

Volkswagen Sachsen GmbH

Gläserne Manufaktur (The Transparent Factory) Dresden



Area: 83,000 m²

Production: Since January 2021: ID.3¹, previously: 50,401 e-Golf² (2017-2020); 84,235 Phaeton (2001-2016) and 2,186 Bentley Flying Spur³ (2005/2006 and 2013/2014)

Model: Volkswagen ID.3

Employees: 400 (incl. work-study degree students & vocational trainees, version dated: 12/2020)

Version dated:
February 2021

Current situation

With the launch of production of the ID.3 in January 2021 in the Transparent Factory in Dresden, the former "Centre of Future Mobility" will steadily transform into the "Home of the ID." over the coming years.

The central goal: To act as a beacon for Volkswagen in Germany, offering customers, visitors and guests a holistic experience of the ID. family – from initial advice and test drives, to production visits, co-constructing the ID.3 and modern event formats, up to the handover of electric vehicles. An additional focus of the strategic realignment is the development of a research and innovation site that drives innovative projects on a pilot scale for later use in large capacity sites at Volkswagen.

In Dresden, customers, visitors and guests get to experience how the Volkswagen brand is shaping the mobility of the future. During a 75-minute tour, they can see close-up how Volkswagen produces its ID.3. The highlight of the visit is a free-of-charge road test (30 minutes) through Dresden with electric and plug-in hybrid vehicles.

Dresden's largest public, partially solar-powered e-mobility station is located beside the Transparent Factory and has been in operation since April 2017. Cooperation has also been agreed between Volkswagen Sachsen and Dresden, the capital of Saxony. The objective is to make Dresden a model city for e-mobility and digitalisation. Since August 2017, innovative start-ups in the field of mobility services have received support for six months each at Volkswagen's newly installed Future Mobility Incubator at the Transparent Factory. They each receive financial support in the amount of €15,000, IT infrastructure, software, free-of-charge office space, vehicles and access to the Volkswagen expert network.

The city of Dresden also provides assistance and finances accommodation for the young entrepreneurs. In March 2018, the Future Mobility Campus was inaugurated. This provides education and training for employees, school classes and, primarily, dealerships.

Production and new business areas

The Volkswagen Phaeton and the Bentley Flying Spur were produced at the Transparent Factory for 14 years up to March 2016. The realignment of the plant for flexible handcrafted production of various models has been completed. The e-Golf was assembled here from April 2017 to December 2020. The Transparent Factory in Dresden was therefore the first site of the Volkswagen brand to be converted fully to electric mobility. Mass production of the ID.3 began in January 2021. As with the production ramp-up of the e-Golf in 2017, production of the ID.3 is also starting with one shift and 35 vehicles from Monday to Friday.

In addition to production, new or expanded areas of business will be created. In the future, significantly more vehicles will be handed over to customers in the Transparent Factory. To that end, a second delivery point was recently set up in the factory – which is unique in the automobile industry. The number of vehicle handovers to customers is expected to increase from 1,301 in 2019 and 3,293 in 2020 to more than 5,000 vehicles in 2021. The goal is around 9,700 deliveries a year by 2022.

The Functional Testing station in Dresden is being further expanded. It is an integral part of the worldwide network of testing stations for whole vehicle development. Its focal points: the testing of assistance systems, mobile online services, engines and chassis.

In the Technical Vehicle Service, Volkswagen used vehicles will be inspected and repaired. Electric vehicles will also be prepared for delivery at the Transparent Factory. The goal is to deliver vehicles produced in Dresden primarily in Dresden.

Moreover, the topic of Production 4.0 will be driven forward in the Transparent Factory. The guiding principle is the automation and digitalisation of complex operations within assembly and logistics. Specifically, the factory will act as a planned pilot plant in the company for the development and application of new technologies in real series processes.

Experience world and service

Volkswagen is breaking new ground with an experience world integrated in the Transparent Factory. Visitors and customers can inform themselves here about Volkswagen, as well as the topics of e-mobility and digitalisation. They get to have a close-up view of production as the tour goes directly along the production line. Roughly 64,000 visitors were welcomed in 2020, despite the many months of closure due to the coronavirus pandemic. In comparison, some 146,000 visitors were welcomed in 2019 before the outbreak of the coronavirus.

