

Medieninformation

December 28, 2020

Initial contact:

The mobile charging robot – Presenting a vision

- Volkswagen Group Components gives us a first glimpse of the real prototypes
 - CEO Schmall: “Available charging infrastructure is key in the success of electric mobility”
 - Charging and charging systems combined as core issues at Group Components
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Wolfsburg – Volkswagen Group Components gives us a first glimpse of the prototypes of its mobile charging robot. This is one of the visionary charging concepts that Volkswagen hopes will expand the charging infrastructure over the next few years. Its task: fully autonomous charging of vehicles in restricted parking areas, like underground car parks. “A ubiquitous charging infrastructure is and remains a key factor in the success of electric mobility. Our charging robot is just one of several approaches, but is undoubtedly one of the most visionary,” explains Thomas Schmall, Volkswagen Group Components’ CEO.



Vision becomes reality: the mobile charging robot

Fully autonomous charging

The charging robot – started via an app or Car-to-X communication – operates totally autonomously. It independently steers the vehicle to be charged and communicates with it: from opening the charging socket flap to connecting the plug and decoupling it. The entire charging process takes place without any human involvement whatsoever. To

charge several vehicles at the same time, the mobile robot moves a trailer, essentially a mobile energy storage unit, to the vehicle, connects it up and then uses this energy storage unit to charge the battery of the electric vehicle. The energy storage unit stays with the vehicle during the charging process. In the meantime, the robot charges other electric vehicles. Once the charging service has ended, the robot independently collects the mobile energy storage unit and takes it back to the central charging station.

[Link to the film](#)

Press contact – Volkswagen Group Components Communications

Tim Fronzek, Spokesman, Tel: +49 5361-9-77639, tim.fronzek@volkswagen.de

Enrico Beltz, Head of Communications, Tel: +49 5361-9-48590, enrico.beltz@volkswagen.de



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According to Thomas Schmall, CEO of Volkswagen Group Components: "Setting up an efficient charging infrastructure for the future is a central task that challenges the entire sector. We are developing solutions to help avoid costly stand-alone measures. The mobile charging robot and our flexible quick-charging station are just two of these solutions." The business unit is currently working on a complete DC charging family. The flexible quick-charging station will be launched onto the market in early 2021. For several weeks now, the DC wallbox has been trialled at different company's German production sites. The mobile charging robot has successfully reached prototype status and will now be comprehensively further developed. One of the prerequisites for market maturity is Car-to-X communication to facilitate the autonomous charging process.

In view of the crucial importance of this issue, in future Volkswagen Group Components will be amongst other things responsible for all Volkswagen Group charging activities and charging systems. The intention is to integrate the charging robot into an overall concept that will focus on the long-term success of electric mobility, and thus the electrification of transport. "Establishing a charging infrastructure is a fundamental prerequisite for this. But it needs to be demand-led and efficient," continues Schmall. "Our developments do not just focus on customers' needs and the technical prerequisites of electric vehicles. They also consider the economical possibilities they offer potential partners." They enable the operators of parking bays and underground car parks to quickly and simply "electrify" every parking space using the mobile charging robot. This reduces any construction work needed, at the same time reducing the potential cost.

[This is how the mobile charging robot works](#)

ID.4 1ST – power consumption (NEDC) in kWh/100 km: 16.2; CO₂ emissions in g/km: 0; efficiency class: A+

ID.3 – combined power consumption in kWh/100 km (NEDC): 15.4-14.5, CO₂ emissions in g/km: 0; efficiency class: A+

This is Volkswagen Group Components.

As an independent corporate business unit under the umbrella of Volkswagen AG, Volkswagen Group Components is responsible for the development and manufacturing of strategic components for the Group's vehicle-producing brands. Around 75,000 employees work in over 60 plants at 48 production sites worldwide in five business areas – Engine and Foundry, Gearbox and Electric Drive, Chassis and Battery System, Seats and Battery Cells. They develop and manufacture vehicle components, shape future topics such as charging infrastructure and battery recycling – and thus make a decisive contribution to the value of the Volkswagen Group, its brands and products. Thomas Schmall is CEO of Volkswagen Group Components.

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