



Production start of Volkswagen ID.3*

Zwickau, November 2019

Note: This press release, image motif and films regarding the ID.3 can be found online under id3.vw-newsroom.com.

All equipment specifications apply to the German market.

*** = The vehicle is not yet available for sale in Europe.**



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Successful production start of the ID.3 at the Zwickau plant

"The production start of the ID.3 heralds the dawn of a new era for Volkswagen – comparable with the first Beetle or the first Golf. Zwickau is to be the lead plant for this new era in the automotive industry. We are converting the plant step-by-step – from 100 percent internal combustion engines to 100 percent e-mobility. This way, we are initiating a system changeover in the automotive industry which will be completed over the next 1 to 2 decades."

Thomas Ulbrich, Board Member for E-Mobility, Volkswagen brand

At a glance

Production start of Volkswagen ID.3

System changeover to e-mobility

- **New era:** With the ID.3, Volkswagen is starting the production of electric vehicles for the volume segment.
- **Trailblazer:** Europe's largest and most efficient electric car plant is taking shape in Zwickau.
- **Electric offensive:** Volkswagen has embarked on the world's largest electric offensive. By 2028, the Group will be launching almost 70 electric models in the marketplace.
- **Sustainability:** The ID.3 is the first vehicle produced with a neutral carbon balance
- **MEB:** The modular electric drive toolkit (MEB) is the technical and economic backbone of the electric offensive.
- **Production:** The new electric cars will be produced at 8 MEB locations in Europe, China and the USA.
- **Production locations:** Over the next few years, a high-performance cluster for electric cars will be created in Germany.

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The car

E-mobility for millions. Clean, fascinating and – at long last – also affordable; e-mobility is the future of the automobile. From today's perspective, e-mobility is the best and most efficient way to achieve carbon-neutral mobility. Hardly any other automaker is driving this transformation with the same consistency and commitment as Volkswagen. Over the next 10 years, almost 70 new electric models are to be launched throughout the Group. The target is to take e-mobility out of its niche to a central position in society.

The ID.3 is the first model in the new electric car generation to reach series production. The ID.3 has been especially designed for e-mobility and leverages to the full the opportunities offered by this technology. It offers long ranges, a spacious interior, dynamic vehicle handling and an entirely new level of digital connectivity. In terms of sustainability, the ID.3 also sets new standards. This makes the car a trailblazer and pioneer in the system changeover.

100 % electric. The ID.3 is an all-rounder fit for everyday use. It is compact and agile, as well as offering an especially spacious interior comparable with a mid-range car. The ID.3 therefore sets new standards in the compact class.

This is all backed up by innovative technologies and long ranges. Customers can choose between three sizes of battery. The standard version with 45 kWh allows ranges up to 330 kilometers. The medium-sized battery, with 58 kWh, can reach up to 420 kilometers and the largest battery, with a capacity of 77 kWh, makes a range of up to 550 kilometers possible (WLTP). Thanks to its fast charging capabilities, even the basic version can reach a range of about 290 km within 30 minutes with 100 kW charging.

Prices start at under €30,000 – before the state subsidy has been deducted.

Modular electric drive toolkit. The ID.3 is the first model to be based on Volkswagen's modular electric drive toolkit (MEB). The heart of the MEB is the flat, scalable high-voltage battery firmly integrated in the floorpan structure. This configuration offers a number of advantages – from longer ranges to a more spacious interior and improved driving dynamics.

Furthermore, the MEB offers tremendous economies of scale, laying the foundation for the electric car to be affordable for as many people as possible. By 2028, up to 22 million electric cars, most of them based on the MEB, are to be produced and sold throughout the Group. Within the next few years, the Volkswagen brand will be launching an entire ID. family. These vehicles will range from compact cars to SUVs and large sedans. In future, the MEB will also be used by the brands Audi, ŠKODA, SEAT and Volkswagen Commercial Vehicles. This way, Volkswagen will bring its successful platform strategy forward to the electric age.



The plant

Europe's largest electric car plant. The Zwickau plant is a key element in the most comprehensive electric offensive in the automotive industry. Volkswagen is the very first volume automaker to entirely convert a large vehicle plant from 100 percent internal combustion engines to 100 percent e-mobility. All in all, Volkswagen is investing about €1.2 billion in the conversion of this location. In the final expansion stage from 2021, up to 330,000 electric vehicles per year will roll off the production lines here, some 30,000 vehicles more than previously. Zwickau will therefore be Europe's largest and most efficient electric car plant.

The ID.3 "made in Zwickau" will also make a significant contribution to climate protection. It will not only operate with zero local emissions but will also be produced with a neutral carbon balance. This will make the ID. 3 a trailblazer on the road to clean, sustainable mobility.