Since more than a quarter of all visitors come from abroad, the tours are offered in ten languages; in addition to German and English, languages such as Chinese, French, Czech and Polish were especially popular in previous years. There are also offers for children and families and tours with special focal points, for example on the environment and architecture. Visitor experience packages including a road test, a visit to the e-VITRUM restaurant and combined tickets with the Semper Opera House, the Dresden Transport Museum and the city tour round off the offering.

Customers can take delivery of the following models in the Transparent Factory: ID.3, ID.4⁴, e-up!⁵, Golf eHybrid⁶, Golf GTE⁷, Passat GTE⁸, Passat GTE Variant⁹, Arteon eHybrid¹⁰, Arteon Shooting Brake eHybrid¹¹, Tiguan eHybrid¹², Touareg eHybrid¹³, Golf Saloon Mild-Hybrid, Golf Estate Mild-Hybrid as well as all Touareg models with conventional drive. Customers benefit from an exclusive welcome in a separate part of the Visitors' Forum. The actual handing-over of the new vehicle is a special experience. In 2020, 3,293 vehicles were handed over to customers in the Transparent Factory, so more than twice as many as the previous year despite the closure. The goal for 2021 is for more than 5,000 deliveries.

Environmental protection

In 2018, the brand set itself an ambitious target for reducing environmental impact in production. By 2025, vehicles and components are to be produced in a way that is 45 percent more environmentally compatible than in 2010, the reference year of the current Think Blue. Factory environmental programme. Volkswagen is therefore well on the way to resource-optimised operations at all the sites of the brand.

The Transparent Factory became the first site of the brand worldwide when it began carbon-neutral production of its vehicles in 2018. Thanks to the use of Naturstrom®, power supply to the plant is already carbon-neutral, saving some 3,600 tonnes of carbon dioxide per year. In addition, the plant is changing over to a carbon-neutral heat supply and vehicle fleet. For this purpose, Volkswagen Kraftwerk in Wolfsburg will be co-operating for three years with the South Pole Group (SPG), the world's largest developer of climate protection programmes: the approx. 560 tonnes of the greenhouse gas CO₂ that would otherwise be generated annually in heat generation from fossil fuels will be compensated for by CO₂ reductions in other places.

Responsibility for the environment also includes biodiversity. The planners already paid special attention to environmental protection during the planning of the Transparent Factory. 350 trees were planted at a cost of roughly €56,000 and special sodium vapour lamps in the outdoor areas operate in a yellow spectral range that does not disturb insects in the nearby Botanical Gardens. Specifically, Volkswagen is also committed to biodiversity. Since May 2019, nine beehives with 50,000 inhabitants each have been installed on the plant site beside the Botanical Gardens. These 450,000 bees are cared for by an employee of the Transparent Factory. The honey, about 360 kilograms, is sold at the plant restaurant, e-Vitrum. The depth of the complex was designed to maintain groundwater equilibrium and the sealed surface area, compared with previous development on the site, has been reduced from 6.7 to 4.8 hectares.

Social and cultural commitment

The Transparent Factory is not only a production facility and an industrial employer. With its location in the centre of Dresden, it also forms part of the city's social and cultural life and shares responsibility for the future of the region. As the Centre of Future Mobility, it is a pioneer of e-mobility. The Transparent Factory aims to allow visitors to experience e-mobility close-up and to help shape the automotive future of the city of Dresden with new mobility concepts and offerings. The fact that the Transparent Factory also assumes responsibility for people of the region is evident from the support for a large number of projects and activities connected with social well-being and cultural development.

Employees have also given a signal for sustainable commitment with a small change campaign. For more than 15 years, they have donated the cents on their salary statements every month. The Transparent Factory uses the proceeds of these donations to provide long-term support for Sonnenstrahl e.V. – a charity in Dresden supporting children and young people with cancer. Annual activities by the workforce also include sponsored runs for UNICEF Dresden. Through regional cultural projects and partnerships, Volkswagen furthermore fosters cultural education and development. Activities include long-term partnerships with the Sächsische Staatskapelle Dresden and the Semper Opera House.

