MAHLE

Press release

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MAHLE launches new generation of its e-bike drive system

- Compact X35+ system for unobtrusive integration into the bike design
- System weight just 3.5 kilograms including battery
- Smart connectivity with MAHLE apps

MAHLE is launching a new generation of its drive system for e-bikes. Thanks to an extremely compact design, the X35+ system consisting of wheel hub motor, battery, and control units can be integrated almost invisibly into a conventional bicycle frame. Rather than follow the trend toward maximum power output, MAHLE offers ideal user-oriented performance. This makes the system not only more streamlined but also significantly lighter. Including the battery, its total weight is just 3.5 kilograms. The hardware is supplemented by an integrated connectivity solution featuring mobile and web-based apps. The MAHLE e-bike solution is therefore perfectly suited to sports and leisure applications as well as everyday mobility. The automotive supplier headquartered in Stuttgart/Germany has been operating an e-bike business segment for four years and counts numerous well-known e-bike manufacturers among its customers.

"With our drive system, we're giving the bicycle back its identity. With the battery integrated into the frame, and the wheel hub motor, there are hardly any visible signs of electrification. E-bikes can now look sporty, slim, and elegant again," explains Jochen Sommer, head of MAHLE's e-bike business segment.

The MAHLE drive unit in the X35+ system supports the rider by seamlessly delivering 250 watts of power at the touch of a button. When switched off, the unit offers no resistance, and muscle power can be used for a natural cycling experience. The electric drive is powered by an accumulator battery with a capacity of 245 watt hours. An additional range extender battery with a capacity of 208 watt hours is optionally available.

For connectivity, MAHLE has developed its own app, which interacts with the main components. This allows the user to analyze numerous pieces of information—for example, how far and how fast he or she has ridden, how much



electrical assistance was needed during the journey, his or her pulse while cycling, and even cruising range and maintenance requirements. The system also incorporates additional functions, such as antitheft protection. When out on the road or trail, a Bluetooth interface takes care of the smartphone connection and important functions, including—but not limited to—real-time data on the e-bike and the current ride, GPS, changing ride assistance levels, and trip recording.



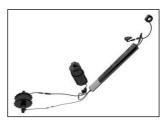
The MAHLE e-bike drive system can be integrated almost invisibly into the bicycle design.



Smart connectivity is provided by a dedicated MAHLE app, which delivers real-time data on the move.



The MAHLE drive system is also used in the Artur model from the Berlin-based e-bike manufacturer Schindelhauer. (© Schindelhauer)



Compact and light: The MAHLE e-bike drive system with optional range extender battery

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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 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. In 2019, the technology group generated sales of approximately EUR 12.0 billion with more than 77,000 employees and is represented in over 30 countries with 160 production locations.