

Volkswagen AG

Wolfsburg plant



February 2021

Area: 6.500.000 m²

Models: Volkswagen Golf, Golf GTE¹, Golf GTI², Golf R³, Golf Variant, Tiguan, Tiguan R⁴, Tiguan e-Hybrid⁵, Touran, SEAT Tarraco, SEAT Tarraco e-Hybrid⁶

Components: chassis

Employees: about 60,000 (December 31, 2020)

Plant

Situated on the banks of the Mittellandkanal, an artificial waterway, the plant has an area of more than six square kilometers, with the factory halls alone taking up a surface area of 1.6 square kilometers – an area as large as the entire Principality of Monaco.

The network of roads connecting the individual production facilities, warehouses, administration buildings and outdoor facilities has a total length of 75 kilometers, with 60 kilometers of railway tracks additionally criss-crossing the grounds. Six locomotives, two shunting robots and a traverse are in operation on the tracks.

Management

Since January 2021, Dr. Rainer Fessel has been responsible for vehicle production and the Wolfsburg plant. Fessel, who holds a PhD in mechanical engineering, began his career in 1995 at Volkswagen. After various positions of responsibility at the Wolfsburg plant, he became Head of Production in Zwickau in 2013. In 2016, he was appointed Plant Manager for the FAW Volkswagen plant in Chengdu. He became Plant Manager for the SEAT brand at the Spanish plant in Martorell in 2018.

Vehicle production

In der größten zusammenhängenden Automobilfabrik der Welt fertigen 16.000 Beschäftigte die Volkswagen Modelle Golf, Golf GTE⁰¹, Golf GTI⁰², Golf R⁰³, Golf Variant, Tiguan, Tiguan R⁰⁴, Touran, SEAT Tarraco und SEAT Tarraco e-HYBRID⁰⁵ für mehr als 50 Länder weltweit.

Plastics production

Since January 1, 2019, plastics production has formed part of the vehicle production business area in Wolfsburg. The internal systems supplier produces plastic components for vehicle interiors and exteriors and has a workforce of about 2,300 people in Wolfsburg. The product range includes the design components, such as instrument panel, door trim and fender as well as functional components such as plastic fuel tanks.

Material movements and flow of goods

Every day, around 180 double-decker rail cars and about 185 car-carrier trailers leave the Volkswagen plant in Wolfsburg. Incoming deliveries of raw materials, components and system modules from around 1,600 suppliers arrive at the plant in about 100 rail cars and 750 trucks every day.

Volkswagen Group Components: chassis business area

In addition to vehicle production, Volkswagen Group Components is active in Wolfsburg with its chassis business area. About 2,000 employees produce drive shafts, drag link tubes and cable shifts in an area of approx. 195,000 m². In addition, the complete wheels for all vehicles produced at Wolfsburg are assembled from a number of parts "just in sequence". Apart from the Wolfsburg plant, other major customers include plants of the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, Audi, SEAT and ŠKODA brands throughout the world.

IT-City

Volkswagen's IT digitalization competence at the Wolfsburg plant is grouped together in the Volkswagen IT City, where the team develops new digital solutions and ground-breaking technologies. The campus-type office complex constructed in May 2017 for about 1,500 employees is designed for agile working with short development and test cycles. It therefore has a lighthouse function for working models of the future.

Technical Development

Technical Development (TD) at Wolfsburg represents one of the largest development centers in the automotive industry. Working in a total area of 1.2 square kilometers, about 11,000 highly qualified employees shape the mobility of the future. Technical Development is where future-oriented areas such as electrification, digitalization and automated driving take shape. The Technical Development team has manifold technologies and facilities for the design, development and testing of future Volkswagen models at its disposal. These include the light competence center for testing innovative lighting systems, the safety competence center with highly advanced crash sled technology and the wind tunnel efficiency center for aerodynamic and aero-acoustics tests as well as realistic climate simulations, which opened in 2017.

Environment

The Wolfsburg plant has set itself the ambitious target of reducing the environmental impact caused by production by 38.1% compared with 2010 by 2025.

