) on November 24.

What's your advice for customers thinking about buying an ID. Charger Pro or Connect?
We are confident our two networked wallboxes, the ID. Charger Connect and ID. Charger Pro, meet the requirements and will be eligible for funding. We are still waiting on the official seal of approval. Applications for grant funding will open on November 24 through https://www.kfw.de/440 and customers will then be able to order their wallbox from Elli. What's important to know is that customers need to apply for funding first, then buy and install their wallbox. If customers need to have a wallbox installed quickly before the grant program launches in late November, they can of course order a unit from Elli as normal.

A great sign for electric mobility: Elli CEO Thorsten Nicklass welcomes the grant.

And what about customers who have already purchased or even installed an ID. Charger Pro or Connect?
Much to our disappointment, the grant program is only open to new orders. Products that have already been purchased or installed cannot qualify for funding retroactively, unfortunately. We are also going on the offensive with Elli in terms of reaching out to the public to explain the grant program. Ultimately, we want as many customers and Volkswagen employees as possible to be able to benefit. And for those who do not yet own an electric car but are planning to get one in future – you can use the grant to install a wallbox in your garage or parking spot now so you'll be ready to embrace electric mobility when the time comes.

Fully charged: Customers can get 900 euros towards a home wallbox.



Safe: The ID.3[1] passes tests with flying colors.

ID.3: Five-Star Results on Its Safety Test

A dream start with five stars: The ID.3 scored the top grade on its European New Car Assessment Programme (Euro NCAP) safety test. The test administrator gave the first model built using the modular electric-drive toolkit (MEB) good scores across all criteria – adult occupant protection, child occupant protection, vulnerable road user protection, and driver-assistance systems.

"It's a great success for the entire ID. team," says Frank Welsch, Head of Development for the Volkswagen brand. "Achieving new levels of safety with our vehicles is always incredibly important to us, which is why we have incorporated that pursuit into the design of the MEB from the start. With its five-star rating, the ID.3 is impressive confirmation that we're doing something right."

Adult occupant protection ratings are based on frontal and lateral impact and whiplash tests, among others. These crash tests and an analysis of measures for safe and quick rescue and extraction contributed to the 87-percent safety rating for drivers and passengers of the ID.3. The car was even given an 89-percent rating for children.

In addition to occupant protection in vehicles, the Euro NCAP also tests how well automatic emergency brake (AEB) systems are able to protect pedestrians and cyclists in an imminent collision.

First trialed with AI methods: Sarah Brüggemann worked with her colleagues to develop lightweight components for the ID.3 series

For the developers in charge of a vehicle body's functional design, one thing is clear: Electric cars need to be just as safe as those with combustion engines in a crash Sarah Brüggemann's developer team was faced with unique challenges when designing for the electric engine, transmission, and battery, which fits between the axles like a bar of chocolate in the underbody. These high-voltage components are new territory, after all. "We had to simulate the design of highly sensitive vehicle components like the battery as well as develop new criteria to evaluate the vulnerability of high-voltage components and their surrounding structure in a crash," explains Brüggemann.

Sarah Brüggemann works in Technical Development in Wolfsburg, part of the Body Shop's functional design team. Along with her colleagues, the 36-year-old structural engineer ensures the body of every Volkswagen brand model meets crash safety standards. The Braunschweig native has been at Volkswagen since 2012 – her work focusing first on lateral crashes, then on frontal crashes. However, her job does not actually involve crash tests and dummies. Her work developing a vehicle's crash safety design is solely computer-based, using computer-aided engineering (CAE) methodology.

She also works on designs for the ID. models' high-voltage batteries, which presents special challenges due to its dimensions. The battery has expanded considerably transversely, leaving very little room for deformation and displacement on the rocker panel in the event of a lateral impact. The safety expert's goal is for all the energy to dissipate in this short corridor in the event of a crash.

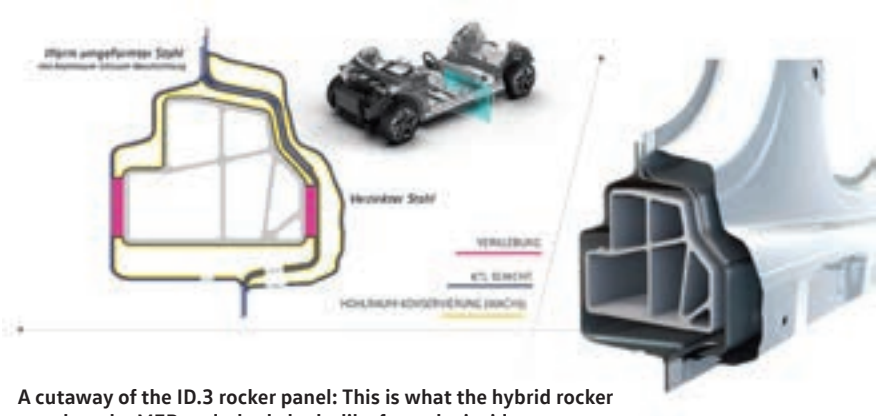
The weight of high-voltage components also has major impacts on safety in a crash. The heavier the battery and the structure surrounding it, the more mass must be dissipated in a crash. Because of this, developers try to design the rocker panel, the A, B, and C columns, the roof frame or the heel plate to be as light as possible by harnessing load-bearing solutions and using innovative materials – all while ensuring there is no loss of performance.

The lightweight design solution Sarah Brüggemann and her colleagues developed on the computer: This is the first time an extruded aluminum profile is being used on the rocker panel to dissipate the high level of crash energy in the event of a lateral impact. "These days, our simulations cover just about every crash scenario, which saves us a lot of money," she says.

Designing the extruded aluminum profile was a lengthy and complex process. This is because the profile must have a high level of strength to absorb the energy along the short deformation path. And the block that remains following deformation cannot press down on the high-voltage battery. Sarah Brüggemann explains, "We first designed the extruded aluminum profile using artificial intelligence (AI). That was also a new one for us."

She's happy with the results. After all, the Body Shop functional design developer helped bring the extruded aluminum profile to series production and make the ID. even safer in the event of a crash.

Lightweight design on the computer: Sarah Brüggemann with the ID.3 rocker panel's aluminum profile, which was developed using artificial intelligence and which dissipates crash energy in the event of a lateral impact.



A cutaway of the ID.3 rocker panel: This is what the hybrid rocker panel on the MEB underbody looks like from the inside.

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[1] ID.3 – power consumption in kWh/100 km (NEDC): 15.4–14.5 (combined), CO_2 emissions in g/km: 0; efficiency class: A+

The ID.3's big brother is being built on three continents – a milestone in Volkswagen's electric campaign

The ID.4's technical specifications

ID.4 1st and ID.4 1st Max
Max. capacity 150 kW / 204 bhp
Max. torque 310 Nm
Transmission Single-speed transmission
Vmax 160 km/h
0–100 km/h 8.5 s
Energy (battery) 77 kWh net
Range (WLTP) approx. 490 km
Length 4,584 mm
Width 1,852 mm
Height 1,612 mm
Wheel base 2,766 mm
Drag coefficient (cd) 0.28
Volume (trunk) 543 L

100 percent SUV, 100 percent electric: the ID.4 is the first fully electric SUV from Volkswagen and the brand's first global electric car. The ID.3's big brother will roll off the production line for Germany and Europe in Zwickau. It will also be built at the Chinese plants in Anting and Foshan this year, and production is planned to start in Chattanooga (USA) and Emden in 2022. The e-SUV, based on the modular electric-drive toolkit (MEB), is an important milestone in Volkswagen's electric campaign: Volkswagen plans to launch 75 purely electric cars and sell roughly 26 million e-vehicles by 2029. The ID.4 will be launched in a market segment that is one of the largest in the world's automobile markets – the compact SUV class. In Germany, it will be launched with two special-edition models, limited to 27,000 units. The 1st edition costs 49,950 euros, and the ID.4 1st Max with panoramic glass roof and electric tailgate, 59,950 euros. A net subsidy of 9,000 euros is available for both models.

10 Things You Need to Know About the ID.4

1 100 % SUV – 100 % electric

The ID.4 is the first fully electric SUV from Volkswagen and the brand's first global electric car. It will be launched in the world's largest market segment, the compact SUV class.

2 Open space for passengers

The ID.4's architecture allows a long wheelbase, making the interior as spacious as a conventional SUV in the next larger class.

3 New lighting technologies

The interactive IQ. light LED matrix headlights emit an intelligently controlled high beam. In addition, the vehicle has innovative 3D LED taillights.

4 Versatile all-rounder

The large wheels, up to 21 inches in diameter, show off the car's sporty, robust character.

5 Comprehensive connectivity

With the navigation systems, drivers can utilize the online services from We Connect Start. The assistance systems from IQ. Drive make confident driving easy.

6 High performance and range

The two ID.4 edition models are based on the ID.4 Pro Performance, with an output of 150 kW (204 bhp). Its battery allows a range of approximately 490 kilometers (WLTP).

7 Two special-edition models

The ID.4 will be launched in Germany with two special-edition models. The ID.4 1st costs 49,950 euros, while the lavishly equipped ID.4 1st Max 59,950 will cost euros (both with 19 percent sales tax). A net subsidy of 9,000 euros is available for both models.

8 Cutting-edge operation

A touch display with a diagonal of up to twelve inches, natural voice control and the ID.Light are equipped as standard. An augmented-reality, head-up display is also available upon request.

9 New electronics platform

The ID.4's software and hardware have been designed with brand new architecture, allowing the customer to get updates in the car after purchase.

10 Sustainable e-mobility for all

Volkswagen's e-campaign continues to pick up speed. The ID.4 is manufactured in a carbon-neutral manner at the Zwickau plant. An entire ecosystem of sustainable mobility is being created around the ID. models.

In Tennessee and Shanghai: Working on the ID.4

Volkswagen employees Marco Franke and Tayfun Sentürk accompany the new electric SUV around the globe

Volkswagen's first electric SUV is a global car: built globally, sold globally. Volkswagen employees Marco Franke and Tayfun Sentürk accompany the ID.4 from Zwickau to Tennessee and Shanghai.

It's no exaggeration to say that electric mobility is part of Marco Franke's family history. A few weeks ago, the 29-year-old car body planner married his girlfriend, Nicole. His coworkers from Volkswagen's Zwickau plant brought an ID.3[2] from the staff fleet along as a wedding car. In a few weeks, the Frankes will move to Tennessee, where Marco will help prepare the ID.4's production launch at the Chattanooga plant. Thus, the Volkswagen brand's first electric SUV lives up to its claim as a global car in a very special way: the ID.4 is not only built and sold worldwide – it's also shaping the path of people like Marco Franke, who get to gain experience at international locations.

On an e-mobility mission in China: Tayfun Sentürk.

On an e-mobility mission in the USA: Marco Franke.

Ever since a stay in the US in 2017, Franke has been determined to get to know America better. Back then, he spent six months in Chattanooga to work on the Atlas launch – now he wants to stay for close to two years. "The country fascinated me from day one. I'm really looking forward to going back," says Franke, who will set up machines at the ID.4 production facility in Chattanooga. The e-SUV is also set to be built there, starting in 2022.

Like Franke, Tayfun Sentürk is on an international e-mobility mission. The 34-year-old has lived and worked in Shanghai for almost a year. As launch manager, he's responsible for the start of production at the new Anting plant, where the SAIC Volkswagen joint venture will build exclusively electric cars based on the modular electric-drive toolkit (MEB). "It's been a really exciting time," says Sentürk about his first year in China. "The factory, the language, the culture – everything was new to me." By contrast, he was well-versed with electric cars from the very beginning – he coordinated launch management for the ID.3 in Zwickau. "It helps that I know the issues and contacts in Germany. There are Skype calls almost daily. If Zwickau has a good solution, then Anting benefits – and vice versa," he says.

Sentürk usually uses his weekends to explore Shanghai. His impression: "People are enthusiastic about new technology. Electric cars are super popular. People drive cleanly, quietly, and have great acceleration." So far, Volkswagen is yet to be represented among the electric models. Sentürk is convinced that this image will soon change: "The Chinese like electric cars and they like SUVs. They're going to love the ID.4."

Back to the Frankes: together with their son, they aim to explore the US in the next two years. They still have to choose a suitable car for their tour. Will it be the ID.4? "We can't say yet. But I know from my own experience that e-vehicles are just as suitable for everyday use as combustors. We'll decide when we get there," says Marco Franke.

The dream car will have to wait a bit – but the Frankes do already have their dream destination firmly in view: Panama City Beach on the Florida coast. The journey from Chattanooga is a good 600 kilometers – after which more than 40 kilometers of sandy beach await. And maybe they'll make the tour electric, with the ID.4.

[1] ID.4 1st: power consumption in kWh/100 km, combined: 16.9–16.2; CO_2 emissions in g/km: 0; efficiency class: A+. ID.4 Pro Performance, 150 kW: power consumption in kWh/100 km, combined (NEDC): 16.9–16.2; CO_2 emissions in g/km, combined: 0; efficiency class: A+. ID.4 1st Max: power consumption in kWh/100 km (NEDC): 16.2; CO_2 emissions in g/km: 0; efficiency class: A+ | [2] ID.3: ID.3 Pro Performance, 150 kW / combined power consumption in kWh/100 km: 16.9–15.4 (WLTP); 15.4–14.5 (NEDC); combined CO_2 emissions in g/km: 0; ID.3 Pro S, 150 kW / combined power consumption in kWh/100 km: 17.7–15.9 (WLTP); 14.1–13.5 (NEDC); combined CO_2 emissions in g/km: 0

Communication by Volkswagen Rated Highly

Public relations work at Volkswagen is being well received by business journalists – so says a survey by Dr. Doeblin, a business research institute. 165 journalists from Germany were asked how they rated communications efforts by the 30 DAX-listed companies.

According to the media professionals, Volkswagen deserves recognition in particular for its "open communication" and the "many good background discussions, even on unpleasant topics" it has engaged in. Volkswagen was ranked second among DAX-listed companies. Only BMW was rated higher by the journalists. The Munich-based company also took first place last year. After BMW and Volkswagen, the remaining top places went to Daimler, Allianz, and Deutsche Telekom. Volkswagen was ranked fifth last year.

Peik von Bestenbostel, Head of Group Communications

Peik von Bestenbostel, Head of Group Communications, says, "This is a real commendation for the entire Volkswagen press team. I would like to thank all of my colleagues for their outstanding commitment. This survey is proof that our open, transparent, enthusiastic communication efforts have us on the right track."

New Alliance for Traton

Traton and Japanese commercial vehicle manufacturer Hino have signed a joint venture agreement. The companies plan to work together to further develop electric mobility with battery-powered electric vehicles, fuel cell-powered vehicles, and components. They also hope to develop a joint platform for electric vehicles, complete with software and interfaces. The two companies have put together a team of specialists for the venture. The activities will initially start in Södertälje, Sweden.

