

## Mercedes-Benz 2025 truck shows autonomous system vision

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Coming down the road will be the future truck of 2025 and it will be able to move autonomously. The Mercedes-Benz Future Truck 2025 was recently showcased at this year's International Commercial Vehicle show (IAA), where visitors got to see what is in store on future highways in terms of trucks, buses and vans. This is an important commercial vehicle show event, of interest to manufacturers, body builders, suppliers, hauler



companies and drivers, in essence the players in the transport sector. The advantages of such trucks will be greater transport efficiency, safer traffic activity affecting all road users, and fuel consumption and CO2 emissions further reduced. This will no doubt please transport decision makers who want to see sure signs of transport vehicles meeting environmental goals. The Mercedes-Benz publicity literature makes note of the truck's Highway Pilot system. Comparable to an autopilot in a plane, the radar sensors and dual-camera system of the Highway Pilot make autonomous driving possible, without relying on any kind of guiding infrastructure.

The Pilot can react to a variety of traffic situations, such as having to move over for approaching emergency vehicles; there is a Blind Spot Assist to add safety when turning and changing lanes. The company release said that when the drivable vehicle is controlled manually and on the move, the lights are white. When the truck is driving autonomously, the color of the lights changes from white to blue. They pulsate strongly, "symbolizing the truck's powerful heartbeat," and clearly indicating to other <u>road users</u> of the vehicle's operating mode.

As the promotional video also shows, the design reflects a sense of ecotruck where calm rather than clinks and clanks is conveyed. The company noted how elements such as the headlamps seem to be missing at first glance. "The Future Truck 2025 comes to life when the engine starts. LEDs illuminate the surfaces and light up the paintwork." The promotional video said "This highly intelligent system relieves the driver from tedious driving as he gains time for other tasks and communication." Company information said that when the truck is travelling autonomously, the driver may recline the seat and also turn it by 45 degrees into the space, allowing a "relaxed, comfortable working position." Indirect lighting illuminates the interior without glare. "In spite of all this sophisticated technology," said the video, "it is the driver who remains in charge and in no way will the Highway Pilot replace the



driver."

The Mercedes-Benz Future Truck 2025 was also discussed Monday in IEEE Spectrum where Philip Ross noted that a human was behind the wheel just in case. He commented in IEEE Spectrum that "The company has long been adamant about the continuing need to keep drivers as backup for robotics and vice-versa. In this view of automated driving, the point is to economize on fuel, improve safety, and give the driver a bit of rest—just not so much that he tunes out altogether."

Dr. Wolfgang Bernhard, member of the board, Daimler, made the observation that trucking today involves an environment where driving can be boring and monotonous. In contrast, the highway pilot when it takes over never gets tired and is always 100 percent sharp. It's never angry. It's never distracted. All in all, it is safer. Still, self-driving trucks have some years to wait before we see them on the road. The biggest part is sorting out a suitable legal environment and once that is in place, the technology can be introduced.

"One of the most interesting questions on the subject of autonomous driving is the time horizon envisaged for its realization," said a Daimler discussion of legal requirements and time horizon for autonomous driving. "In purely technical terms, turning it into reality on the roads is already feasible within around five years. This time window corresponds to passenger car development cycles, where a possible start in 2020 is envisaged. Owing to the more complex factors for heavy commercial vehicles, the time horizon will however be rather longer – realistically an implementation is possible within ten years, also in view of the legal considerations that still remain to be clarified."

**More information:** <u>social.mercedes-benz.com/clipp ... nd-details-</u> released/



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