

The first journey taken by a self-driving truck: the Mercedes-Benz Future Truck 2025.

Hands off the wheel.

At the wheel here is the technology of the future, which is already a reality at Daimler today. At the IAA Commercial Vehicles 2014, the Mercedes-Benz Future Truck 2025 study offered a visually fascinating and technically feasible preview of the future of freight transport. The Future Truck 2025 marks a revolution in road freight transport, traffic infrastructure, the truck-driving profession and the freight forwarding industry, and is thus a key component of the transport system of tomorrow. The vehicle was designed to ensure the highest degree of road safety and efficiency, and it will also help to further reduce fuel consumption. Thanks to the "Highway Pilot" with networked sensors and cameras, the driver can simply turn control of the truck over to an autonomous high-tech system. This capability was successfully demonstrated by a prototype on the autobahn.



Video.
The spectacular world premiere of the Highway Pilot system on the A14 highway in Germany.





Outstanding safety. The eye-catching appearance of the Mercedes-Benz Future Truck 2025 underscores the vehicle's unique technological capabilities. The self-driving truck also marks a major step away from traditional trucks and towards the autonomous transport vehicles of tomorrow. With its aerodynamically optimized design, the truck's cab exudes maximum calm and power. Cameras have replaced the exterior mirrors, and classic elements such as headlights seem to be missing at first glance. LED lamps in the bumpers light up after the engine is started, indicating that the Future Truck 2025 is ready to roll. The truck's lights turn white when the prototype is driven manually. When the truck is driving autonomously, the color of the lights changes to a pulsating blue to clearly indicate the vehicle's operating mode to other road users.

Innovative design for the cockpit as well. Displays, a touchpad and a tablet computer replace familiar instruments and switches in the Future Truck 2025. Long-haulage trucks from Mercedes-Benz already feature a visual separation between living and driving areas. In the future, the cab will also include a workplace for autonomous driving phases. It will be possible to move the seat back completely and turn it 45 degrees to face into the cab space.

The Highway Pilot keeps the truck in its lane more precisely than any driver can. When it is driving autonomously, the Future Truck 2025 will enable drivers to work in a completely new way.



A revolution on the road. In the summer of 2014, auto industry specialists and journalists from around the world witnessed the cutting-edge capabilities of the Highway Pilot in a camouflaged prototype of the Future Truck 2025. Although a driver was sitting at the steering wheel, the Highway Pilot drove the vehicle all by itself.





“Avoidance of human error at the wheel will reduce danger and accidents. Traffic will flow more calculably and safely. The traffic system will become more flexible and infrastructure will be utilized more effectively. The Future Truck 2025 will facilitate a quantum leap in terms of safety and efficiency.”

Hans Luft, Daimler Wörth plant, Truck Testing

Highway Pilot activated – technology takes the wheel. It’s a vision that the automotive pioneer Daimler has put on the road. Back in 2013, Mercedes-Benz Cars became the world’s first automaker to prove that autonomous driving is possible in cities and on country roads with the Mercedes-Benz S 500 INTELLIGENT DRIVE research vehicle. That car’s groundbreaking technology was also incorporated into the Mercedes-Benz Future Truck 2025. In a further milestone for autonomous driving systems, the fascinating technology in the Future Truck 2025 demonstrated its capabilities in real traffic situations in the summer of 2014. This success was particularly noteworthy because it was achieved with existing and near-production technologies such as Proximity Control Assist and Active Brake Assist.

On the road today in the truck of tomorrow. A route of around 30 kilometers with alternating stretches of open road and slow-moving traffic. Just a normal trip? Far from it, as the journey was taken by a camouflaged prototype of the Mercedes-Benz Future Truck 2025, which drove itself along the A14 highway near Magdeburg in Germany. During the trip, the “driver” did everything but drive, performing tasks such

as order scheduling, checking e-mails and reserving parking spaces. This revolutionary achievement was made possible by the Highway Pilot system. The “brain” of the Future Truck 2025 consists of radar sensors, a stereo camera, three-dimensional maps and a system that allows the truck to communicate with other road users and road infrastructure.

The Future Truck 2025 pays attention and makes space.

After the driver turns on the highly intelligent system, he or she can let go of the steering wheel. The long-haulage truck continues to travel at the desired speed, maintains a safe distance to the vehicle ahead and stays precisely in its lane. The Future Truck 2025 also reacts to unanticipated events. For example, it smoothly adjusts its speed if the traffic ahead slows down or comes to a halt. If an emergency vehicle approaches from the rear, the truck automatically moves over to make space and then returns to the center of the lane. Still, even in the cockpit of the future, the driver remains completely in control. For example, he or she can disengage the Highway Pilot and resume control of the vehicle at any time by hitting the brake or the gas pedal or simply pushing a button.