Raising Our Profile: The Values the Group's Brands Stand For

The Brand Strategy Navigator is the result of a joint project – supporting clear identities

Like a compass, the Brand Strategy Navigator with distinct brand profiles provides orientation in internal decision-making processes.

It's like a team sport: Everyone on the team has their own strengths, which they use for the success of the team as a whole. That principle translates well to the Brand Strategy Navigator, a project developed under the Volkswagen Group strategy's Best Brand Equity module. The difference is that instead of athletes, the team is made up of brands and their brand identities – what's at the heart of each brand, and what distinguishes them from other brands. Strong brands help optimally orient the Group for the future and boost its positioning compared to its competition.

Distinctive market identities

"The Group's brand portfolio has grown dramatically over the past several decades. That means our brand identities sometimes overlap for our customers, even leading to similar products. The new Brand Strategy Navigator has allowed us to work with each brand to clearly define brand identity to differentiate more and appear more distinct on the market," explains Stefan Büscher, Head of Group Brand and Marketing Strategy. He worked closely with his team and representatives from every brand to develop and implement the Brand Strategy Navigator throughout the Group.

Unique brand identities help with making decisions on design, products, services and positioning. According to Büscher, "This more distinct profile gives both our customers and our brands clear direction and help us focus on the future. In the end, our customers' needs and lifestyles are the clear focus in the Brand Strategy Navigator. We want to inspire our customers so they become fans of our brands for life."

Stefan Büscher and his team have made each brand's profile more distinctive.

> "The Group's brand portfolio has grown dramatically over the past several years. That means our brand identities sometimes overlap for our customers, even leading to similar products."
>
> **Stefan Büscher, Head of Group Brand & Marketing Strategy**

Brand management remains the responsibility of each brand team. In its role as navigator, the Volkswagen Group is coordinating the overall brand portfolio and is systematically dividing the global playing field into brand territories (similar to positions on a sports field). Each brand contributes with its own strengths, recorded on brand ID cards. These cards present each brand's identity and values, vision, and mission. These cards are used to compile a clear profile for each brand, along with a unique brand mission and a list of core competitors.

Group strategy project

The Brand Strategy Navigator is a project developed under the Volkswagen Group Together 2025+ strategy's Best Brand Equity module. Best Brand Equity really means increasing brand value. The entire module aims at working together to reposition the brand portfolio. This takes maximum advantage of overall market potential and boosts the value of the Group's brands.

TD Launches Mission: Cultural Change

Nearly 900 employees attended the event – 83 TD transformers are multipliers

Changing human interaction in Technical Development – that's the goal of Mission: Cultural Change. The digital event, held online due to the coronavirus, was a success: Nearly 900 employees attended the livestream. Many took part in interactive votes, or shared questions and comments via chat and livestream.

"We have already initiated many important substantive issues as part of this transformation," said Frank Welsch, Head of Development, referring to TD Strategy 2025+, which launched in 2019. "We now want to turn our attention more to how we interact and the culture within TD."

He outlined four action areas: Increasing trust, overcoming silos, increasing the speed of decision-making, and promoting diversity. "It's not that we have a problem recognizing issues, we just need to catch up with implementation," he stressed. That's why 83 TD transformers from every level in the TD divisions are working with the project management team to make sure this transformation is permanent and really takes hold in day-to-day life. Also present at the event were Dietmar Albrecht, Chief Human Resources Officer for the technical divisions, and TD Works Council Coordinator Gerardo Scarpino.

Digital event in the coronavirus era: Nearly 900 employees attended the livestream.

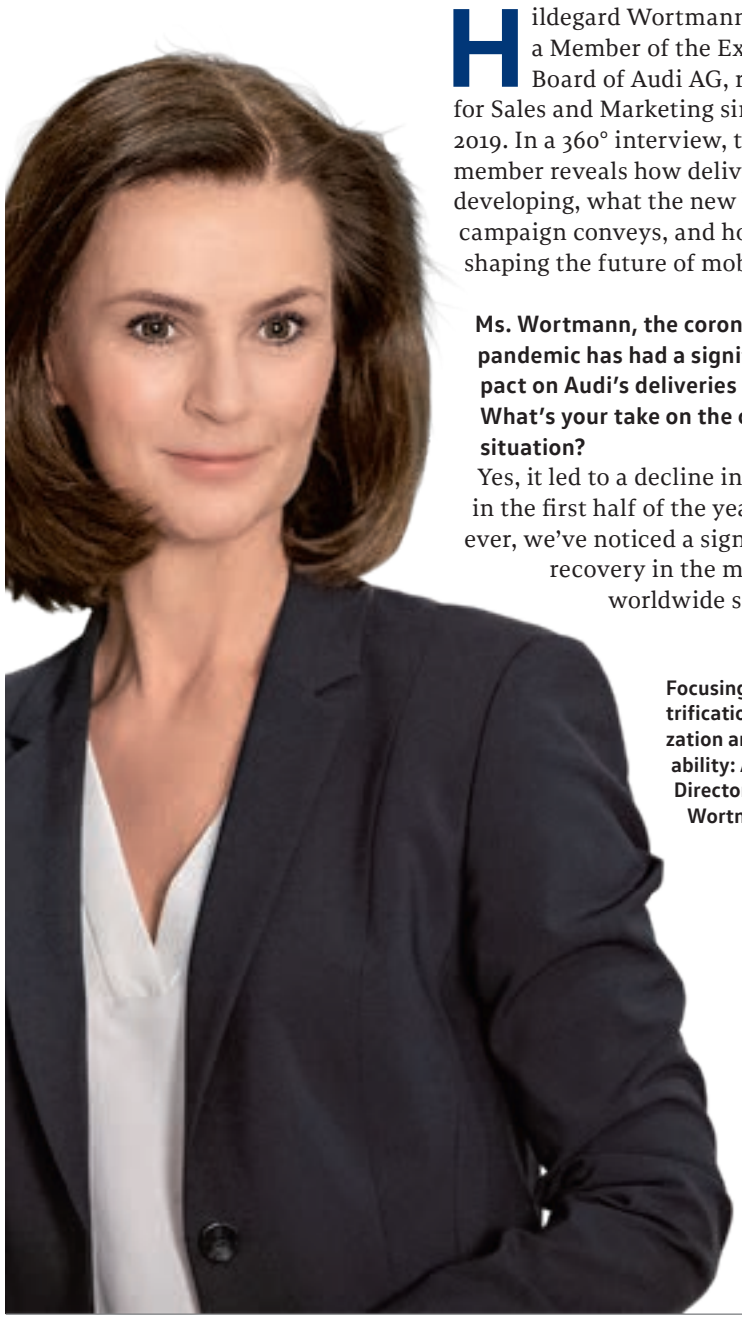
The discussion was broadly based. Participants had the opportunity to chime in on priority issues as part of the open dialog hosted by Ralph Linde, Head of the Volkswagen Group Academy. It turns out that employees are also interested in the issues being prioritized by the TD management team – decision-making and decision-making processes, first and foremost Many said these processes took too long and lacked transparency.

Other key issues discussed included dismantling hierarchies in TD and improving work-life balance. And some initial outcomes were presented as well: Johannes Neft, Head of Development in Assembly, presented a new concept for targeted job rotation between divisions for upper-level management – a highly practical silo buster. Implementation has already begun. And Egon Feichter, Head of TD Strategy, Product Data and Services, presented new digital communications formats, including the TD Skype Dialog and the Digital Café, which were launched during the pandemic. Having been launched, Mission: Cultural Change is proceeding seamlessly, as project manager Milan Wegener announced. The TD transformers will work on the specifics for each action area in analysis workshops and develop some initial recommendations for improvement.

In-depth discussion: "TD transformers" Ekaterina Lapekhina (right), Qing Yang (left), and Anke Tesch.

Hildegard Wortmann: "The Future of Mobility Is Electric"

The Audi Sales Director on current sales and the future orientation of the four-ringed brand



Focusing on electrification, digitalization and sustainability: Audi Sales Director Hildegard Wortmann.

Hildegard Wortmann has been a Member of the Executive Board of Audi AG, responsible for Sales and Marketing since July 1, 2019. In a 360° interview, the board member reveals how deliveries are developing, what the new brand campaign conveys, and how Audi is shaping the future of mobility.

Ms. Wortmann, the coronavirus pandemic has had a significant impact on Audi's deliveries this year. What's your take on the current situation?
Yes, it led to a decline in deliveries in the first half of the year. However, we've noticed a significant recovery in the markets worldwide since May. This growth continued in September: with 18.4 percent more deliveries than in the previous year, it was our strongest month of the year so far. At 6.4 percent, the third quarter was also up on the previous year and we were able to further increase our premium market share. At the same time, however, we continue to closely monitor the further development of the pandemic on a daily basis. The year remains very challenging.

What conclusions have you drawn from the past months?
The COVID-19 crisis is accelerating the digitalization and transformation of the business – this will create new opportunities for us in the future. We've already implemented various measures in recent months, such as expanding digital sales with online reservation tools and digital vehicle presentation. Another example is the virtual market launch of the new Audi A3. We are continuing to drive such initiatives forward.

Which models have helped with the upswing?
The Audi Q3, the Audi A6 and the Audi A8 have had especially positive developments recently. But I'd like to highlight the Audi e-tron – a gamechanger. Since the market launch, we've delivered more than 58,000 Audi e-trons to customers worldwide, and this year alone we've delivered more than 30,000. The Audi e-tron continues to be the best-selling vehicle in its segment worldwide.

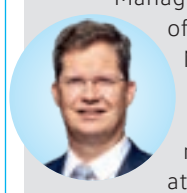
So you're going to continue focusing on electric mobility?
Absolutely. The future of mobility is electric. We have the ambitious Roadmap E, which we're sticking to despite the pandemic: We will be bringing 30 electric models to market by 2025, around 20 of which are fully electric. Next year, the Audi e-tron GT and Audi Q4 e-tron will be two more emotional highlights that I'm already looking forward to. In the coming years, Audi will become a provider of integrated, carbon-neutral, premium mobility with the aim of taking the lead over the competition.

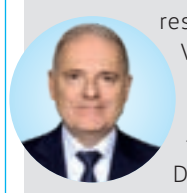
"Together, we can live progress!"

Audi recently launched its new brand campaign. How does the campaign address this goal?
Our new global brand campaign with the slogan "Future is an attitude" illustrates this transformation. Audi has a contemporary definition of "progress" and is geared toward the future – for a new automotive era and for our customers. Our aim is to use technology to improve people's lives and make a contribution to society. Together, we can live progress!

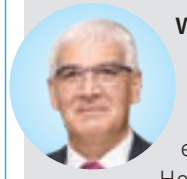
Names & News

Peter Modelhart, previously COO of Porsche Holding Salzburg for the Volkswagen Group Retail division (Germany, Spain, Portugal, and France), has been the new Management Spokesman of VGRD GmbH since November 1. He is succeeding **Rainer Schroll,** who is retiring from operational management. As Managing Director of Porsche Holding Salzburg (PHS), Schroll will retain management responsibility for VGRD GmbH.





Franz Dopf will be retiring and leaving the company on December 31.



Wendelin Göbel has been Management Spokesman for Wolfsburg AG since early November. He succeeds Frank Fabian, who left Volkswagen as part of a retirement plan. Oliver Syring had already left the management board of Wolfsburg AG in October. He moved to a management position in the Group Academy, part of Volkswagen's Human Resources department. Göbel has worked for the Volkswagen Group since 1987. He had been Head of HR & Organization for Audi since 2017. Background: Wolfsburg AG is a joint venture between the city of Wolfsburg and Volkswagen, forging long-term economic and employment prospects at the Wolfsburg site and, to this end, networks economic and scientific activities in the region and far beyond.

Alliance of the CEOs: Focus on Environment

First meeting of the twelve members in Stuttgart – EU climate goals are "achievable"

Common goals: Herbert Diess, Chairman of the Board of Management of Volkswagen AG, and the CEOs of eleven other European companies joined forces in the European CEO Alliance at a meeting for a carbon-free future and a more resilient Europe. The companies involved included ABB, AkzoNobel, Eon, Enel, Iberdrola, A.P. Møller Maersk, Philips, SAP, Scania, Schneider Electric, Siemens and Volkswagen.

The European Union has committed itself to becoming climate-neutral by 2050, which is in line with the eleven companies' own decarbonization strategies. All members support the Paris Agreement climate targets for 2050, the EU Green Deal, and the ambition of increasing the EU climate targets. The members represent various industries, together generating an annual turnover of 600 billion euros and employing 1.7 million people. The CEO Alliance channels companies' decarbonization efforts: it links sectors and strategies, identifies potential for cooperation, and promotes projects and investments for a sustainable economy and society.

At its constituent meeting in Stuttgart, the cross-sector alliance emphasized, "The climate targets of the European Union are achievable. Our industries will not block the transition to a carbon-neutral economy, but promote it. We see long-term growth potential for all industries. If we can successfully manage this historic change, sustainable development and new, future-proof jobs will be the result. Together, we will support all efforts to reach a social consensus for more sustainability." With this launch, the CEO Alliance has become an action alliance bringing together corporate strategies, industries and companies on the path to a carbon-neutral Europe.

All alliance members consider the European Commission's new climate targets, which provide for a 55-percent reduction in emissions by 2030, to be achievable. On the industry side, the members of the CEO Alliance have already announced that in the coming years, they will invest a total of more than 100 billion euros in their respective decarbonization roadmaps to help achieve these goals. Each member has defined its own strategy to address decarbonization, such as by reducing carbon emissions across the relevant value chains or offering sustainable products and services to customers. To achieve the respective CO_2 targets, each member and industry will be dependent on other companies and industries, making cross-sectoral work especially necessary.

The network began its dialog with politicians with Frans Timmermans, First Vice-President of the European Commission.

In attendance in Stuttgart (from left): Georg Kell (advisor), Henrik Henriksson (Scania), Peter Weckesser (Schneider Electric), Thierry Vanlacker (AkzoNobel), Herbert Diess (Volkswagen), Connie Hedegaard (advisor) and Björn Rosengren (ABB). The other CEOs participated virtually.

Facing the Future

Products, locations, and strategy: Volkswagen Group Components has reinvented itself over the last few years

Launched five years ago, the transformation of Volkswagen Group Components is now progressing at full speed. From product portfolio to strategy, all the signs are pointing to the future: Strong locations with competitive products are making a vital contribution to the Volkswagen Group's e-mobility strategy.

The aim of the transformation process introduced by Components CEO Thomas Schmall is to turn the traditional in-house supplier into a strong, independent company unit with a competitive product portfolio, efficient plants, and a clear focus on e-mobility. To achieve that, the business area developed a special strategy and efficiency program, restructured its product portfolio and divisions, and discontinued unprofitable elements. At the same time, the production of electric vehicle volumes created new prospects for many employees.

