



Media Information

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Eisenach plant at a glance: Body Shop, General Assembly, New Battery Shop

- First automobile factory founded in the new federal states after German reunification
- Since then, continuous development in keeping with the times
- Recognised several times as the most modern and productive automobile manufacturing facility in Europe
- Investments amounting to €130 million made for the new Grandland
- Modernisation and further development enables multi-energy production on new BEV-native STLA Medium platform
- Solar park for supply with “green” energy planned
- Made in Germany: New Grandland designed and engineered in Rüsselsheim, built in Eisenach

Body shop

- The biggest transformation in the history of the Eisenach plant was carried to enable production of the new Grandland
- Integration of the fully flexible STLA Medium platform
- Biggest challenge: Integration of new areas into operational processes without new buildings or area expansions
- Efficient use of existing space, for example through a redesigned logistics concept with the integration of high-bay warehouses into production; This meant that 9,500m² of additional space could be gained for the implementation of STLA Medium
- Result: Completely flexible system for different Grandland versions such as right- and left-hand drive, Hybrid and fully electric versions and much more
- Use of various joining processes (resistance and laser welding, bonding)
- Fully automated: 422 robots, online measuring stations for quality assurance, Camera systems and AI technology for critical operations



General Assembly

- Entire conveyor systems converted and further developed to accommodate higher weights, larger dimensions, etc
- All vehicle types are now produced with full flexibility via a “single-line process”: battery-electric, plug-in hybrid and hybrid models all on one line
- High quality and safety requirements guaranteed by
 - Numerous camera-based systems for detailed inspection
 - “Andon” system: Management system that ensures immediate help “on the line” for individual employees by notifying team leaders
- Focus also on work ergonomics: massive optimisations have been made for the production process, such as the introduction of height-adjustable transport pallets

New battery shop

- Requirement: Integration of the new battery shop into the existing infrastructure of the Eisenach plant, location close to the battery installation in the vehicles (“short distances”)
- Battery shop today covers almost 2,000 m² of space
- Since the beginning of 2024, the new battery shop has been assembling its own batteries for all vehicles from Eisenach
- Battery Shop is fitted with the latest technologies and equipment
- Production is carried out using fully automated robot cells and specially trained employees
- Special “high-voltage training”: Only employees who have completed this highest level of training are tasked to manufacture the Grandland Electric or handle the batteries. “High-voltage” work is only permitted with special protective clothing
- Generally, two types of batteries are installed in Eisenach: for fully electric vehicles and for plug-in hybrids
- The following work processes are carried out in the battery shop from delivery of the cells to installation of the battery in the vehicle:
 1. Positioning the up to 180 kg housing on a mobile frame using robotic technology
 2. To achieve a cooling effect, the modules float in a so-called “heat paste” (made of two components): the heat is thereby distributed or dissipated across the housing
 3. The modules, each weighing around 30 kg, are inserted into the battery fully automatically by robots



4. The battery is programmed and completed with a 5-step manual process
5. Final inspection
6. Sealing of the battery – the covers are attached fully automatically by two robots using 80 screws
7. Two tests:
 - Electrical stress test for functionality: vehicle simulation and battery discharging
 - Battery leak test

The battery is now ready for installation in the vehicle

Automatic transport of the battery to the assembly line station where it is installed in the vehicle

About Opel

Opel is one of the largest European car manufacturers and a leader in the reduction of CO₂ emissions thanks to its extensive electrification offensive. The company was founded by Adam Opel in Rüsselsheim, Germany, in 1862 and started building automobiles in 1899. Opel is part of Stellantis NV, a global leader created for the new era of sustainable mobility. Together with its British sister brand Vauxhall, the company is represented in more than 60 countries around the globe, continuing to enter new international markets. Opel is currently consistently implementing its electrification strategy to secure sustainable success and ensure that the future mobility demands of customers are met. By 2024, a battery-electric variant of each Opel model will be available.

Visit <https://int-media.opel.com>

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