The key figures measured and monitored are CO₂ emissions, energy consumption, water consumption, waste production and solvent emissions.

An important factor in the successful implementation of resource efficiency measures is the systematic exchange of information between specialists in the works teams. At the Wolfsburg plant, more than 200 ambassadors of the Zero Impact Factory strategy provide support for achieving the targets. Another element is the exchange of information between production plants, aimed at adopting suitable optimization ideas from each other.

To identify and realize further savings potentials, compressed air systems, cold networks, cooling towers, hall ventilation systems and lighting systems are comprehensively reviewed and optimized. Each year, the plant is monitored by internal and external audits and successfully certified in accordance with ISO 14001 and ISO 50001. An EMAS environmental declaration is also issued by the plant on an annual basis.

Energy

The two cogeneration plants operated in Wolfsburg by Volkswagen AG not only generate power and heat for the Volkswagen plant, but also heat for the city of Wolfsburg. In addition, together with the cogeneration plant at Kassel and the compact cogeneration plant at Brunswick, the Wolfsburg power plants supply electricity for the plants at Salzgitter, Brunswick, Emden, Hanover and Kassel. At the Wolfsburg plant, VW Kraftwerk GmbH operates a public 110 kV power grid. For this purpose, an information safety management system in accordance with DIN ISO 27001 was developed and certified in 2018. This demonstrates that the availability, confidentiality, integrity and comprehensibility of information in this area receive special protection.

Since 2011, Volkswagen Kraftwerk GmbH has invested across all locations in the expansion of renewable energies and the installation of high-efficiency natural gas-powered cogeneration plants. Volkswagen is currently planning to thoroughly modernize the two major power plants owned and operated by the company in Wolfsburg and to change them over from coal to natural gas operation. In the course of this project, several new gas and steam turbine units are to be installed as replacements for the existing coal-fired boilers. The total investment will be about €400 million and commissioning is due to take place between mid-2021 and the end of 2022. The new, high-efficiency gas turbines for the Wolfsburg power plants will reduce CO₂ emissions for power and heat generation permanently by about 1.5 million metric tons per year.

History

Wolfsburg is the location of the Volkswagen Group and Volkswagen brand headquarters. It is from here that the worldwide activities and management of the Group are organized. Volkswagen, founded in Berlin on May 28, 1937 as "Gesellschaft zur Vorbereitung des Deutschen Volkswagens", commissioned a factory to be built at the site of what would eventually be the City of Wolfsburg. The factory was built in 1938/39 as a facility for series production of the Volkswagen car designed by Ferdinand Porsche. Realization of this "People's Car" vision was interrupted by World War II, which brought with it armament production and forced labor. Under the trusteeship of the British military government from 1945 to 1949, Volkswagen was transformed into a civil market company and came into its own. The dream of cars for everyone started to become reality when production of the Volkswagen started under British command on September 27, 1945. In 1955, the factory celebrated completion of the one-millionth Beetle in Wolfsburg. By the time production was discontinued in 1974, a total of 11,916,519 Beetles had been built in Wolfsburg. Production of the Golf then started. The form and functionality of the Golf made it the symbol of an entire vehicle class. With the GTI and the frugal diesel, the Golf became a best-selling model. The one-millionth Golf already rolled off the assembly line in Wolfsburg in 1976. This first Golf was replaced by its second-generation successor in May 1983. This model was assembled by largely automated systems in the dedicated assembly Hall 54 built especially for the Golf. In 1988, the 50th anniversary year of the city and the plant, the 10 millionth Golf was produced. In the plant, which had grown over the course of time, new market demands and ambitious corporate targets were mastered by investments in flexible technology, lean production methods and modern assembly systems adapted to customers' and employees' needs as well as a variety of shift working and working time models. In the 1990s, the Polo was added to the product range produced at the plant and was joined for a short time by the Seat Arosa and the Lupo, the Volkswagen brand's new entry-level model. From August 1997, the fourth-generation Golf, which was produced using highly advanced equipment, set new quality standards in the compact class which bore its name.