Full e-speed ahead

At the core of Group Components' value creation is end-to-end responsibility for the battery. Components thereby takes care of the key components of e-mobility for the Volkswagen Group – from the cell to recycling. New production and value-creation capacity was established at the Components locations with the launch of the new Battery Cell division at the beginning of the year and with the successful production start of MEB components, such as the electric motor in Kassel and the battery system in Braunschweig (see diagram). Components' strong focus on e-mobility is already apparent with the ID.3[1] and ID.4[2], where Group Components' value-creation share is at around 40 percent – approximately ten percent higher than with traditional combustion vehicles. However, the competitive manufacture of conventional technologies continues to be important as a driver of volume and earnings, which allows continued investment in e-mobility.

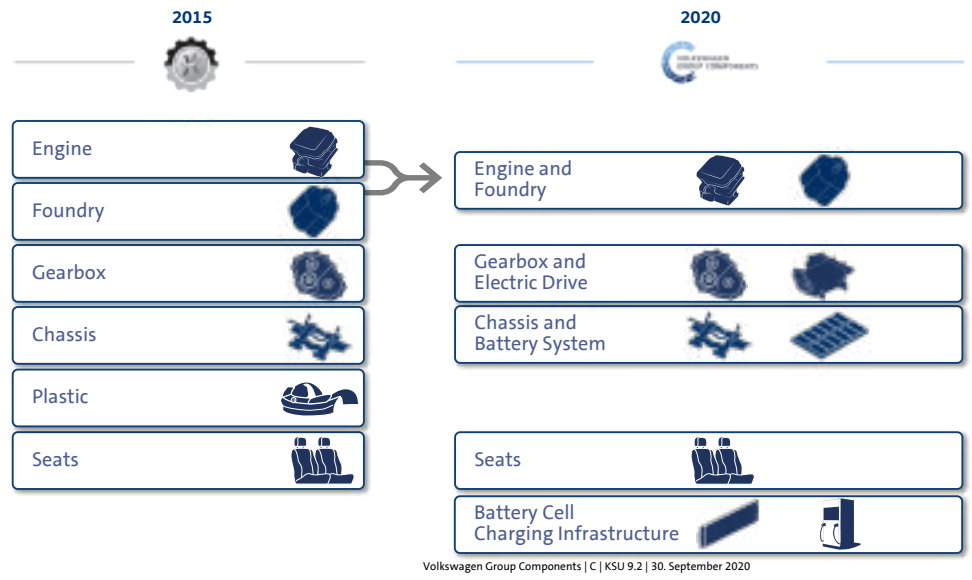
Transformation is all about teamwork

The transformation can only be a success if everyone works as a team – because employees must back and support the switch, from plastic production to battery systems, from heat exchangers to charging columns. In order to make the transformation at the locations sustainable, a number of colleagues have already moved to e-mobility topics such as the production of battery systems or electric drives. In addition, comprehensive training sessions and intensive qualification measures have been provided on site.

The international location network is also representative of the close cooperation in Components. The location network of more than 60 plants at 48 locations allows the plant utilization rate to be quickly adjusted when necessary – as shown through the effective collaboration between the engine locations of Salzgitter, Győr, Chemnitz, and Polkowice.

New E-Components at the Locations

New Structure of the Business Areas



The Transformation Is in Full Swing...

Sales of the ID.3 are booming and the ID.4 recently celebrated its world premiere. And Volkswagen Group Components is ever-present – because with a share of around 40 percent of the value creation, Components is making a major contribution to the success of the ID. family. All kinds of parts, from the electric drive to the rear axle, are made by Group Components (see diagram).

Furthermore, through the manufacture of the flexible fast-charging column, Group Components is playing a key role in the development of the charging infrastructure.

In addition to the production of individual components, an expansion of activities as a system supplier is also key for the future. It is expected that Components will deal with the lion's share of the Volkswagen–Ford cooperation, through which Ford will build an electric vehicle on the basis of the modular electric-drive toolkit. Starting in 2023, more than 600,000 units are set to be produced. Group Components will contribute about two thirds of the volume.

A cross-divisional team has also been occupied with the future of Components as a system supplier over the last few months: The twelve colleagues have developed a highly integrated system approach for the electric powertrain with electric drive, high-voltage battery, and other auxiliary units. That shows that the transformation continues!

Group Components "rides along": The ID.4 by Volkswagen.

"Having started as an in-house supplier, Components is now entirely responsible for the topic of batteries within the Group. Group Components shows how it's possible to transform from an underdog to an innovation driver – I'm proud of the hard work by colleagues that has made these essential steps in the transformation possible."

Thomas Schmall, CEO of Volkswagen Group Components

"Our Group Components is affected by the transformation like no other area – and it also stands for the successful transformation like no other area. That's down to the fact that, in Components, employees with top qualifications, courage, and team spirit meet an exemplary management culture under the leadership of Thomas Schmall, which carries everyone along. That's vital for the reorganization to be a success. Hats off!"

Bernd Osterloh, Chair of the Group Works Council

More News from Group Components

Introducing the new Transform Minds
The third round of Transform Minds has started with 30 new colleagues taking part. Under the motto "The Battle," they are developing ten projects relating to the transformation of Group Components. We introduce the new Transform Minds and their projects.

Components Team in China restructured
China is the Volkswagen Group's most important market. And Group Components also has a strong team on the ground there. You can find out how the central team around Frank Engel, the Executive Vice President of Components China, has been restructured and which projects our colleagues are driving forward there on the Components pages.

New Head of Business Area
Change at the helm of the Engine and Foundry business area: The previous Head Herbert Steiner became Seat's Vice President for Production and Logistics on November 1. His successor, Thoralf Hanschel, who is currently Head of Engine Production at Audi Hungaria in Győr, will start on December 1.

The entire Components edition of 360° is available at: https://bit.ly/31We6XT

[1] ID.3: power consumption in kWh/100 km (NEDC): 15.4–14.5 (combined), CO_2 emissions in g/km: 0; efficiency class: A+
[2] ID.4: power consumption (NEDC) in kWh/100km: combined 16.9–16.2; CO2 emissions in g/km: 0; efficiency class: A+

A Look at the Brands

Lab on Wheels: MAN Quickly Delivers Help

500 COVID tests can be administered a day

MAN Truck & Bus worked with healthcare experts to develop a unique, innovative diagnostics vehicle to quickly and safely test for SARS-CoV-2 infections in hotspots. The rolling laboratory is based on the MAN TGE van. With the ability for each vehicle to administer 500 tests a day, the rolling lab is perfect for deploying to conduct testing house calls for suspected infections, including at nursing homes, schools, businesses, and other organizations. The MAN Coronavirus Diagnostics Vehicle can even be used to target and interrupt chains of infection. When mobile equipment is needed, for example at border crossings along the Autobahn, the diagnostics vehicle gets the chance to show off another strength: its flexibility. In this way, testing capacity can be quickly relocated as required and deployed where needed. The mobile diagnostics vehicle is also digital. It allows four tasks to be completed as part of one continuous process: swabbing, testing, analyzing, and communicating. Test results are digitally sent to the laptop from the testing device in real time. This allows the mobile units to quickly report directly to the competent health authorities, officials, and patients themselves.

How AI Can Help You Find a Parking Spot

Camera analyzes images on factory premises

As part of its push to digitalize all of its corporate divisions, Skoda is relying more and more on artificial intelligence (AI) applications. At the Skoda FabLab, experts from Central Technical Service work in different clusters to develop and implement innovative technologies. The possibilities the future holds are demonstrated by image analysis technology. It is currently used to help identify and report vacant parking spaces on plant premises in Mladá Boleslav. In future, it could also be used to assist trucks in accessing the site. In Production, Skoda is also testing how image analysis can be used in Production for maintenance on different systems.

When images speak volumes: All the information is analyzed.

Plant Now Carbon-Neutral Thanks to Photovoltaics

Europe's largest solar panel setup at the Audi plant in Győr now up and running

Carbon-neutral: The Audi plant in Hungary is the second of five Audi locations to achieve carbon neutrality. To achieve this, Audi worked with E.ON Hungaria to get the largest rooftop photovoltaics array up and running. The location in Győr has relied on exclusively green electricity since the beginning of the year. Audi's Hungarian plant has been using a geothermal system to cover the majority of its heating needs since 2012. What remains is compensated for with biogas certificates.

Made of 150 Grams of Silver: The Bugatti Emblem

Made by hand

150 grams of sterling silver. Ever so finely shaped, a glistening enamel coating, and a 3D effect. Since the year the brand was founded, the Bugatti emblem, the Macaron, on the horseshoe radiator has served as a testament to the brand's exclusivity, luxury, design, and exceptional craftsmanship.

"Its inimitable quality, attention to detail, and even its weight demonstrate just how important the emblem still is for our brand today," says Stephan Winkelmann, President of Bugatti. "It is one of the few components in our vehicles where weight doesn't matter. We consider the solid, 970 sterling silver workmanship, which is incredibly high quality, especially given its size more important in this case than a lightweight component. The oval on the vehicle has transported the famous Bugatti name out into the world since our company's beginnings."

Crossed the finish line: the two Lamborghinis.

Rally: Two Old-Timers on a Long Journey

A 1,000-kilometer route

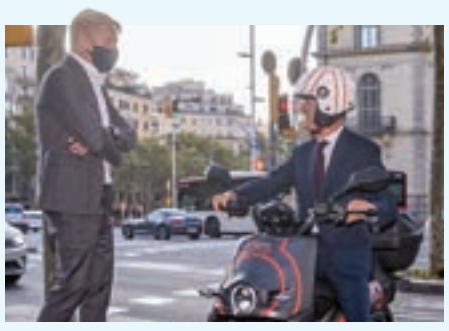
Automobili Lamborghini attended the 2020 Modena Cento Ore with two vehicles from its Mudetec technology museum: a Jarama GTS and a Countach 25° Anniversario. The event is considered one of the most attractive old-timer rallies in Italy, held this year for the 20th time. The anniversary route led participants from Rome to Modena. After 1,000 kilometers, a series of special tests and journeys along three racecourses, the two Lamborghinis arrived safely in Modena.

Barcelona: Herbert Diess Tests Electric Scooter

Group CEO praises "a perfect solution"

Huge praise for the Seat team: Group CEO Herbert Diess has now taken a test drive on one of the sharing service electric vehicles in Barcelona. More than 600 fully electric Seat MÓ scooters help residents and visitors get around Barcelona in an environmentally friendly way. The background on this development is that Barcelona implemented an extensive environmental zone early this year. Users of the motor sharing service can now move freely around the city, since the electric scooters are exempt from the traffic restrictions.

With a full charge, the electric scooters have a range of up to 125 kilometers. The batteries are also removable and interchangeable. On LinkedIn, Herbert Diess said of his test, "A perfect solution for discovering Barcelona, one of the cities with the most number of scooters in Europe, in an accessible, affordable, fun, quiet, and carbon-neutral way. The best mobility option for the pandemic!"



Friendly exchange: Seat CEO Wayne Griffiths and Herbert Diess.

Three New Panameras Launched

Range of electric hybrids extended

Porsche is completing its product range with three new Panamera models – the Panamera Turbo S E-Hybrid[1], the Panamera 4 E-Hybrid[2], and the Panamera 4S[3]. The new Panamera Turbo S E-Hybrid combines the four-liter V8 biturbo, 420 kW and 100 kW (136 bhp) electric engine – peak performance in this fully revamped model series. Porsche succeeded in enhancing its purely electric range by up to 30 percent with a new 17.9 kWh battery and optimized driving modes. The same is true of the new Panamera 4 E-Hybrid, featuring an electric engine that cooperates as before with a 243 kW, 2.9-liter V6 biturbo, resulting in a system output of 340 kW (462 bhp). The Panamera product portfolio is rounded off by the 4S, which delivers 324 kW and benefits from all the optimizations of the latest model update in terms of its chassis, design, equipment, and infotainment.

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[1]Panamera Turbo S E-Hybrid Executive: fuel consumption, combined: 2.8 L/100 km; CO_2 emissions, combined: 63 g/km; power consumption, combined: 22.7 kWh/100 km, energy efficiency class A+

[2]Panamera 4 E-Hybrid Sport Turismo: fuel consumption, combined: 2.3–2.2 L/100 km; CO_2 emissions, combined: 51–49 g/km; power consumption, combined: 18.2–17.5 kWh/100 km, energy efficiency class A+

[3]Panamera 4S: fuel consumption, combined: 9.2–8.8 L/100 km; CO_2 emissions, combined: 210–202 g/km, energy efficiency class D

China CEO Stephan Wöllenstein's Remarks on the World Premiere of the ID.4[1] in the Far East

Volkswagen hopes to become the number-one selling electric brand with the ID. family

With the launch of the ID.4, the ID. family has now celebrated its Chinese debut. Two variants of the first real electric SUV will shortly arrive on the Chinese market. What does that feel like?

Simply amazing. After all, we only launched our Move Forward strategy just three years ago. We prioritized design, expanding our product portfolio, especially our range of SUVs, digitalization, and electric mobility. The new ID.4 will be available in China as the ID.4 CROZZ[2] and the ID.4 X[2], combining all our Move Forward objectives. That's why the ID.4 models are such a game changer for us. Now is when the hard work done by the Volkswagen team here at Volkswagen Group China and its joint venture partners finally pays off: Our vision is becoming a reality.

Where is electric mobility in China heading for Volkswagen?

By the end of 2023, we want to launch a total of eight models from the ID. family on the Chinese market. Our goal is clear: We want to be the number-one electric vehicle provider. Exactly the way we already are for combustion engine vehicles and the SUV segment. And I know that we will get there with the ID. family.

And President Xi Jinping just announced a few weeks ago that China will reach peak CO_2 emissions before 2030 and that it hopes to achieve carbon neutrality by 2060.

This is a good indication that our decarbonization strategy is on the right track in China.

The issue of charging infrastructure is key to many potential electric customers thinking of making a purchase. What does the situation look like in China?

New: Stephan Wöllenstein with the new ID.4 CROZZ in front of a CAMS charging station. The battery is recharged up to 80 percent within 45 minutes.

China continues to be the world's largest market for electric cars, and is continuing to expand its lead in this regard. That's why it's so important for our customers to have access to reliable charging infrastructure. We have tested thousands of charging stations in China to ensure they are compatible with the new ID.4. But we're doing much more than that here at Volkswagen. We are working with our partners JAC, FAW, and Star Change to launch the CAMS joint venture for charging infrastructure. 40 super charging stations are already up and running. Our goal is to have 255 charging stations operational in more than 16 cities with more than 3600 charging points by the end of the year. These systems can recharge even our largest batteries to around 80 percent in under 45 minutes. I know our customers will appreciate this first-class service.

