

MAHLE corporate start-up chargeBIG establishes charging infrastructure for electric vehicles

- One hundred charging points go into operation in the company's own parking garage
- chargeBIG is a centralized, scalable charging infrastructure concept for fleet operators and drivers who leave their cars in a parking lot all day
- Low-cost and time-saving integration into existing infrastructure

Stuttgart/Germany, July 16, 2019 – Today, MAHLE celebrates the go-live of 100 chargeBIG charging points for electric vehicles in the company's own parking garage in Stuttgart-Bad Cannstatt/Germany. This event is MAHLE's contribution toward the day of action organized by the Bündnis für Luftreinhaltung, a local alliance to combat air pollution.

“Our corporate start-up chargeBIG has a vision: in the future, the charging of electric vehicles will be widespread, low cost, very easy, and clever. Today, this vision has become a reality in Bad Cannstatt,” explains Dr. Jörg Stratmann, Chairman of the Management Board and CEO of MAHLE.

Around 120 guests from the fields of politics, business, and science are expected to attend the event on MAHLE's parking deck to find out about the intelligent charging structure as well as the fast charging unit with battery storage. Anyone traveling in their own electric vehicle will be able to connect to one of the new chargeBIG charging points and test the system directly. The development of the charging infrastructure in MAHLE's parking garage is the result of a project funded by the German Federal Ministry for Economic Affairs and Technology (BMWi) and carried out in collaboration with partners Fraunhofer ITWM and eliso.

“chargeBIG is a smart, pragmatic solution that has come about in a lively start-up environment—with a fantastic team spirit, huge commitment, and great enthusiasm,” says Dr. Stratmann.

Intelligent charge management system for long-stay parking

chargeBIG is an intelligent charge management system for users of long-stay parking and can be integrated into the existing infrastructure at low cost and without protracted conversion work. The system follows a new approach: charging as quickly as necessary rather than charging as quickly as possible. And it is intended for use by as many vehicles as possible, among which the amount of electricity available is distributed intelligently. The chargeBIG system is an ideal solution for parking lots where electric vehicles are left for relatively long periods of time—as in company parking garages, at airports, in underground garages for large residential buildings, and in the case of fleet operators.

The chargeBIG charging concept consists of a central control unit with permanently mounted cables and connector plugs instead of charging columns in the parking lot. Thanks to the intelligent charging system and design-to-cost approach, there is no need to invest in expanding the network connection, thus saving time and money when setting up the charging infrastructure.

A central control unit distributes the available charging capacity across the parked vehicles using dynamic, phase-specific load management. This prevents unbalanced loads in the power supply. chargeBIG responds flexibly to other consumers on the network and uses the electric vehicles as a controllable load, ensuring optimal utilization of the available power supply. In addition, the chargeBIG solution is more convenient to install and look after than alternative systems, as the charging points can be maintained very easily via the central electronics. The system offers a further advantage in terms of safety, because the charging points are de-energized when not in use.

Air quality action day

The unveiling of the charging points is also MAHLE's contribution toward the day of action organized by the Bündnis für Luftreinhaltung. This alliance of major Stuttgart-based companies to combat air pollution was officially launched in spring 2019 with the support of the Minister President of Baden-Württemberg, the German federal state in which MAHLE is headquartered. The joint goal of the alliance is, as far as possible, to keep the city's air quality within the relevant limit values for nitrogen oxide and fine particulates from 2020. For this reason, the participating companies aim to use numerous measures to exert a positive influence on their employees' transport choices.

About MAHLE

MAHLE is a leading international development partner and supplier to the automotive industry as well as a pioneer for the mobility of the future. The MAHLE Group is committed to making transportation more efficient, more environmentally friendly, and more comfortable by continuously optimizing the combustion engine, driving forward the use of alternative fuels, and laying the foundation for the worldwide introduction of e-mobility. The group's product portfolio addresses all the crucial issues relating to the powertrain and air conditioning technology—both for drives with combustion engines and for e-mobility. MAHLE products are fitted in at least every second vehicle worldwide. Components and systems from MAHLE are also used off the road—in stationary applications, for mobile machinery, rail transport, as well as marine applications.

In 2018, the group generated sales of approximately EUR 12.6 billion with more than 79,000 employees and is represented in over 30 countries with 160 production locations. At 16 major research and development centers in Germany, Great Britain, Luxembourg, Spain, Slovenia, the USA, Brazil, Japan, China, and India, more than 6,100 development engineers and

technicians are working on innovative solutions for the mobility of the future.

For further information, contact:

MAHLE GmbH

Margarete Dinger

Corporate Communications/Public Relations

Pragstraße 26–46

70376 Stuttgart/Germany

Phone: +49 711 501-12369

margarete.dinger@mahle.com