In August 2001, Auto 5000 GmbH was established as a result of negotiations between Volkswagen and the IG Metall trade union in order to create jobs in Wolfsburg for Touran production. The name of the company refers to the plan to recruit 5,000 new employees at a gross salary of DM 5,000. The project was promoted with the slogan of "5000x5000". From 2007 onward, Auto 5000 also produced the Tiguan compact SUV, which celebrated its world premiere at the IAA in 2007 and was launched on the market in October 2007. From January 1, 2009, the employees of Auto 5000 GmbH were transferred to Volkswagen AG and the project came to an end.

In September 2008, Volkswagen presented its new sixth-generation Golf. The 15 millionth Golf produced at the plant rolled off the assembly line two years later. The new seventh-generation Golf made its debut in September 2012. Six months later, in March 2013, the model won the European award "Car of the Year 2013".

The year 2014 was all about electric mobility: In March, the first e-Golf⁰⁷ rolled off the production line, followed by the Golf GTE, the plug-in hybrid, in June. During the following few years, four new models were launched, the second-generation Touran in May 2015, the second-generation Tiguan at the beginning of 2016 and updates of the Golf and Golf Sportsvan at the end of 2016.

History

In May 2017, IT City opened its doors. Situated north of the grounds of the plant, it is a central location for the Volkswagen Group's IT and digitalization competence. State-of-the-art workstations for around 1,500 specialists are designed to facilitate agile and user-oriented working. In July 2018, the Wolfsburg plant received the "Lean Production Award 2018" for efficient and agile production systems for the first time. In October 2018, the plant started to produce a model for another Group brand for the first time in 20 years – the SEAT Tarraco. The Spanish SUV is being produced together with the Volkswagen Tiguan and Touran. The Wolfsburg plant already produced the VW Lupo and SEAT Arosa (from 1996 to 1998), Audi 50 and VW Polo (from 1974 to 1978), and the VW Passat and Audi 80 (from 1994 to 1998) as well as the Audi 100 (from 1993 to 1997) together on the same production line. The eighth generation of the Golf has been produced here since the end of 2019. Just before the end of 2020, the Wolfsburg plant celebrated the simultaneous start of production of two hybrid models, the Tiguan eHybrid⁵, and the Tarraco e-HYBRID⁶, marking the launch of electric mobility production at the plant's facility 2.

Since series production started in December 1945, more than 46 million vehicles have been manufactured at the Wolfsburg plant.

1. Golf GTE (NEDC) fuel consumption l /100 km: combined 1.5; power consumption in kW/h/100 km: combined 11.4; CO₂ emissions (combined) in g/km: 34; efficiency class: A+.
2. Golf GTI (180 kW / 245 PS) - (NEDC) fuel consumption in l/100 km: urban 9.0-8.6 / extra-urban 5.6-5.3 / combined 6.9-6.5; CO₂ emissions in g/km (combined): 157-149; efficiency class: D-C.
3. Golf R (235 kW / 320 PS, with 7-speed DSG dual clutch gearbox) – (NEDC) fuel consumption in l/100 km: urban 9.0, extra-urban 6.0 - 5.9, combined 7.1 - 7.0; CO₂ emissions in g/km (combined): 163 - 161; efficiency class: D.
4. Tiguan R 2.0 TSI 4MOTION DSG, 235 kW (320 PS) / fuel consumption in l/100 km (NEDC): urban 10.2 / extra-urban 7.0 / combined 8.1; combined CO₂ emissions in g/km: 186; efficiency class: D.
5. Tiguan eHybrid – fuel consumption in l/100 km (NEDC): 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+.)
6. SEAT Tarraco e-Hybrid – fuel consumption in l/100 km (NEDC): combined 14.5; CO₂ emissions in g/km: combined 0; efficiency class: A+.
7. e-Golf: Power consumption, combined 13.8 - 12.9 kWh/100 km; CO₂ emissions, combined 0 g/km; efficiency class A+.