Herbert Diess Tests the Volkswagen Viloran[3]

Group CEO impressed with the comfort of the 5.31-meter-long van

Nothing's comfier: Group CEO Herbert Diess reclines in the Chinese Viloran prototype van. Did you say recline? That's right. Measuring 5.31 meters in length, the van features high-quality heated, ventilated seats with massager function, and has space for seven passengers. And for a car of its size, its consumption is economical. Those are just some of the special features built into the multi-purpose-vehicle (MPV), which is based on the modular transverse toolkit (MQB) and sold exclusively in China. Herbert Diess called it "the most comfortable chauffeured sedan you could imagine."

Traveling in comfort is hugely important to families and managers in China, unlike in Europe, where status is perhaps considered more important. According to Diess, "Our strength lies in the fact that we understand different regions – and we build the right cars for them. Congratulations to Stephan Wöllenstein and the SAIC Volkswagen team."

Travel in comfort: The 5.31-meter-long van has comfort built in.

Audi and FAW Found New Company to Produce Electric Vehicles

Memorandum of understanding signed

Audi is ramping up its operations in China. A key milestone on the path to becoming sustainable luxury mobility providers, Audi and FAW today signed a memorandum of understanding that sets out the framework for the joint production of electric vehicles based on the PPE platform. The agreement was signed as part of a German-Chinese automotive conference held in the northern Chinese city of Changchun. In future, Audi will even bring the premium platform electric (PPE), which was developed together with Porsche, to China to push ahead with transformation in this major market. Plans for multiple fully electric Audi models to be produced for the Chinese market using the new PPE platform starting in 2024 are underway.

"This decision underscores the strategic importance of the Chinese market. By taking this step, we are actively pushing ahead with local innovation here in China," says Markus Duesmann, AUDI AG Chair, who is also responsible for China.

By signing the memorandum of understanding, Audi is reinforcing its cooperation with its long-term joint venture partner, FAW. Audi is also consistently pursuing sustainable mobility approaches and is specifically focusing the local production portfolio on the needs and preferences of Chinese customers in the premium segment. The new cooperation company is currently in the planning stage. The first Audi should roll off the production line in 2024.

Audi is already running production at four locations in China with its partner.

Audi production in China: The new joint venture is another milestone in the company's electric strategy.

Werner Eichhorn, President of Audi China, says, "This is yet another milestone in our electrification strategy for the Chinese market. By signing this memorandum of understanding, we are reinforcing our commitment both to our long-term Chinese partner, FAW, as well as to China, which we are now taking to the next level."

Audi's electric offensive in China has already begun: Audi and FAW jointly produce the purely electric Q2L e-tron[4] and the A6L TFSIe[5] plug-in hybrid. In addition, production of the Audi e-tron[6] moved to Changchun in late September. Before then, the models had to be imported. Over the next few years, Audi will offer or localize more fully electric models from the e-tron family in China. By 2025, Audi hopes to generate around a third of its sales in China through electrified vehicles.

From January to September 2020, Audi delivered 512,081 vehicles to customers in China (+4.5 percent compared to the same period in the previous year). Despite the interruptions in production due to the coronavirus pandemic, the brand managed to achieve its best ever result in its 30-year history in China.

Audi is already running production as part of the FAW-Volkswagen joint venture at four locations in China – Changchun, Foshan, Tianjin, and Qingdao – with a total capacity of some 700,000 vehicles.

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[1] ID.4 1st: power consumption in kWh/100 km, combined: 16.9–16.2; CO_2 emissions in g/km: 0; efficiency class: A+ | [2] ID.4 CROZZ/ID.4 X: This vehicle is not sold in Europe | [3] Viloran: This vehicle is not sold in Europe | [4] Q2L e-tron: This vehicle is not sold in Europe | [5] Hybrid A6L TFSIe: This vehicle is not sold in Europe | [6] Audi e-tron: power consumption, combined in kWh/100 km: 24.2–21.4 (NEDC); 26.2–21.7 (WLTP), CO_2 emissions, combined in g/km: 0

Ralf Brandstätter: “We Can’t Stop Living Our Values”

In interview: What the brand CEO now aims to change – Why every Volkswagen employee can be proud of the new Golf

Major interview: Brand CEO Ralf Brandstätter on the success of the company’s corona measures, incoming orders for the new Golf, and the quality of Volkswagen products.

What’s currently driving you, Mr. Brandstätter?
Right now I have three priorities: leading the company through the coronavirus crisis with financial stability, successfully steering Volkswagen through the transformation, and systematically implementing the “Way to Zero” we’ve adopted. The situation is still very unstable, and accordingly challenging. I want to take this opportunity to thank all our colleagues keeping Volkswagen on course with such flexibility and commitment.

You mentioned the effects of the COVID-19 pandemic. Where does the company currently stand?
Volkswagen responded to the pandemic quickly and resolutely. We’ve done everything to protect the health of our employees. And we’ve reduced our expenses to the bare essentials, thus securing the company’s financial stability. Nevertheless, the peak phase of the pandemic thus far in the summer has left some deep scars. For weeks, we were unable to produce or sell any cars. In the period from January to September, we delivered almost 19 percent fewer vehicles than last year. As a result, our financial results also took a hit. Sales fell by €16 billion. We posted a loss of €1.5 billion in the first half of the year.

But has the situation improved in recent weeks?
International automotive markets have recently started picking up speed again. There have been favorable developments in our incoming orders. For example, we received more orders for the Golf in September than we’ve received since 2009. Now the emotional versions of the Golf family are finally available. And the ID.3[1] and ID.4[2] have also had a good start. So we’re seeing a small glimmer of light at the end of the tunnel, but the current infection rates show how unstable the situation is. The rapidly increasing number of cases really concerns me. Further lockdowns in important markets can’t be ruled out. Health protection and cost discipline remain top priorities. And we need to become much more robust overall.

What do you mean by that?
How well a company is positioned is especially easy to see during a crisis. Despite the strong impact of COVID-19 on deliveries to customers, we’ve even managed to slightly increase our market share worldwide. Volkswagen hasn’t fared badly so far, but many competitors are coping with the current situation a lot better than we are. So we can do even better.

How?
By jointly tackling our structural challenges with vigor, now. There are four crucial points for Volkswagen. First: We need to finally become profitable in the South America and North America region. The teams on site are doing a good job and have a plan, but now we have to implement it sustainably. Second: We need to further reduce our fixed costs. It’s one of the reasons why the current “level freeze” is so important when it comes to increasing personnel in the administrative divisions. Third: We need to increase our productivity. Volkswagen sells its products worldwide, and has to stand up to the competition. High productivity ensures sales and makes the jobs in our company future-proof. And fourth: We need to keep an eye on margins. Volume won’t help us if it doesn’t make us money. Every car we build needs to contribute to the success of the company. If we can make progress together on these points, Volkswagen will not only be more crisis-proof, but also much more future-proof.

Focus on quality: Brand CEO Ralf Brandstätter wants to see more value again.

Speaking of the future: Will you stick to the Volkswagen 2025+ strategy?
By all means! The 2025+ strategy is our grasp on and handbook for the future. But in difficult times, you also have to react flexibly. We must take into account that important framework conditions have changed in recent years. Digitalization, for example, has reached a level that has turned many business models completely upside down. The issues of sustainability and climate protection are becoming increasingly important for society. Politicians in Europe are reacting to this by, among other things, tightening up CO_2 targets. The European Parliament only recently significantly tightened the climate targets for Europe with the Green Deal. We have to reduce our CO_2 emissions in Europe by 60 percent by 2030. The original target was 40 percent. It’s a huge challenge. We’re now adapting our 2025+ corporate strategy to these altered conditions and are aligning our compass accordingly. We’re therefore working intensively on Strategy 2030.

You recently said in a speech to management that you aim to reunite product substance and brand promise at all levels. What do you mean by that?
Volkswagen is a strong brand. Our positioning is “top of volume.” That means, for example, that we bring innovations from the premium class to volume. We expect customers to pay a certain extra price for this. Our task is to provide them with the corresponding added value – for the entire product experience. In addition to outstanding handling and cutting-edge technology, Volkswagen has always stood for a premium interior and quality. It’s how we’ve stayed ahead of the competition. In my opinion, we haven’t always lived up to this brand promise in some areas in recent years. We continue to build cars that drive sensationally and set technical standards. We’ve also made major investments in digital innovations – such as large displays and the ID. Light. But we’ve neglected value in the interior a bit. Hard plastic may be cheap, but it isn’t nice to look at or touch. I know that many colleagues at Volkswagen would like to see more value here again. I feel exactly the same way. We can’t stop living our Volkswagen values. That’s why we’re tackling this now.

> “Now we’re going to let the Golf shine the way it deserves.”
>
> **Ralf Brandstätter**

What does that mean, specifically?
Our new Chief Designer Jozef Kabaň, the product lines, and I have regular exchanges. We were able to implement some changes in the ID.4 at short notice. I think the results are impressive. However, our measures are only really going to become visible in things like the product upgrade of the T-Roc. We’re also on the right track with the successor models to the Passat and Tiguan. With these cars, we show that a premium appearance doesn’t necessarily have to cost more and more money. Overall, I think more simplicity would do us good. We don’t need 150 new aluminum wheels and dozens of new seat fabrics every year. Sometimes less is more. We should stick to that. We do less – but what we do, we do really well. By the way, that shouldn’t just apply to Design, but to all Volkswagen divisions.

Fully electric into the future of the Volkswagen brand: Ralf Brandstätter on a test drive in the ID.3.

The market launch of the Golf 8 was also quite a headache for you and many others. Where is the car at right now?
The Golf is a sensational vehicle, even in its eighth generation. And every Volkswagen employee, especially in Wolfsburg, can be proud of this car. Not only is it really good-looking and highly emotionalized, it’s also a technical benchmark in its segment. There’s a reason why it keeps winning one test after another in the automotive trade media. Of course, the Golf hasn’t had it easy. Because of COVID, we had to pause the market launch at a very early stage. By now, however, the car has arrived in all important markets. And the important versions like the GTI[3], GTD[4], GTE[5], TGI[6], Variant, and R[7] will also be available by the end of the year. Our icon, the GTI, is especially popular with our customers. Even if it didn’t run smoothly from the beginning – this phase is behind us. Now we’re going to let the Golf shine the way it deserves.

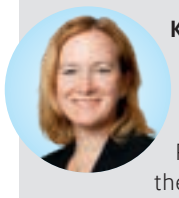
With the ID.3 and ID.4, Volkswagen presented the first two fully electric, MEB-based vehicles this year. Are you satisfied with the feedback so far?
Both cars are being received really well. We’re getting great feedback from journalists, dealers and customers. No other model received more media coverage worldwide in September than the ID.4, which shows once again how much the entire industry is looking to Volkswagen. We all need to be more aware of what it is we’re getting off the ground together. What’s happening right now is the greatest transformation in the automotive industry in 100 years. And Volkswagen is at the forefront of the movement. What we’ve achieved in the brand with the development of the MEB isn’t just the development of a platform, but a life insurance policy for the Volkswagen Group. Dozens of fully electric models will be produced throughout the Group on this basis. We at Volkswagen can be very proud of this accomplishment.

Last question: Is there anything else you want to tell the Volkswagen team?
First of all, it’s very important to me that all colleagues stay healthy. I would therefore urge everyone to stay mindful and disciplined. Please continue to keep your distance, wear your mask and observe the hygiene rules – on and off plant premises. I would also ask everyone not to lose patience with Volkswagen. I know from my own experience that it’s annoying when the newspapers and magazines print negative reports about Volkswagen, or friends ask what’s going on here. But I also know that Volkswagen is a really strong company with a top-class team. In more than 30 years with Volkswagen, I’ve experienced that again and again.

mp

[1] ID.3 Pro Performance, 150 kW/combined power consumption in kWh/100 km: 16.9–15.4 (WLTP); 15.4–14.5 (NEDC); combined CO_2 emissions in g/km: 0; efficiency class: A+; ID.3 Pro S, 150 kW/combined power consumption in kWh/100 km: 17.7–15.9 (WLTP); 14.1–13.5 (NEDC); combined CO_2 emissions in g/km: 0; efficiency class: A+ | [2] ID.4 1st: power consumption in kWh/100 km: combined 16.9–16.2; CO_2 emissions in g/km: 0; efficiency class: A+; ID.4 Pro Performance, 150 kW/combined power consumption (NEDC) in kWh/100 km: 16.9–16.2; combined CO_2 emissions in g/km: 0; efficiency class: A+; ID.4 1st Max – power consumption (NEDC) in kWh/100 km: 16.2; CO_2 emissions in g/km: 0; efficiency class: A+ [3] Golf GTI (NEDC) fuel consumption in l/100 km: urban 8.6, extra-urban 5.3, combined 6.5; CO_2 emissions in g/km (combined): 149; efficiency class: C | [4] Golf GTD (NEDC) fuel consumption in l/100 km: urban 5.4, extra-urban 3.9, combined 4.4; CO_2 emissions in g/km (combined): 117; efficiency class: A | [5] Golf GTE – (NEDC) fuel consumption in l/100 km: combined 1.7; power consumption in kWh/100 km: combined 12.4; CO_2 emissions combined in g/km: 38; efficiency class: A+ | [6] Golf TGI – 96 kW/130 bhp fuel consumption (NEDC) natural gas (CNG) in kg/100 km: urban 4.4/extra-urban 3.1–2.9/combined 3.6–3.5; CO_2 emissions in g/km: 98–95; efficiency class: A+ | [7] Golf R: Near-production-ready concept car

Names & News



Kerstin Scholz, previously HR Manager at Volkswagen Navarra, took over as Head of Production Strategy at the Volkswagen brand on October 1. Scholz succeeds Dr. Robert Cisek, who has been appointed Chairman and Managing Director of Volkswagen Group South Africa. She joined Volkswagen 21 years ago, and during that time has been responsible for HR administrative areas and established Group Management Development for the HR division.

Volkswagen Invests in Automation

The Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands are continuing to work at full speed on the transformation into the age of electric mobility and on the conversion of their plants to e-mobility. The Volkswagen brand has now ordered more than 1,400 robots from the Japanese manufacturer FANUC for the assembly plants in Chattanooga (USA) and Emden. VWCV has ordered a further 800 robots from the Swiss manufacturer ABB for the Hanover location. The robots will mainly be used in body construction and battery assembly. The three plants are currently being prepared for the production of electric cars with cutting-edge assembly lines: From 2022, the ID.4[1] will roll off the production lines in Chattanooga (USA) and in Emden, and the model known by the concept car name ID. BUZZ[2] will be produced in Hanover.

Christian Vollmer, Head of Production

Christian Vollmer, Volkswagen Board Member responsible for Production and Logistics: "In Emden and Chattanooga we're establishing two of the most cutting-edge assembly facilities in the auto industry as part of the transformation to electric mobility. And in these times, we're also investing in the latest technologies such as digitalization and automation."

