



Press Release Munich/Düsseldorf, March 6, 2018

Esslingen, Rimini and Dayton/Ohio operate Kiepe Electric bus systems with In Motion Charging

Systems specialist Kiepe Electric grows its market share in zero-emission drive systems. Mass transit authorities in Esslingen, Rimini and Dayton place orders for additional electric bus projects.

"We are delighted at the follow-up orders placed by our long-standing customers, reflecting their enduring trust in us and in our high-quality products," says Dr. Peter Radina, Member of the Management Board, Knorr-Bremse Rail Vehicle Systems.

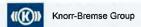
USA: Greater Dayton Regional Transit Authority (GDRTA) in Ohio has taken up an option for 26 dual-mode electric buses that are to replace its current trolleybuses, bringing the fleet into line with the latest state of the art. The four prototypes tested in a pilot program proved a match for the demanding conditions in downtown Dayton, as well as for the inclement weather. Since 2013, Kiepe Electric has won major orders from Seattle and San Francisco for electrical equipment for a total of 482 vehicles, and now ranks among the leading suppliers of electric bus drive systems in the U.S. market.

Italy: From 2019 onward, nine electric buses with IMC charging technology from Kiepe Electric will be operating on the new Rapid Coast Transport (TRC) line between Rimini and Riccione. The newly built line will run on a dedicated track, isolated from other traffic, and will offer local residents and tourists a fast link between the two cities. A traction battery enables the buses to access and exit the electrified route along roads with no overhead lines.

Germany: The City of Esslingen is to expand its battery-powered trolleybus fleet to ten vehicles. The mass transit authority has been running four electric buses from Kiepe Electric on scheduled line service since 2016. The focus here is on the enhancement of the company's ground-breaking In Motion Charging technology: With the new IMC 500 system and an improved traction battery, the buses will now be able to draw up to 500 kW of power from the overhead lines, boosting their performance above all on uphill stretches.

Electrical equipment from Kiepe Electric powers vehicles in many towns and cities around the world. Kiepe Electric is committed to advancing the electrification of bus fleets across the globe, based on its trailblazing IMC charging concept. This innovative charging technology from the Düsseldorf-based company adds real value for bus fleet operators: With In Motion Charging, trolleybuses cover sections of route without overhead lines in battery-powered mode, with the batteries then being recharged when the vehicle is back under overhead lines. This makes for non-stop 24/7 operation, with greater efficiency, resource conservation and vehicle availability.

Caption 1: The new electric buses with IMC technology from Kiepe Electric on the Altoona test track I © Dayton Larson Transportation Institute Department of Civil and Environmental Engineering, Pennsylvania State University







Caption 2: Low noise and low emissions: An IMC battery bus from Kiepe Electric in the center of Esslingen I © Kiepe Electric GmbH

Knorr-Bremse is the leading manufacturer of braking systems and supplier of additional sub-systems for rail and commercial vehicles, with sales totaling over EUR 6 billion in 2017. In 30 countries, some 28,000 employees develop, manufacture, and service braking, entrance, control, and energy supply systems, HVAC and driver assistance systems, as well as steering systems, and powertrain and transmission control solutions. As a technology leader, through its products the company has been making a decisive contribution to greater safety by road and rail since 1905.

Knorr-Bremse subsidiary Kiepe Electric, based in Düsseldorf, Germany, is a globally active supplier of electrical systems to the leading rail vehicle and bus manufacturers. The company offers efficient solutions and ecologically sustainable concepts for low-emission public transportation with eco-friendly electrical equipment for light rail vehicles, metros and regional rail networks as well as for battery, trolley and In Motion Charging (IMC) buses.