Sustainable production. The ID.3 is the first vehicle from Volkswagen that has been consistently designed for a neutral carbon balance over the entire value stream and is handed over to customers with a neutral carbon footprint. Our principle is first to avoid and then to reduce CO₂ emissions; any unavoidable emissions are offset by investments in climate protection projects.

All power purchased by the Zwickau plant from external suppliers is Volkswagen Naturstrom from renewable sources. Furthermore, the plant is equipped with a high-efficiency cogeneration plant for the combined generation of electric power and heat which is to be operated using carbon-neutral gas in the future. The buildings and equipment are subject to a continuous energy optimization process, for example involving the use of frequency-controlled fans and pumps. This approach continually reduces power, water and heat demand.

100 percent eco-power is also used for energy-intensive battery cell production. Emissions from the entire production process that are currently unavoidable are offset, among other things through support for the recognized "Katingan Mataya Forest Protection" climate protection project on the Indonesian island of Borneo.

Transformation during normal operation. The Zwickau plant is being transformed during normal operation. In parallel to the development of ID. production, the manufacture of the Golf Variant is to continue until mid-2020. Following an intensive planning phase, the first production line was converted from summer 2018 onwards. This project called for the comprehensive modernization and refurbishment of the body shop, paint shop, assembly line and infrastructure. The entire conveyor technology had to be prepared for electric cars.



Following the production start of the ID. 3 as scheduled, the second production line is to be converted using the same approach and commissioned at the end of 2020. In the final expansion stage from 2021, the employees at Zwickau are to produce six models for three Group brands (Volkswagen, Audi and SEAT). The maximum capacity of the plant will then rise from the previous figure of 1,350 to 1,500 vehicles per day. 50 partner companies are providing support for the conversion of the plant. Much of the existing equipment is to be reused – also at other Group plants. A total of 12 new buildings and building sections are being built at the plant site. The existing press shop is being extended and prepared for the new era; this part of the project alone calls for an investment of about €75 million. From 2021, Zwickau will therefore produce all the key body parts for the modular electric drive toolkit (MEB) itself on site.

High-tech plant. In the course of the conversion, the Zwickau plant will become a digital, flexible, high-tech factory that is highly efficient. Digitalization will affect all areas of production, although to a different extent. While body production and painting were already highly automated in the past, the degree of automation in vehicle assembly is now also being boosted.

Volkswagen is consistently opting for highly-advanced Industry 4.0 robots and is extending the use of human-robot cooperation. The equipment includes about 1,700 latest-generation production robots as well as more than 500 driverless transport systems for the fully autonomous delivery of parts to the production line. Going forward, the cockpit will be installed fully automatically as a complete module using an industrial robot, for example.

In addition to shorter process times, automation also brings benefits for the workforce. Human-robot cooperation will reduce the burden on the human workforce of physically demanding, unergonomic tasks, for example in the installation of the roof liner. An increasing degree of automation will also boost production capacity; as a result, the number of employees will in the final resort remain stable.

Worldwide MEB production. Zwickau marks the start of the transformation of Volkswagen production to e-mobility. In future, Volkswagen will make electric cars at 8 MEB plants on three continents – in Europe, Asia and North America. Together, these plants will form the world's largest electric car production network.

In Germany, Zwickau is the first plant to be converted and the Emden and Hanover plants are to be changed over to the high-volume production of MEB-based electric cars a little later. In China, two MEB plants which are to start production in 2020 are being built in Anting/ Shanghai and Foshan. In North America, Volkswagen is investing about US\$800 million in the future production of electric cars at its Chattanooga plant. All these facilities will benefit from the experience and know-how of the team at Zwickau.



The people

A strong team. At Zwickau, about 8,000 people are working on the production of the new electric car generation. They mastered the two-year conversion phase up to the start of production with considerable know-how and commitment. They will also be the key to ensuring that the ID.3 takes to the road with proven Volkswagen quality. For this purpose, Volkswagen has embarked on a gigantic qualification offensive. By 2020, all 8,000 employees will receive training to prepare them for their new tasks.

Volkswagen is committed to automobile production in Germany and intends to create long-term prospects for employees with the transformation to e-mobility. At Zwickau, this approach also includes an employment guarantee up to 2029 which has been agreed with the Works Council.

Volkswagen steht zum Automobilstandort Deutschland und will mit der Transformation zur E-Mobilität langfristige Perspektiven für die Mitarbeiterinnen und Mitarbeiter schaffen. Dazu gehört in Zwickau auch eine mit dem Betriebsrat vereinbarte Beschäftigungssicherung bis 2029.

Training camp for e-mobility. In Zwickau, Volkswagen has embarked on the automotive industry's largest training camp. By 2020, all 8,000 employees are to be prepared for the new requirements and job profiles of e-mobility. 3,000 employees are to be trained in specific specialist areas connected with e-mobility at the e-mobility training centre. All in all, the qualification program will include 13,000 days of training.

