

LIEBHERR

Liebherr presents all-electric truck mixers

Mar 29, 2020 - 01:01 pm



The vehicle manufacturer Liebherr, in cooperation with Designwerk and ZF, have developed the first fully electric truck mixers with a drum holding ten or twelve cubic metres on a five-axle chassis. The first applications are planned for autumn 2020 at the customers Holcim and KIBAG in Switzerland.

The new concrete truck mixers with the designations ETM 1005 and 1205 have a chassis of the Designwerk brand Futuricum, and a drum drive developed jointly by Liebherr and ZF. “For the first time, both the truck and the truck mixer body are powered jointly by the traction battery, eliminating the need for costly power electronics components”, the company emphasises in an accompanying press release. This eliminates the need for costly components in the power electronics, among other things.

The Futuricum chassis, based on Volvo Trucks’ FM series, houses an electric motor with an output of 500 kW and, according to the Swiss manufacturer, copes perfectly with the weight of the concrete in the drum. A drum drive is a unit consisting of an additional electric motor and a mixer gearbox installed directly on the drum. All hydraulics are superfluous, says Liebherr. Additionally, the body has a low dead weight with the best possible transport volume. The company did not provide information on the transaction battery’s capacity. However, as there are two battery packs installed, other Futuricum trucks with similar battery configurations could provide guidance. The Futuricum Collect 26E is a fully-electric refuse collection vehicle that also has an output of 500 kW and is based on Volvo’s FM series, which features two 170 kWh batteries.

In return, the project initiators emphasise those truck mixers are particularly suitable for electrification, as the distances from the concrete plant to the construction site are relatively short compared to freight transport. In the cement factory, where the vehicles always return to, charging infrastructure can be installed and used for overnight charging. The Swiss companies Holcim and KIBAG will now test this in practice. According to Liebherr, the design of the truck is ideally suited to Switzerland, where 40-tonne lorries are allowed to drive on five axles.

As far as the electrification of construction machinery is concerned, Liebherr already made a name for itself last year. At the Bauma trade fair, the company presented a battery-powered large rotary drilling rig. This was an electric version of the already established LB 16 large rotary drilling rig powered by a combustion engine.

With reporting by Cora Werwitzke, France.