Factory manager

Danny Auerswald is a graduate industrial engineer (TU Dresden) and – having spent five years with Volkswagen Consulting management consultancy – began his career in 2013 in various production and logistics roles at Volkswagen. He was spokesperson for the members of the Group and Brand Boards of Management, Michael Macht and Thomas Ulbrich, for three and a half years. The Saxony native took over as plant manager of the Pekan site in Malaysia in August 2016, where he was responsible for production of the Passat, Tiguan, Polo, Vento and Jetta. Since August 2020, he has been site manager in Dresden.

About Volkswagen Sachsen GmbH

The founding of Volkswagen Sachsen GmbH in December 1990 marked the launch of an ambitious project by Volkswagen AG to establish a competitive production facility for Volkswagen vehicles and engines in one of the most traditional regions of the German automotive industry. In addition to the temporary use of existing facilities at Zwickau and Chemnitz, which Volkswagen fully modernised, two new manufacturing facilities were built for vehicle and engine production.

The Gläserne Manufaktur (Transparent Factory) in Dresden was inaugurated in 2001. Automobilmanufaktur Dresden GmbH (Gläserne Manufaktur) was merged with Volkswagen Sachsen GmbH in 2014.

Volkswagen Sachsen GmbH now includes the Zwickau vehicle plant, the Chemnitz engine plant and the Transparent Factory in Dresden. Volkswagen Sachsen GmbH has a workforce of around 11,320 employees (including Volkswagen Training Institute). Roughly 98 per cent of the employees have industry-related vocational training, a master craftsman's certificate or a technical college or university degree. The average age is around 44 years and women currently account for 11 per cent of the workforce.

Dr Stefan Loth is Chairman of the Board of Management of Volkswagen Sachsen GmbH with responsibility for Technology and Logistics. The Management Board also includes Dirk Coers (Human Resources and Organisation) and Karen Kutzner (Finance & Controlling).

¹ID.3 – combined power consumption in kWh/100 km (NEDC): 17.7 - 14.5, CO₂ emissions in g/km: 0; efficiency class: A+.

²e-Golf: the vehicle is no longer offered for sale.

³Bentley Flying Spur: vehicles of this model generation are no longer offered for sale

⁴ID.4 - power consumption in kWh/100 km (NEDC): combined 16.9-15.5; CO₂ emissions in g/km: 0; efficiency class: A+

⁵e-up!: power consumption in kWh/100 km: 12.7 (combined); CO₂ emissions in g/km: 0; efficiency class: A+

⁶Golf eHybrid: fuel consumption, l/100 km: combined 1.4-1.2; power consumption, kWh/100 km: combined 11.6-11.0; CO₂ emissions, g/km: combined 31-28; efficiency class: A+

⁷Golf GTE: fuel consumption, l/100 km: combined 1.5; power consumption, kWh/100 km: combined 11.4; CO₂ emissions, g/km: combined 34; efficiency class: A+

⁸Passat GTE: fuel consumption, l/100 km: combined 1.3-1.2; power consumption, kWh/100 km: combined 11.8-11.5; CO₂ emissions, g/km: combined 29-28; efficiency class: A+

⁹Passat GTE Variant: fuel consumption, l/100 km: combined 1.4-1.3; power consumption, kWh/100 km: combined 12.6-12.2; CO₂ emissions, g/km: combined 32-30; efficiency class: A+

¹⁰Arteon eHybrid: fuel consumption, l/100 km: combined 1.4-1.3; power consumption, kWh/100 km: combined 12.8-12.0; CO₂ emissions, g/km: combined 33-30; efficiency class: A+

¹¹Arteon Shooting Brake eHybrid: fuel consumption, l/100 km: combined 1.5-1.3; power consumption, kWh/100 km: combined 12.9-12.1; CO₂ emissions, g/km: combined 33-30; efficiency class: A+

¹²Tiguan eHybrid: fuel consumption in l/100 km: combined 1.7-1.5; power consumption in kWh/100km: combined 14.1-13.5; CO₂ emissions in g/km: combined 38-33; efficiency class: A+

¹³Touareg eHybrid: fuel consumption, l/100 km: combined 2.6; power consumption, kWh/100 km: combined 24.2; CO₂ emissions, g/km: combined 59; efficiency class: A+