Transformation: More than 2,200 new robots have been ordered for the production of electric cars.

The ID. BUZZ will be produced in the VWCV plant in Hanover from 2022. "Our conversion measures are right on schedule," says Josef Baumert, Board Member responsible for Production and Logistics at VWCV. "By the time the ID. BUZZ goes into production, we will have completed the current modernization of our Hanover plant, from which all subsequent models at the location will also benefit."

The Group is planning to make investments totaling €33 billion by 2024, with the aim of becoming the global market leader in electric mobility. Of that, several billion euros are going into the three plants mentioned above.

Designers' jobs are becoming more digital and climate-friendly: Marco Pavone, Head of Exterior Design Volkswagen, next to an 18-meter-long LED wall in the Wolfsburg Design Center.

Designers Go Even More Digital

In the age of COVID-19: Increased use of online meetings, data glasses, and an 18-meter-long LED wall

Marco Pavone was a frequent flier until recently. "It was clear to us that it's better to discuss important decisions face to face. Design depends on me looking at shapes from the same perspective and being able to show changes," says the Head of Exterior Design at the Volkswagen brand.

Then came the coronavirus epidemic, and business travel was put on hold. Since then, the designers have learned to replace a large percentage of those trips with online meetings. The technology available has been improved. This is one of many examples showing how Volkswagen is becoming a more digital and sustainable company during the pandemic.

Only a small number of colleagues are there waiting for Pavone in the large presentation hall in the Wolfsburg Design Center in the mornings these days – but there is an 18-meter-long LED wall. Colleagues from China and Brazil, who would usually have travelled all the way, now join in online.

Details can be seen in razor-sharp focus on the LED wall

Pavone is presenting the virtual model of a new vehicle. He explains what his team has changed since the last meeting and why. He can even show details in razor-sharp focus on the video wall – almost like on a real car. "We know that we can trust the technology," says Pavone.

The digital formats not only make it possible for employees to work together during the pandemic – they're also better for the environment. "I made 13 business trips by plane last year," says Pavone. That's about 133,000 kilometers and 50 tons of CO_2 emissions. Online meetings may also result in a certain level of power consumption and CO_2 emissions, but the environmental footprint is significantly lower than when attending meetings on other continents.

One thing that really helped the designers was the fact that they had already digitalized a number of work steps before the outbreak of the pandemic. For example, designers, engineers and other development partners work together in virtual reality using data glasses. And the use of plasticine models had already been reduced dramatically before the beginning of coronavirus crisis. That change resulted in millions of euros in savings.

The first concept car ever to be designed entirely virtually and without the intermediate step of plasticine models will be presented at a trade show next year. "The 3D world almost feels like reality. We wouldn't have thought that to be possible before," says Pavone.
The designers are keen to continue using these new digital possibilities after the pandemic. There's no going back – the time, money, and emissions savings are too great. "I expect that we'll have a mixture of virtual meetings and some face-to-face meetings," explains Pavone. That's something he's looking forward to. "After all, we are human."

Would it be possible to do without such encounters long-term? Pavone shakes his head. He says, "The digital possibilities are incredible – but you can still miss a mistake. Perfect design is only possible when we also get to see the model outside in sunlight, in the real world. After all, the car will be driving around on real roads later – not on a screen."

Historian: "The Golf Is Good at Transformation"

Ingo Köhler from the Humboldt University of Berlin talks about the diversity of the Golf and its enduring appeal

Ingo Köhler is an economic and business historian at the Humboldt University of Berlin. In his book Auto-Identitäten (Auto-Identities), he explores the product and marketing strategies employed by car companies since 1965. Köhler is a die-hard motorhead and his first car was a Golf I LX.

Transformation, new software architecture, and now the coronavirus crisis. How do you, as a historian, view the situation of the eighth Golf generation?
No two crises are the same, of course. As historians, we're not prophets who can reliably predict the future. Rather, our job is to research and compare historic constellations. And on that point I have to say, the Golf is good at transformation.

What do you mean exactly?
The Golf is a child of the great transformation of 1974. The company had held on to the Beetle for far too long. With the Passat, Scirocco, Golf, and Polo, it was then possible to finally provide cars for all tastes and budgets in various segments.

And the Golf?
As the successor to the Beetle, the Golf represented the core of the new product strategy. The success of the model has been put down to the company's courage in breaking with conventions. The Golf's design was incredibly striking and angular. The outdated rear engine was moved to the front and water cooling replaced air cooling. And ultimately, Volkswagen was also a little lucky that their products really resonated with the spirit of the time.

Was the Golf the car of the middle-ground in the late 1970s?
Yes, that's exactly where the Golf was positioned. A complete all-rounder that met every user expectation all the way up to the sporty GTI version – an all-in-one machine guaranteed to fulfil the requirements. The Golf segment has hardly lost any of its reference function. Through market research we know that lifestyle and social milieu have become increasingly important since the 1980s: "Tell me who you are – and I'll tell you what you drive," so to speak. Only that with the Golf class, the buyers are spread across all social strata and milieus.

Historian Ingo Köhler: The Golf is a "complete all-rounder."

Once a Golf, always a Golf?
The compact car seems to inspire great loyalty. Golf owners often stick to the basic concept, but vary things when it comes to features and engines. However, this continuity in transformation is only made possible by a growing number of variants. Back in the 1970s, Volkswagen was successful with a spectrum that ranged from the small diesel to the sporty GTI. The Golf has repeatedly shed its skin with customers, while always remaining true to itself.

Share your view of the future for the eighth Golf generation.
The Golf imparts a sense of security that you basically can't go wrong when you buy one. It's this image as a perpetual modern classic among all-in-one cars that has made it the success it is. However, it remains to be seen whether e-mobility and the SUV boom leave enough room for the Golf. The model will certainly face major challenges in integrating new requirements.

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[1] ID.4: power consumption (NEDC) in kWh/100 km: combined 16.9–16.2; CO_2 emissions in g/km: 0; efficiency class: A+
[2] ID. BUZZ – concept car

The Story Behind the Functions Pilot Hall

New idea: Close communication between areas right from the start of new projects – Development and Production involved

Are all the planned customer functions included in the vehicle in time as projected, or are further updates required? Until recently, these questions were discussed with all business areas on new vehicle projects with the start of Pilot Hall Discussions.

But now, under the leadership of Jörg Grandt and Thomas Maier, a new idea has been developed: Top Functions Discussions are now held under the leadership of Technical Development at the beginning of a project, at the Product Mission project milestone. This means that all participants get together at a very early stage. Then, at the Procurement Approval milestone, Production takes over responsibility and continues the process as the Functions Pilot Hall. This provides greater transparency at a far earlier stage for all business areas. Werner Meyer (Production) and Detlef Aufdermauer (Technical Development) explain how that works and what the advantages are.

Succeeding together: (from left) Jörg Grandt, Thomas Maier, Detlef Aufdermauer, and Werner Meyer.

"It's great when the two areas work together on a project to bring Volkswagen as a whole forward."

Jörg Grandt

What are the Top Functions Discussions and the Functions Pilot Halls all about?

Meyer: In the area of Project and Launch Management, we're constantly working on improving vehicle launches. Technical complexity has to be kept under control for a good launch. And the interaction between the hardware and software utilized in the vehicle is a crucial factor in that. Two aspects are relevant here: The components and functions that are experienced by the end customer, and the technology for production.

What functions do you focus on in these discussions?

Aufdermauer: Our aim is to ensure that all the functions of an electronic architecture – such as in a toolkit – are compatible and work together. We then put the finished functions in a kind of "warehouse," from which the individual vehicle projects can help themselves and take whatever they need.

Together with Development, Procurement, Quality Assurance, and Production, we develop technical components and functions for our three MQB toolkits.

Can you give us an example?

Meyer: The first Top Functions Discussion was about the successors to the Tiguan and the Passat. The Tiguan takes, metaphorically speaking, all the functions from the warehouse offering that it wants to implement for the end customer and production: for example, the lane assist function, and anything required for production such as error detection software.

Then, in the Top Functions Discussions, all the participants check whether the required software and hardware are included in the schedule. If any problems are discovered, the participants vote on corrective measures. Influences on development progress are discussed at an early stage, as are effects on production.

"This committee is an important instrument for getting our products to the end customer more quickly and smoothly." **Thomas Maier**

Aufdermauer: Bringing together all the participants in the Top Functions Discussions saves time and money. It means that everyone is aware of the requirements for their partners, not just their own. Problems are identified at an early stage and are addressed directly with the person in charge. All business areas gain a shared view of the current project status of the functions.

The basis for the Top Functions Discussion includes – if we look at the example of the MQB baseline – the daily consultations in the digital café of the TD project center, and the weekly technical discussions in Technical Development.

What concrete advantage does that offer the Volkswagen brand?

Meyer: The action field of start-up excellence is a component of production strategy. This is where we've considered which lever we need to push to become better holistically. Now, through the cross-divisional and anticipatory work, we are all pulling together far earlier and have a shared knowledge base. That takes the pressure off everyone involved and also has a positive impact financially. As a result, the requirements of Production are introduced at an early stage and last-minute changes can be avoided. The start-up process of the vehicles also comes into clearer focus through the vehicle-independent Functions Pilot Hall.

Read the full interview in Volkswagen Net

Brazil: Toys and Food Donated

Employees at the Curitiba and Taubaté plants support children and their families

Feeling a strong sense of solidarity, the workforce at the plants in Curitiba and Taubaté in Brazil recently carried out two charitable collections, resulting in more than 6,000 toys and around 10 tons of food being donated.

It was International Children's Day that inspired the team from São José dos Pinhais in Curitiba to do something to help disadvantaged children from the region, while the Production team from the Taubaté plant collected food for around 1,400 local families who are suffering as a result of the pandemic. Both campaigns were held under strict adherence to hygiene rules.

"Our team showed great enthusiasm as well as lots of empathy and commitment," said the Curitiba Plant Manager Leandro Lemos de Oliveira about the toy collection.

"The world is going through a difficult time and we are all learning the real meaning of the words 'solidarity' and 'charity.' At Volkswagen Taubaté, '**WIRstattICH**' (WeNotI) is part of the culture, and our social initiative shows how committed our team is," explained Plant Manager Vilque Rojas from Taubaté.

The First Commissioning Robot

In the Bratislava plant: Machine lifts 250-kilo transmissions

The Bratislava plant in Slovakia produces vehicles for several Group brands. Until recently, the commissioning of the transmissions for the SUV models Audi Q8, Audi Q7, and Volkswagen Touareg was done manually. A logistics employee would take the transmission weighing between 200 and 250 kilos from a container using a manipulator and pre-commission it on a just-in-sequence trolley. This task is now carried out by a robot.

It is the first fully automated commissioning process of its kind. This is made possible by the dynamic and fully automated feeding of the material to the robot and the interplay of sophisticated technical solutions.

The new commissioning robot is free standing in the room and can be moved slightly at any time, which makes it flexible and location-independent. That is possible because of the dynamic positioning of the material using driverless transport systems around the robot.

Alongside the dynamic positioning, the system also features an innovative safety concept. LiDAR sensors, which are normally used in driverless cars to ensure a safe and collision-free journey, monitor the robot's entire work area. This allows for safe operation without the use of conventional safety technology.

A multifunction gripper specially designed for this system takes the component without precisely positioning or centering the container. That is made possible by the 3D camera installed there and the sensitive protective skin fixed on the outside of the gripper. When touched, this functions like an emergency stop button, which in combination with the LiDAR sensors allows the system to operate without need of further safety housing for the robot.

Two years of research on highly automated commissioning solutions: Patrick Schmett from Planning at the Volkswagen brand.

360° November 2020

Hybrids Put to the Test: On Tour With the Touareg

Product consultant Bram den Dunnen accompanies journalists on a test drive in the large SUV

Historical backdrop: Bram den Dunnen with the Touareg eHybrid in Nörten-Hardenberg.

Volkswagen is electrifying the Touareg. Media representatives currently have the opportunity to test drive the new hybrid models – the Touareg eHybrid and Touareg R – during an international driving event for journalists. The event in Nörten-Hardenberg (southern Lower Saxony) will see Volkswagen experts such as product consultant Bram den Dunnen showcase the new vehicles.

Electrical range of around 47 kilometers

"Even with the Touareg, we are pursuing our electrification strategy and will offer two plug-in hybrids in the future: the Touareg eHybrid with 280 kW system power for customers who prioritize comfort, and the 340 kW top Touareg R model for the sporty, ambitious drivers," den Dunnen explains. According to the product consultant, "Both vehicles have an electric range of around 47 kilometers, which means they cover around 90 percent of all daily car journeys in Germany – powered exclusively by electricity."

The interaction between the electric motor and the six-cylinder turbo gas engine supports the predictive hybrid strategy, which is possible when the navigation system actively guides the driver to their destination. Den Dunnen notes: "Both Touareg vehicles use GPS and map data to achieve economical fuel consumption values, even over medium and long distances. To this end, the system integrates the topography, route data, and destination area into the route calculation so that the Touareg eHybrid and Touareg R can achieve total ranges of up to 810 kilometers."

As for the interior, special features include both vehicles being equipped with the "Innovision Cockpit" as standard. According to product consultant den Dunnen, "It comprises the "Digital Cockpit" complete with a 12-inch screen and "Discover Premium" infotainment system display with a 15-inch touch screen." What's more, both hybrids also feature a panoramic sunroof and four-zone air conditioning as standard. "As with all other current Touareg models, the electrified SUVs have a touch steering wheel and optional automatic parking – even via smartphone, without the driver being in the car," enthuses Bram den Dunnen.

Interior: the "Innovision Cockpit" in the Touareg eHybrid.

Touareg hybrids: Towing capacity of up to three and a half tons

As if all this weren't enough, the "Trailer Assist" function means both models can also park a trailer almost automatically in reverse. And as for the optional "Travel Assist," this makes assisted driving in the Touareg possible for the first time up to a speed of 250 km/h.

One of the product expert's personal highlights is that the "Touareg eHybrid and Touareg R are approved to tow trailers weighing up to three and a half tons, which means that they can be used for the same applications as their combustion engine counterparts."

> "We are also pursuing our electrification strategy with the Touareg and will offer two plug-in hybrids in the future."
>
> Bram den Dunnen, Product Consultant

For sporty, ambitious drivers: the Touareg R with 340 kW.

Compact SUV: the new Volkswagen Taos[6]

Taos: New SUV for America

Volkswagen of America recently celebrated the premiere of the Taos. The vehicle is part of the SUV offensive launched back in 2017. In terms of how it looks, the new compact SUV is largely characterized by its front end complete with LED light signature and the striking side profile with its strong character line.

The Taos will be available in eight colors, with four-wheel designs and the latest connectivity and infotainment technology. The configurable "Volkswagen Digital Cockpit" tool comes as standard, as does "Car-Net" with Wi-Fi functionality. The SUV is powered by a 1.5-liter version of the EA211 turbo-charged four-cylinder engine.

