
No hot air: Over 1000 kilometers with the fuel cell truck

The fuel cell is the vehicle of choice for the electrification of long-distance trucking. Mercedes-Benz has now covered a distance of 1047 kilometers on one tank of liquid hydrogen with a prototype GenH2 truck approved for public road transport. The tractor-trailer started yesterday afternoon at the customer center in Wörth am Rhein and reached Berlin this morning. The truck with a gross vehicle weight of 40 tons was fully loaded.

"By cracking the 1,000-kilometer mark on one tank of fuel, we have now impressively demonstrated: Hydrogen in trucks is anything but hot air and we are making very good progress on the road to series production," said Daimler-Truck board member Andreas Gorbach. He added that the demonstration drive was also an appeal that, in addition to the right drive technologies, two other factors are necessary for the decarbonization of transport: a green energy infrastructure and competitive costs compared to conventional vehicles.

The hydrogen supplied by Air Liquide was produced from biomethane. During refueling, cryogenic liquid hydrogen at minus 253 degrees Celsius was filled into two 40-kilo tanks, each mounted on the side of the chassis. Thanks to the particularly good insulation of the vehicle tanks, the hydrogen can be kept at temperature for a sufficiently long time without active cooling. In the development of hydrogen-based drive systems, Daimler Truck prefers liquid hydrogen in the long term. In this state of aggregation, the energy carrier has a significantly higher energy density in relation to volume than gaseous hydrogen. As a result, more hydrogen can be transported, which significantly increases the range and thus enables the vehicle's performance to be comparable to that of a conventional diesel truck. (aum)

Images for article



Covered more than 1000 kilometers on 80 kilos of liquid hydrogen: Mercedes-Benz GenH2 Truck.

Photo: Autoren-Union Mobilität/Daimler Truck



Covered more than 1000 kilometers on 80 kilos of liquid hydrogen: Mercedes-Benz GenH2 Truck.

Photo: Autoren-Union Mobilität/Daimler Truck



Covered more than 1000 kilometers on 80 kilos of liquid hydrogen: Mercedes-Benz GenH2 Truck.

Photo: Autoren-Union Mobilität/Daimler Truck