In addition, about 1,500 employees will complete what could be described as a high-voltage driving license. The main focus will be on the safe handling of high-voltage systems. Further training to qualify as an electrician or as an electrician specializing in set tasks is also possible. These qualifications are state-recognized.

This qualification offensive is being implemented in cooperation with the Volkswagen Training Institute in Zwickau. For this purpose, a dedicated high-voltage laboratory with electric training vehicles has been established. In addition to preparatory training in basic skills at the e-mobility training centre, the main focus is on robot training, highly advanced automation technology and vehicle electronics.

Made in Germany. The ID.3 is an electric car "made in Germany": Almost all Volkswagen's German facilities are involved in the development and production of the ID.3. The model was conceived and developed by the E-Mobility Series Group and Technical Development in Wolfsburg. The battery system at the heart of the ID.3 is being produced in Brunswick. The plant is currently being expanded to make up to half a million battery systems per year in the future. The MEB drive system, an entirely new development, comes from Kassel, with Salzgitter supplying the rotor and stator. The Volkswagen brand alone is investing about €9 billion in e-mobility up to the end of 2023 – most of it in the German facilities.



Tradition meets the future: Milestones in the history of the Zwickau plant

Zwickau has been seen as the cradle of the automotive industry in Saxony for 115 years. Volkswagen is developing this location into Europe's largest e-mobility competence center by 2021. A chronicle.

- On **May 10, 1904**, automotive engineer August Horch registered his first company in Zwickau, A. Horch & Cie. Motorenwerke AG. This started an almost unparalleled tradition of automobile production in Zwickau and the region for 115 years and more.
- In **1909**, August Horch established his second automobile company, Audi Automobilwerke, in Zwickau ("Audi" being the Latin equivalent of "Horch", which means "listen" in German) and launched his first Audi on the market in 1910. The two companies, A. Horch & Cie. Motorenwerke AG and Audi Automobilwerke GmbH, later became part of Auto Union AG and eventually AUDI AG. Audi has formed part of the Volkswagen Group since **1965**.
- On **November 7, 1957**, VEB Sachsenring Automobilwerke Zwickau (formerly Auto Union AG) started production of the Trabant P50. More than 3 million units were produced before production was discontinued in April 1991.
- Following German reunification, Volkswagen returned to the region in **1990** with the establishment of Volkswagen Sachsen GmbH. In the newly constructed assembly halls of the former Sachsenring in Mosel, the Trabant and the first Volkswagen Polo cars produced at the plant rolled off the assembly lines at the same time.
- On **September 26, 1990**, the foundation stone for a new automobile plant designed for the production of the Volkswagen Golf was laid in the presence of Federal Chancellor. Dr. Helmut Kohl und Prof. Carl Hahn, the Chairman of the Board of Management of Volkswagen Initially, Volkswagen invested DM 4 billion in the plant. The first Golf from the Mosel plant was completed on February 15, 1991.
- In **February 1994**, the Golf CitySTROMer made its debut. This was the first all-electric Golf, which was built here as the first series model of the Group in the 1990s. The reward for this commitment was the award of the European Environment Certificate in **1996**.
- On **July 9, 1999**, the millionth Volkswagen from Saxony rolled off the assembly line – a satin silver Passat.
- In **2015** an energy park with an integrated electric charging station was commissioned in Zwickau. The park utilizes wind power and photovoltaics to generate electricity.
- On **November 17, 2017**, Volkswagen decided on the transformation of the Zwickau plant. For the launch of the ID. 3, the plant was to be converted into the first pure e-mobility plant and the center of e-mobility in Europe.
- Production of Volkswagen's ID.3 started on **November 4, 2019**. This is the first all-electric production model in the entirely new ID. family based on the modular electric drive toolkit (MEB).



Facts and figures

- **8,000 people** work at the Zwickau plant.
- **13,000 training days** have been completed by the workforce for the changeover to e-mobility.
- **1,700 production robots** will be used at Zwickau. Much of the existing equipment will be reused – also at other Group plants.
- **About 6 million** Volkswagen cars have rolled off the production lines since 1990 (above all Polo, Golf, Golf Variant and Passat).
- **8 MEB plants** in Europe, China and the USA will form part of the Volkswagen production network by 2022.
- **330,000 electric cars per year** will be produced at Zwickau in the final expansion stage from 2021.
- **More than 20 all-electric models** are to be launched by Volkswagen by 2025.
- **€9 billion** is the amount being invested in e-mobility by the Volkswagen brand alone up to 2023.
- **22 million electric cars**, most of them based on the MEB – this is the production and sales target to be achieved by the Volkswagen Group by 2028.
- **€1.2 billion** is the amount being invested by Volkswagen in the conversion of the plant.
- **1,800,000 square meters** is the area of the Zwickau vehicle plant, including 1,400,000 square meters covered by buildings. New factory halls with an estimated floor space of 50,000 square meters are to be constructed in the course of the changeover.