The vehicles for the North American market are produced in Puebla, Mexico. The Taos for South America comes from the Volkswagen plant in Pacheco, Argentina.

Incidentally, the compact SUV segment, which also includes the Taos, is the largest US vehicle segment in 2019, with four million vehicles sold and a 24 percent market share.

The Taos: part of the SUV offensive.

Katja Jimenez Talks Journalists Through the Tiguan

Driving event for media representatives: Product expert knows all the advantages of product enhancement – "The car is greater than ever"

Electrified, digitalized, networked: Introducing the new Tiguan. International journalists currently have the opportunity to test the product upgrade (PU) of Europe's most successful SUV of 2019 in Wolfsburg, with experts on hand to answer any questions about the vehicle. One of these experts is Katja Jimenez, who is responsible for the Tiguan PU in the Compact series.

According to Jimenez, "When it comes to product upgrades, it is particularly important for me that the vehicle clearly looks new from the first glance. In this respect, the Tiguan PU has hit the mark perfectly. Thanks to the completely new front end with a striking bumper, wide radiator grille, and optional IQ. Light LED matrix headlights, the vehicle has been given a complete facelift."

Going forward, the Tiguan can also be electrified on request. Product expert Jimenez adds, "I think it's great that the PU is now also available as a plug-in-hybrid[4], as this allows us to offer our customers a bridge toward e-mobility.

Wolfsburg: Katja Jimenez with the new Tiguan.

In my day-to-day life, I cover short distances like my commute to work purely electrically, so I only use the conventional drive to visit relatives who live far away." The Tiguan PU offers even more efficient combustion engines than its predecessor.

Digital: The new Tiguan with the latest generation of the Modular Infotainment Toolkit.

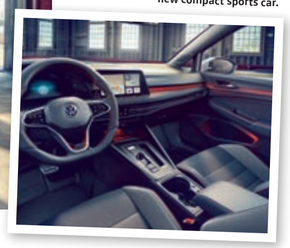
Katja Jimenez reveals: "In the TDI, for example, we use twin-dosing technology, a dual SCR catalytic converter system that efficiently reduces nitrogen oxides. The TSI[5] also ticks the boxes with its temporary cylinder cut-off, which can help to reduce fuel consumption. With these new drive concepts, the Tiguan will also make an important contribution to achieving our CO_2 targets going forward."

Even the interior has some new features, as Jimenez shares: "The PU includes the latest generation of the Modular Infotainment Kit (MIB 3) and a new climate control panel with touchscreen module. The optional Travel Assist is also a new feature in the Tiguan. The assistance system enables assisted braking, steering, and acceleration within the system limits at the touch of a button."

"The car is greater than ever."

All things considered, Tiguan expert Katja Jimenez has no doubt that "the car is greater than ever and I couldn't be happier to present it to journalists now. The last project phase was particularly exciting: In addition to the usual ramp-up challenges, we also had to contend with the approval of 16 engine-transmission variants in many different countries around the world, each with their own regulations. This was a real tour de force that we successfully overcame thanks to an incredible team effort."

Sporty: the new Golf GTI Clubsport[7].



Digitalized: a peek inside the new compact sports car.

World Premiere: The New Golf GTI Clubsport

The most powerful model in the current GTI generation with 221 kW (300 bhp)

Volkswagen presents the new Golf GTI Clubsport – a modern, compact sports car that impresses with not only its exceptional engine performance but also a new level of driving dynamics. The front-wheel drive vehicle features a 221 kW (300 bhp) turbo engine with 400 Nm of torque and a new driving dynamics manager that networks the control of the electronic differential locks (XDS) and the lateral dynamic components of the optional electronic damper control DCC. In the new Golf GTI Clubsport, the standard electro-mechanical front axle differential lock is now also integrated into the network of the vehicle dynamics manager for the first time.

Its individualized front end really is striking with its honeycomb radiator grille trim typical of the GTI models, enlarged aerodynamic wings, and a bumper that appears to be virtually open at the bottom.

Moving back to the rear, the vehicle has a two-part roof-edge spoiler, which is only used on the Golf GTI Clubsport to clearly set it apart. The front spoiler and rear wing are much more than design features – they actually serve to significantly increase the downforce of the sports car.

mp

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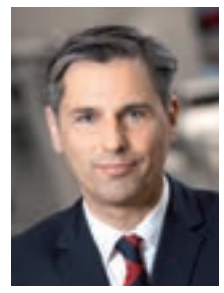
[1] Touareg eHybrid (280 kW/381 bhp system output) fuel consumption (NEDC) in L/100 km, combined: 2.7; power consumption, kWh/100 km: combined 21.1; CO_2 emissions, g/km: combined: 61; efficiency class: A+ | [2] Touareg eHybrid (340 kW/462 bhp system output) fuel consumption (NEDC) in L/100 km, combined: 3.0–2.8; power consumption, kWh/100 km: combined 19.9–19.5; CO_2 emissions, g/km: combined: 69–63; efficiency class: A+ | [3] Tiguan 2.0 TDI, 110 kW DSG 4MOTION / fuel consumption (NEDC) in L/100 km: urban 5.8–5.6 / extra-urban 4.8–4.5 / combined 5.1–4.9; CO_2 emissions in g/km: 135–129 (combined), efficiency class: A | [4] Tiguan eHybrid: The vehicle is a near-production-ready concept car. | [5] Tiguan 1.5 TSI, 110 kW DSG / fuel consumption (NEDC) in L/100 km: urban 6.6–6.5 / extra-urban 5.5–5.2 / combined 5.9–5.7; CO_2 emissions in g/km: 135–130 (combined), efficiency class: B | [6] Taos: This vehicle is not on sale in Europe. | [7] Golf GTI Clubsport: The vehicle is a near-production-ready concept car.

New Golf[1] and ID.3[2] Clean Up at the "German Car of the Year" Awards

Car of the year 2021: German automotive journalists tested 72 models in five categories

What does Germany consider to be the car of the year for 2021? 18 renowned automotive journalists from all over Germany meet once a year in Bad Dürkheim (Rhineland-Palatinate) to find out the answer. The jury deciding on the "German Car of the Year" recently decided in favor of Volkswagen on two occasions: The eighth-generation Golf and the fully electric ID.3 both came out on top in their respective classes.

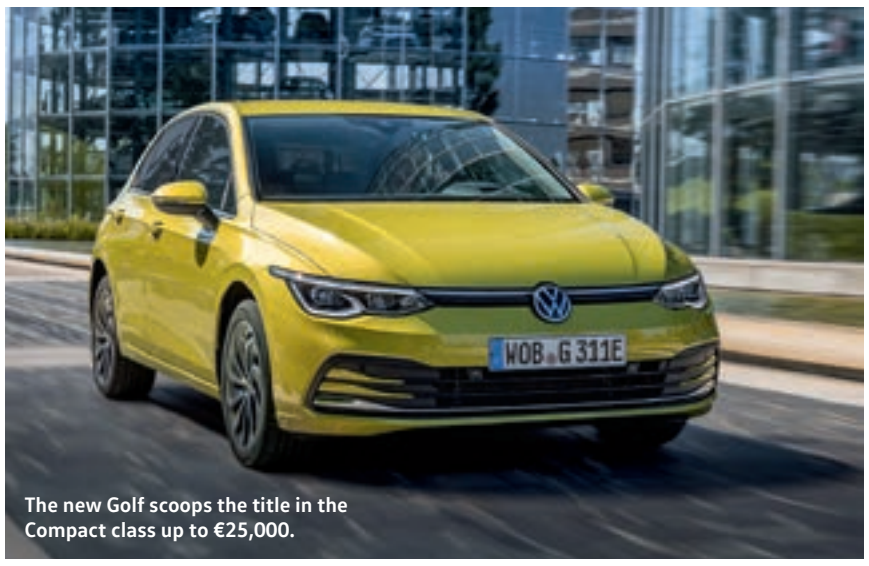
The jury had 72 innovations to choose from, broken down into five categories: compact cars up to a basic price of 25,000 euros (Compact), premium models up to a basic price of 50,000 euros (Premium), more expensive vehicles in the luxury segment (Luxury), those with alternative drives (New Energy), and sports cars (Performance). "Both the new Golf and the ID.3 impressed our jurors in their respective segments, and against very strong competition at that," reveals co-organizer Jens Meiners, who reports for German and American trade media.



Sales Director Klaus Zellmer

Klaus Zellmer, Sales Director for Volkswagen, was delighted with the verdict from the trade journalists: "The new Golf and ID.3 have already come out on top in a number of relevant comparative tests. The fact that both top models were awarded by the jury for their environmental friendliness and innovations in particular is a great sign for all of us at Volkswagen that we're doing something right."

Zellmer went on to add: "Environmental friendliness and innovation really are the most important building blocks on our 'Way to Zero' with the aim of making emission-free mobility available for everyone. The Golf, with its highly efficient engines, plays just as important a role in the transformation phase as the fully electric ID.3, which is already climate-neutral."



The new Golf scoops the title in the Compact class up to €25,000.

Best car in the Premium segment up to €50,000: the ID.3.

mp

[1] Golf eHybrid – (NEDC) fuel consumption in l/100 km: combined 1.4–1.2; power consumption in kW/h/100 km: combined 11.6–11.0; CO_2emissions combined in g/km: 31–28; efficiency class: A+
[2] ID.3: power consumption in kWh/100 km (NEDC): 15.4–14.5 (combined), CO_2 emissions in g/km: 0; efficiency class: A+

Dresden leading by example: Volkswagen also extended its cooperation with Dynamo, the third-league soccer team. The logos show which teams are also still involved.

On Location: Nine Clubs Supported by Volkswagen

From Braunschweig to Dresden and Zwickau to Osnabrück and Emden: The company extends its contracts

Volkswagen is set to continue its cooperation with the most traditional and generally highest ranking soccer clubs across its locations. The expired contracts with Eintracht Braunschweig, VfL Osnabrück (2nd division), Dynamo Dresden, FSV Zwickau (3rd division), Chemnitzer FC, Hessen Kassel (regional league), KSV Baunatal and Kickers Emden (Oberliga) have each been extended by one year. At the company's headquarters in Wolfsburg, support is also granted to fifth-league side Lupo Martini, which was the first soccer club in Germany to be founded by former migrant workers. And, as everyone knows, Volkswagen has been an ardent supporter of VfL Wolfsburg since the club was founded back in 1945. The professional division for the "Wolves" has been a 100% Volkswagen subsidiary for many years now.

It is by supporting soccer clubs across its plant locations that Volkswagen aims to fulfil its social responsibility objectives. At the heart of the partnerships lie the youth sections, which are provided with one or more minibuses. For the Volkswagen workforce, the clubs and the communal activities they engage in contribute to a real sense of identification with each respective location. Last season, for example, a number of Volkswagen employees had the opportunity to let their children enter the stadium hand in hand with the pros at a VfL Osnabrück home game. Meanwhile, over in Dresden, the Transparent Factory took part in the "Love Dynamo – Hate Racism" campaign day and invited coach Markus Kauczinski to help with the production of the e-Golf.

Sponsoring local clubs is all part of the wider football strategy at Volkswagen. In Germany, the company is committed to supporting the German Soccer Association, the DFB-Pokal competition, young soccer players, and cultural projects in soccer. The car manufacturer lives and breathes its motto of "Soccer is for all of us" to express its support for soccer at every level – from the grassroots right to the top.

ID.3[1]: National Team Coach Launches Pilot Series in Dresden

Jogi Löw joins the many others now on the road in the new electric vehicle from Volkswagen

Introducing Joachim Löw as you've never seen him before: The Volkswagen brand ambassador has launched pilot-series production of the all-electric ID.3 at the Transparent Factory in Dresden. Together with Thomas Ulbrich, Board Member for Electric Mobility at Volkswagen, and Dresden site manager Danny Auerswald, Löw placed the first pilot-series ID.3 on the assembly line at the unusual production facility, which not only stands out for its open and transparent architecture, but is also used as a start-up incubator and a venue for concerts, readings, and congresses.

"I have always been fascinated by technical innovations. But e-mobility is something else: it represents a revolutionary kind of progress for not only the environment, but also society as a whole," enthuses Löw. For the national coach, the visit was a first: "I have been to the stadium in Dresden several times, but never to the Transparent Factory. It's so exciting to see how Volkswagen is driving change at this location, too."

But actions speak louder than words for Joachim Löw, who is keen to actively lead – or rather, drive – the mobility turnaround rather than simply talk about it. This is why he himself will be driving a manganese-gray metallic ID.3 going forward. Over in Dresden, Volkswagen E-mobility Director Ulbrich introduced Löw to his new company car. "While I was in Berlin for the Cup final last year, I had the opportunity to test drive an ID.3, which was still in development at the time. This is when I had my first taste of what it means to be on the road electrically, and now I'm intrigued to see how the vehicle will fit into my everyday life," shares Löw, revealing that he already has a Volkswagen wallbox installed at his home.

Volkswagen currently produces the ID.3 models exclusively at the Zwickau site. After a short conversion phase in the Transparent Factory, series production of the ID.3 is also set to start in Dresden from February 2021.

Löw sneaks a selfie in front of the Frauenkirche in the center of Dresden.

Guided tour through the Transparent Factory: Joachim Löw (center) with Thomas Ulbrich (right) and Danny Auerswald.

Zipping around: the national soccer coach in the ID.3.

Daniel Thioune with the prize figurine.

Quote of the Year by Daniel Thioune

> ***Those who aren't able to pick up points against HSV shouldn't try to gain an advantage at the expense of a refugee, who has done nothing to anyone, and try looking at their own mistakes instead.***
>
> Daniel Thioune, then-coach of second-division soccer club VfL Osnabrück, in response to protests from a number of clubs regarding match results following the allegation that HSV-pro Bakery Jatta competed under a false name.

The Soccer Quote of the Year comes courtesy of HSV and former Osnabrück coach Daniel Thioune. The award is bestowed with a €5,000 prize, which will benefit refugee projects in Hamburg and Osnabrück. In cooperation with Volkswagen, the German Academy for Soccer Culture has been looking for the most thoughtful, amusing, and philosophical quotes since 2006.

Outstanding: Jörg Schmadtke, Michael Meeske, and Tim Schumacher (r–l) from the VfL management team.

Sustainability: VfL Way Ahead

VfL Wolfsburg is playing a pioneering role in professional soccer when it comes to sustainability: Alongside Bremen, Stuttgart, and Leverkusen, not to mention St. Pauli and Paderborn, the wholly owned Volkswagen subsidiary has chosen to take part in the sustainClub sustainability certification.

sustainClub is the first and only recognized sustainability standard and orientation framework in professional soccer, and involves evaluating around 180 criteria relating to ecology, economy, and social affairs.

Of the six founding members of sustainClub, VfL plays a special role, as it has been involved in the development from the very beginning. In fact, the "Wolves" were the first – and at the time only – partner to achieve a score equivalent to Gold status way back in 2016. VfL has now also completed the current certification as the best club in terms of points and achieved Gold status.

"The fact that we have now defended our success, so to speak, makes us very proud," shares VfL Managing Director Michael Meeske, emphasizing: "To us, sustainability isn't just something we talk about to make us look good to the outside world; it's something the employees of VfL Wolfsburg actually live and breathe in their day-to-day work."

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[1] ID.3 Pro Performance, 150 kW/energy consumption combined in kWh/100 km: 16.9–15.4 (WLTP); 15.4–14.5 (NEDC); CO_2 emissions combined in g/km: 0; efficiency class: A+
ID.3 Pro S, 150 kW/energy consumption combined in kWh/100 km: 17.7–15.9 (WLTP); 14.1–13.5 (NEDC); CO_2 emissions combined in g/km: 0; efficiency class: A+

REAR-VIEW MIRROR – *A look at the Volkswagen history books*

History Reinforces Trust in the Brand

Volkswagen Classic plays an active role in the preservation of automotive traditions alongside the AutoMuseum, the ZeitHaus at Autostadt, and the Heritage Division. A few days ago, it moved to Volkswagen Group Services with its approximately 300 traditional and modern-era classic cars. We caught up with team leader and expert on classic Volkswagen, Sascha Neumann, to find out more.

Classic expert Sascha Neumann: building trust through history.

What is the purpose of Volkswagen Classic?

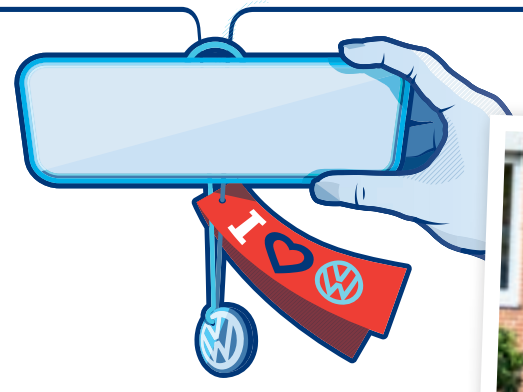
Communication is right at the heart of Volkswagen Classic. We are all about building bridges between the past and the future, which is why we take part in classic car events or showcase historic cars at trade fairs. We also see ourselves as a reliable contact for the media as well as for fans and drivers of classic Volkswagen cars. After all, it is now more important than ever to give our customers something to identify with and focus on. The way to successfully build trust is to share storied from bygone times. The Volkswagen story touches many people because it is part of their life story.

The classic cars are right at the heart of Classic – how do you keep them fit for rallies, classic car meets, or trade fairs like Techno Classica?

Our team is very small, so while we are able to carry out minor repairs and maintenance, we depend on external partners for larger undertakings. This is why Classic has made the move to Volkswagen Group Services, just as the commercial vehicles classic car division did years ago. We hope that this move will result in some real synergies with our sister project in Hanover, not to mention a greater level of planning reliability.

Volkswagen Classic guards the brand's automotive capital – why is this important going forward?

Volkswagen has become what we are today thanks to the Beetle and the Golf. This kind of continuity is important to many of our customers, and so we as the Classic division can strengthen this trust in the brand by highlighting these continuities. Take electric mobility, for example, which has a long history at Volkswagen. Electric cars have been over 40 years in the making and are now making their way onto the road. Classic showcases the reliability, quality, and innovative power that is inherent to the Volkswagen brand.



50 Years Ago: The K70 Set the Course

Karl-Günter Queißer has seen it all and looks back on how it all began at the new Salzgitter plant

Back when the first K70 rolled off the production line 50 years ago, he was there: Karl-Günter Queißer – a man of the first hour at the Salzgitter plant. He experienced the turbulent period of upheaval at Volkswagen in the early 1970s. "It really was something special," is how he sums up his time with the K70.

Now 79 years old, Queißer began his career at Volkswagen in 1970 as a painter and varnisher at the new plant in Salzgitter. He was quickly impressed by the comfortable sedan with its four doors, spacious interior and trunk, and the water-cooled front-wheel drive. The K70 represented a completely new drive concept, which would later become successfully established in the Passat and Golf. The Salzgitter model also set the bar in terms of both active and passive safety with its reinforced passenger compartment, crumple zones at the front and rear, and safety belts for all seats.

It was as early as fall 1971 that Queißer bought his first K70. Until then he had always driven Beetles, so the change was a quantum leap. After three K70s, a Golf made its way into his garage. "It just keeps on going," says the man who welcomes change and experiences it with joy.

Queißer also successfully takes part in classic car rallies

Today he drives both: a K70 LS and a Golf 8. Driving the K70 is his dream come true, and he successfully takes part in rallies and excursions in his classic car. A trip to Salzgitter back in September took him to his old place of work.

A golden oldie with his classic car: Karl-Günter Queißer stands alongside his K70 LS at the Salzgitter plant.

He would have loved to celebrate the 50th birthday of the K70 with the fan club on a drive and anniversary event, but unfortunately the coronavirus pandemic wouldn't allow it. Instead, he celebrated with a small circle of friends in Salzgitter and looked back on memories of a very special time. Time and again, employees stopped at the unusual vehicle with interest – and former colleague Queißer was passionate about answering every last question.

47 Years Ago: Series Production Launch of the Passat

Volkswagen was undergoing a period of transformation in the early 1970s, and the new Passat brought a breath of fresh air to the model range. As the advertising slogan so aptly described, it was "The car that was long overdue." In 1973, the mid-class sedan went into series production as the first model of the new Volkswagen generation at the plant on the Mittelland Canal. The Passat came complete with a whole host of new features, and its technology was closely based on the Audi 80: Front-wheel drive, water-cooled four-cylinder engine in the front with the corresponding manual and automatic transmissions, overhead camshaft, and an all-steel body. In the case of the Passat, Volkswagen also switched to suspension assembly for the vehicle construction. This not only made production more flexible, but also improved assembly conditions for employees.

Following the press driving demonstration, Volkswagen showcased the Passat at the IAA in Frankfurt in September 1973, launching it under the slogan of "The car of the future." It proved a real hit thanks to its clear contours, low belt line, and real diversity. Those who were interested could choose between no less than 17 variants: two doors, four doors, or a practical variant with four doors and a tailgate, with outputs of 1.3 liters with 55 bhp or 1.5 liters with 75 or 85 bhp. The price of the Passat started at 8,555 marks. In the first year alone, more than 110,000 Passat models rolled off the production line.

Two doors and a hatchback: The Passat is the first model of a new generation.

60 Years Ago: How the Management Became a Board

The transition to an Aktiengesellschaft – similar to a public limited company – in the summer of 1960 brought about some fundamental changes at the top of the company: Volkswagenwerk GmbH became Volkswagenwerk AG, which was entered in the Wolfsburg commercial register on August 22, 1960. In addition, the previous management structure, which was run by Heinrich Nordhoff and his deputy Wilhelm Steinmeier, became a Board of Management appointed by the Supervisory Board. Heinrich Nordhoff was again at the head of the board in the role of "Chairman," as stated by the 1960 annual report. He was joined on the board by Fritz Frank, Kurt Haaf, Otto Höhne, Julius Paulsen, and Wolfgang Siebert, with Hans Hiemenz, Frank Novotny, and Helmut Orlich joining a little later. The Board, which had grown to nine top managers, then presented its first annual report at the Annual General Meeting of Volkswagenwerk Aktiengesellschaft on July 1, 1961. This was another first in itself and the balance sheet was well worth seeing, as Volkswagen had sold over 860,000 Beetles and Transporters all over the world. With a turnover of over 4.6 billion DM, the company on the Mittelland Canal remained the driving force behind Germany's economic miracle.

Former top manager: Heinrich Nordhoff (1899–1968) was General Director of Volkswagenwerk GmbH from 1948 and CEO of Volkswagenwerk AG from August 1960 to April 1968.

75 Years Ago: Brits Kick Off Beetle Production With Major Order

A major order for 20,000 vehicles from the British military in August 1945 set the course for a positive future for the Volkswagen plant and its workforce. Civilian series production of the Beetle became reality, and a second order for a further 20,000 vehicles followed two weeks later. This protected the plant, production, and workforce and averted the threat of being taken apart. On December 27, 1945 the first Beetle left the assembly lines and 55 units were built by the end of the year. The unique post-war history of the Beetle had begun. The key figure was the then 28-year-old Major Ivan Hirst, who arrived in Wolfsburg in August 1945 and organized the reconstruction in his capacity as Senior Residence Officer. His conclusion after four years at the head of the facility was that "we had a modern factory, ready for the future, with a strong workforce, German management, and a great product."

Production starts in Wolfsburg after a huge order from the British military.

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Dear Colleagues,

In the last issue of this year's 360°, we examined the transformation of Group Components – from 2015 to today and into the future. It all started five years ago: we rolled up our sleeves, adapted our product portfolio, fine-tuned our business divisions, and developed our own Components strategy. When doing so, we had to say goodbye to unprofitable product ranges. At the same time, we were able to create many new, long-term job prospects for our employees in the production of e-components. In other words, we are on the right track and we have a clear vision for the future of Group Components: at its core is end-to-end responsibility for batteries, and accordingly, our key role in the ID. family. Meanwhile, we are exploring how we can use our expertise to establish ourselves as a system supplier in the future. Read more on page 12 in the Group section of this issue.

Now more than ever, we need leaders, lateral thinkers and doers who will take us forward with clever ideas and innovative technology. These are my expectations for the 30 new Transform Minds, who entered "The Battle" at the start of October. The employees are working in small groups on ten innovative projects, which will be pitched to a jury in December, and are being planned with help from me and a coach from our leadership team. All the Transform Minds and their projects are presented on the right.

The most important sales market for our vehicles is China. We are represented there as Group Components by a strong team, led by the head of Components China, Frank Engel. Employees in China are working on projects such as the collaboration with battery manufacturer Gotion, exchanging of knowledge between plants, and optimization of processes. In addition, these colleagues are an important interface to our business division teams in Germany. More information can be found on pages 26 and 27.

Last but not least, I would like to thank Herbert Steiner, who managed the Engine and Casting division until the end of October, and is now Head of Production and Logistics at Seat. He drove the transformation of the business division forward and did a fantastic job together with his team. Thoralf Hanschel, a distinguished expert in components, will take over from Herbert Steiner on December 1. I wish them both a great start in their new roles. Read more on page 28.

Yours sincerely,
Thomas Schmall

CEO
Volkswagen Group Components

Introducing the New Transform Minds!

The third round of Transform Minds has begun – so here are the 30 Transform Minds and their project topics

So it begins: 30 new faces, ten exciting topics, and one goal: to develop the best project. That's why the third round of Transform Minds has been dubbed "The Battle" – now faster, more exciting, and more competitive than before.

It started at the beginning of October with a two-day meeting at the Volkswagen Arena and in Hall 6, the Group Components headquarters. Due to the current situation, some of the Transform Minds attended in person while others joined online from the international sites. Besides getting to know each other, the focus was the topic of transformation. In addition, there was input on the Components strategy, rapid fire presentations, and a silence walk – a journey through the period from 2016 to 2025 at ten stations. An initial group session with intensive power brainstorming on the ten project topics was also on the agenda.

Currently, the Transform Minds are working on their projects in teams of three (see infographic). At the start of December, they will pitch the projects to the heads and managers of the Components division, or "coaches." Once groups are matched with a coach, they will work together on their respective projects in the fight for victory. In the semi-final, a jury will evaluate the projects and decide which teams will compete for first place in the final.

Overview of the teams and their project topics:

COMPILING A WHITE BOOK FOR CHARGING INFRASTRUCTURE

SUSANN WITT
Quality Assurance, Chemnitz

NICO IHNEN
Quality Assurance, Skoda Auto a.s., Mladá Boleslav

IZZET ÖNTAS
Planning & Process Management, Wolfsburg

SMART QUALITY ANALYSIS

ULRICH KÖHLER
Quality Assurance Analysis, Kassel

TORSTEN MEISEL
Quality Assurance, Salzgitter

TOMASZ DUCHINSKI
Components/Purchased Parts, Motor Polska

SUSTAINABILITY BENCHMARK FOR SUPPLIER COMPANIES

NURAY SAHIN
Technical Service, Braunschweig

STEFANIE HONSTRASS
Seat Cover Projects, SITECH

MORITZ WEBER
Quality Assurance Casting, Kassel

AVOIDING DUPLICATE WORK IN ADMINISTRATIVE DIVISIONS

OUSSAMA BEN ROMDHANE
Site Optimization/Project System, Braunschweig

SIMON SVENTO
Site Development, Martin

ALWYN BESTER
Mechanical Production of Individual Parts, Chassis in Wolfsburg

ERGONOMICS IN PRODUCTION

ISTVAN SARKANY
Engine Production V6 Otto, Audi Györ

MICHA HOFMANN
Production, Chemnitz

BEGONIA TOLEDO MUNIOZ
SITECH Way/Production Systems SITECH

CARBON FOOTPRINT OF PRODUCTS

MICHAL SROKA
Plant Technology Casting, Kassel

MISCHA BACHMANN
Hardening Shop, Kassel

PETR DLOUHÝ
Logistics, Skoda Auto a.s., Mladá Boleslav

GENERATING ENTHUSIASM FOR TRANSFORMATION

ANDREA OBTMEIER
Thermal Management of Cooling Water, Salzgitter

DANIEL KEMPA
Phase-out Management, Salzgitter

EKATERINA HOHLOVA
Tool Management Engine Production, Kaluga

MAKING DIGITALIZATION TANGIBLE

ATTILA KISS
Component Management Technology, Audi Györ

MICHAEL WEHRAM
Process Optimization, Chassis in Wolfsburg

SINA KOELLNER
HR Group Components, Wolfsburg

RULES OF COOPERATION

LISETTE WEYAND
Production System, Kassel

MAGDALENA CICHOŃ
HR Coordination Casting, Poznań

SASCHA TÖNNIES
Assembly, Chassis in Wolfsburg

CHARGING SOLUTIONS @ HOME

JAN PHILLIP BRAND
Cell Development, Salzgitter

SEBASTIAN KRUPPE
Slip Joint Assembly, Chassis in Wolfsburg

CEDRIC KÖHL
Planning in Engine and Casting division, Wolfsburg

mk

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The New WE

Teamwork, strategy and future projects: Volkswagen Group Components has a strong team at its back in China

With around 18,000 employees in 23 plants, Volkswagen Group Components is well-represented in China, the most important sales market for the Volkswagen Group. From the EA 211 to the chassis system, Chinese colleagues are producing components from all five business segments of Group Components: this strong network of plants is managed by the C-P team, led by Frank Engel, Managing Vice President of Volkswagen Group China, Components, Logistics and QA. The goal of the team: to create interfaces between the business segments and to boost productivity, strategic planning and international cooperation, including in the joint ventures.

The team covers a broad spectrum of subject areas, from logistics to quality assurance and vehicle production. One new area is the Component Business (C-PC) department: Employees of the department serve as vital interface partners for the business divisions of Group Components in Germany.

On this double page, we present several colleagues from the C-P team, major projects such as the collaboration with Gotion High-Tech, and two production milestones.

Frank Engel, Managing Vice President of Volkswagen Group China, Components, Logistics and QA, remarked:

"Our current challenges call for a rethink in our heads and structures. Whether it's ROADMAP 2025, environmental compliance, or new projects like the collaborations with Gotion High-Tech and JAC Volkswagen. In the past few months, we have been working hard on transforming our structures and processes so that we can continue to quickly, reliably and successfully overcome challenges in the future. Our new Component Business team in particular, which serves as an interface between the plants in the China region and the business segments Engine & Casting, Gearbox & Electric Drive, Chassis & Battery System and Seats, will make a significant contribution to achieving this. It's our mission to make progress on the challenges of the future, such as supplying our electric cars with batteries, making CO_2 savings, and further developing our successful engine generations."

Jörg Gammisch, Component Business (C-PC)

"I have been working for the Component Business department since August, and I'm responsible for further development of the Components strategy in the China region. Our goal is to bring profitable and future-proof projects to fruition. I am also the contact for chassis components, as well as for overarching subject areas and new products, such as vertical mobility and charging solutions."

Valerie Jeblik, Component Business (C-PC)

"I transferred to the Component Business team from VWATJ in May. I'm responsible for electric drives, batteries and seats. My current main project is components for the e-mobility joint venture, JAC Volkswagen. I am working closely with colleagues from JAC."

Josef Riepl, Component Business (C-PC)

"I have worked for the Component Business department since August, and I'm the point of contact for the Engine and Casting, and the Gearbox and Electric Drive business segments. I work closely with the plants and the Group to develop projects for the implementation of the Components strategy. My job also involves working on building up a network of experts to share best-practice solutions, and supporting SOPs in the plants."

Wenchao Du, Component Business (C-PC)

"I have been on the Component Business team since May, and I'm responsible for the Engine and Casting business segment, as well as Gearbox and Electric Drive. We identify concrete action steps from the Components strategy and implement them in the plants. I also perform technical and economic benchmarking for products and processes, and organize knowledge-sharing between the plants."

Johannes Tepe, Component Business (C-PC)

"I transferred to the Component Business team in Beijing from Sitech Shanghai last August, and am responsible for the ROADMAP 2025 efficiency program. Our goal is to reduce our full costs, stabilize profits and increase our innovative strength and sustainability. I am also working on digitalization in the region, together with our IT department and the plants."

Jian Wu, Component Business (C-PC)

"I joined the Component Business team three years ago. Until recently, I was primarily working on projects to do with battery systems. Since July, I have been in charge of the project management office for our major collaboration with the Chinese battery manufacturer, Gotion High-Tech."

Jiangping Zhu, Head of Productivity Management (C-PA)

"After seven years of professional experience as a planner in the body shop, I switched to the Productivity Management department in 2016. My specialist areas are industrial engineering and CIP, with a focus on KPI systematics, the SPEED+ Award, C-HPU at Components China and the subject areas of process efficiency and methodology within the context of ROADMAP 2025."

Caihong Hu, Head of Environment Management (C-PE)

"I have been part of the Volkswagen family since 2004, and started as a trainee in Procurement in Wolfsburg. In 2019, I accepted the challenge of becoming manager of the new Environmental Management department. I'm now responsible for environmental compliance, environmental production and the global decarbonization project."

Haiming Wu, QA Components (C-PH)

"I have been in charge of the team at the Battery Project Center starting this year. My responsibilities are coordinating and supporting the localization of MEB high-voltage batteries in the FAW-VW and SAIC-VW joint ventures. Our focus is on interdisciplinary and cross-brand information exchange and sharing of technical knowledge between the joint ventures and Volkswagen AG."

Ralf Junitz, Head of QA Components (C-PH)

"I have been in charge of Quality Assurance for Volkswagen Group China since August. We have important tasks ahead of us, such as supporting the NEV vehicle launches of our joint ventures FAW-VW and SVW, the new e-joint-venture JAC Volkswagen, and the battery cell collaboration with Gotion. Quality coordination of the 23 component plants in China is another interesting challenge."

Jian Zhou, Head of Logistics (C-PL)

"After five years at VWATD, I took on the role of Head of Logistics at Volkswagen Group China in 2017, where I am responsible for the planning round, production program, bottleneck management, export logistics, and process planning and optimization. My focus is on company-wide issues. Our goal is to achieve maximum synergy and efficiency in the logistics network through effective cooperation, within the scope of ROADMAP 2025."

Four projects at a glance:

Collaboration with Gotion High-Tech

In order to develop further expertise in battery production, Volkswagen signed contracts in May with the Chinese battery manufacturer Gotion to acquire a 26.47-percent stake in the company. Volkswagen China is now working with Gotion to identify and maximize synergies between the two companies. The collaboration with Gotion is part of Volkswagen's international electrification strategy.

ROADMAP 2025

With its eight core subject areas, mentored by the plant managers, the efficiency program will make an important contribution to increasing the competitiveness and future viability of the component plants. Focal points include processes, logistics, environment and digitalization. The most important of these is to create synergy between plants by sharing innovative measures – not only within the China region, but with the German and international plants as well. In addition, Frank Engel and the plant managers get together once per quarter to discuss the next steps.

Battery Project Center

The Battery Project Center was founded in 2017 for the purpose of strengthening regional responsibility for high-voltage batteries and developing battery expertise on site. Its focus is on supporting the vehicle joint ventures, FAW-VW and SVW, with the localization and industrialization of the MQB, BEV, PHEV and MEB battery systems from the Braunschweig component plant. To achieve this, employees in Development, Planning and Quality Management are providing continuous support in Changchun, Foshan and Shanghai. In the long term, the mutual exchange of knowledge will help develop expertise in battery systems at the Chinese components plants.

Planning round

The process of the planning round is an important part of Volkswagen's long-term strategic planning in the China region. The component production volumes and the required capacities are planned based on the products and sales volumes. A team at VGC Logistics is responsible for coordinating the volumes and capacities of the component plants in the region. From one planning round to the next, there are fluctuations in volume as many new product decisions are made in the meantime. The latest market situation and new products in Components are reevaluated in PR70. This increases the complexity of transforming the Components companies. To ensure uniform volume and capacity planning Group-wide and achieve maximum synergy, employees are working closely with the Chinese component plants and Group Components."

Components Colleagues Celebrate Production Milestones

In the last few weeks, our Chinese colleagues have had two major production milestones to celebrate: the first was the six-millionth EA888 engine to be manufactured at **Volkswagen FAW Engine Dalian** at the end of September. A few weeks later, at the end of October, colleagues at **VWATD** celebrated the eight-millionth DQ200 gearbox. The two new plant managers, Raimund Rösch and Heiko Knatz, who took over management of their respective plants in July, were delighted by these production milestones and expressed their gratitude to their teams.

Raimund Rösch, General Manager VWED

"I have been General Manager at Volkswagen FAW Engine Dalian since July. In this role, I am responsible for the sites in Dalian and Changchun, including the production of approx. 900,000 EA888 engines per year. In recent weeks, the team has impressed me with strong technical expertise and abilities. I've also been impressed by how well the two sites have utilized digitalization for the optimization of production and quality. At the end of September, my team and I were able to celebrate a fantastic achievement: on September 25, the six-millionth EA888 rolled off the production line. An outstanding team effort!"

Volkswagen FAW Engine in Dalian

A fantastic production milestone: Raimund Rösch (second from right) celebrates the six-millionth EA888 with colleagues.

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Volkswagen Automatic Transmission in Dalian

Strong performance: Frank Engel (left), Jörg Fenstermann (second from right) and Raik Kleiss-Schmid (right) congratulate Heiko Knatz (second from left) and his team on the production milestone.

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"I started my new role as Deputy General Manager Technical at Volkswagen Automatic Transmission in Dalian (VWATD) in July 2020. It's impressive how the Dalian site has developed. VWATD has been producing gearboxes at the site since 2009, and camshafts since 2013. I'm fascinated by how consistently the Chinese team has developed optimizations and continuously improved quality. The hard work has paid off: on October 21, we celebrated the eight-millionth DQ200 gearbox together. I would like to thank the team for this achievement."

Heiko Knatz, Deputy General Manager Technical VWATD

A Look at the Brand Volkswagen Passenger Cars

From Touareg to Design

The new Touareg R[1].

Volkswagen is electrifying the Touareg.
That's why several media representatives are test driving the new hybrid models, the Touareg eHybrid[2] and Touareg R during an international driving event for journalists.

Designers are going more digital.
Current travel restrictions mean design colleagues have had to move many of their planned trips online. This is one of many examples of how Volkswagen is becoming a more digital and sustainable company during the pandemic.

Designers' jobs are becoming more digital and environmentally-friendly.

Names & News

Heiko Dröse, previously Product Manager in Drive Development at Audi AG in Ingolstadt, took over Business Strategy in Gearbox Construction and Electric Drives at the Kassel plant on September 1, 2020.

Diversity and Openness in the SITECH Group

Shared motto: We are each different individuals – but we're still a team!

The SITECH Group lives and breathes diversity. At each of the six SITECH sites in Germany, Poland and China, the workforce consists of a colorful rainbow of different personalities. These diverse teams bring completely different perspectives and creative approaches to the table – that's why diversity is so important to any modern company. That includes women in leadership positions: almost one in four management roles at SITECH Sp. z o.o. and SITECH Sitztechnik GmbH is occupied by a female manager.

What's more, communication formats such as Strength Through Diversity and With Passion at SITECH promote respect and consideration between colleagues. These articles offer a look behind the scenes as employees show us what they do in their free time, from social commitments to unusual hobbies (see images). Thanks to these new formats, employees at SITECH can get to know each other from a different perspective, and are reminded not to judge their colleagues' values and skills based on their appearance.

As well as community, the SITECH team also values social responsibility: many sites run local corporate social responsibility campaigns. For example, colleagues at the Polish sites have worked with local forestry offices to regularly organize fun quiz hikes for elementary school children in local forests. This helps children expand their knowledge of flora and fauna. In addition, SITECH colleagues regularly organize events, such as Diversity Day, to promote diversity, respect and tolerance.

From volunteering to hobbies: SITECH communication formats show employees enjoying every part of their lives.

Pictures were taken before the coronavirus pandemic.

Product Compliance Management

Important guardrails for product work

The implementation of the Product Compliance Management System (PCMS) is in full swing. To fulfill our responsibility for all the products and product-related services we have launched, product conformity and safety must be ensured throughout the product life cycle. To achieve this, compliance with PCMS mandatory requirements is crucial: legal and official regulations, internal and external standards, contractually agreed customer requirements and voluntary commitments.

Volkswagen Group Components' Product Compliance Mission Statement encompasses seven guidelines for action according in line with the aspects of the PCMS:

1. Define and establish **CULTURE**
2. Set **GOALS** and measure effectiveness
3. Identify, evaluate and report **RISKS**
4. Define and implement **PROGRAMS** and **PROCESSES** for risk management
5. Create **ORGANIZATION** with roles and responsibilities
6. Implement **COMMUNICATION** and **TRAINING**
7. **MONITOR** and **IMPROVE** effectiveness

More information about product compliance is available on the intranet: **https://Volkswagen-net.de/wikis/display/PCMS**

New Head of the Engine and Casting Division

Herbert Steiner moves to management role at Seat

A change at the helm of the largest Components division: the former division head, Herbert Steiner, moved to Seat on November 1 as the new Head of Production and Logistics. His successor, Thoralf Hanschel, who is currently Head of Engine Production at Audi Hungaria in Győr, will start on December 1. Thoralf Hanschel was already responsible for production planning at Components before moving to Győr.

On his departure, Herbert Steiner remarked, "I would like to thank the entire Components team for our time together. My colleagues at the various plants and in Wolfsburg do a first-rate job and have worked hard to ensure the competitiveness and future viability of Group Components. I would like to thank the Engine and Casting team in particular, who have achieved so much in the last two years, from the SOP to the production anniversary. I now hand the baton to my successor, Thoralf Hanschel, with a strong team at his back and exciting projects ahead."

Thoralf Hanschel

Herbert Steiner

Spotlight on Productivity

The Industrial Engineering and Production System department manages productivity across all of Components

Group Components manufactures components for the Volkswagen Group at over 60 plants. So productivity is always high on the list of priorities. The Components-wide productivity liaison is the Industrial Engineering and Production System (CO-3) division. The team's responsibilities range from productivity management to maintenance.

Overview: CO-3's responsibilities.

1. Productivity control

Experts ensure the transparency of productivity goals with a holistic indicator and reporting system. The focus is on overall equipment effectiveness (OEE), effective employee utilization, and monitoring and visualizing measures.

2. Productivity optimization

Improving and qualifying OEE
Qualification concept pilot program in Braunschweig with a focus on loss of speed and organizational losses, setup and TPM.
Taskforce utilization
Short-term, intensive support for plants in the event of supply bottlenecks.
Value stream planning
Implementation of macro value stream activities to develop shared process visions with a focus on holistic processes and their management.

3. Standardization and networking

Developing methodology, coordinating IT and setting factory planning standards, as well as sharing best practices between plants.

4. Strategic maintenance optimization

Employees have started a project to optimize maintenance activities at the Salzgitter site. The aim is to transform maintenance organization with future-proof processes and IT solutions for these activities. The concept will serve as a benchmark for other sites to optimize their maintenance activities.

5. SPEED+ Award

The second plant tour took place digitally. Travel restrictions in place mean the Shop Floor Management, C-HPU, Environment and Diversity categories will be digitally prepared for an online third plant tour. However, the Plant Efficiency, Assembly Efficiency and Lead Time categories rely on on-site line evaluations by SPEED+ experts. It is simply not possible to judge these categories given the current travel restrictions. Because of this, awards will not be given in these categories.

More information about the Industrial Engineering and Production System is available on Group Connect. To find it, enter the keyword "IEPSK" in Internet Explorer.

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[1] Touareg R (340 kW/462 bhp system output) fuel consumption (NEDC) in L/100 km, combined: 3.0–2.8; power consumption, kWh/100km: combined 19.9–19.5; CO_2 emissions, g/km: combined: 69–63; efficiency class: A+
[2] Touareg eHybrid (280 kW/381 bhp system output) fuel consumption (NEDC) in L/100 km, combined: 2.7; power consumption, kWh/100km: combined 21.1; CO_2 emissions, g/km: combined: 61; efficiency class: A+