

Press Release

Palencia, 4 September 2025

MAHLE SmartBike Systems unlocks more torque and power for X20

- X20 System upgrades for a more responsive and versatile riding experience
- 65 Newton metres (Nm) of torque, 275 watts (W) of peak power, 1.4 kilograms (kg) light
- Now compatible with Universal Derailleur Hanger (UDH)

Driven by a commitment to continuous innovation, MAHLE SmartBike Systems has enhanced the performance of its flagship X20 rear hub system. The new X20 increases torque to 65 Nm (nearly 20%) and boosts peak power output to 275 W (up 10%), delivering sharper acceleration, improved climbing capability, and a more responsive ride — all while maintaining the system’s ultra-light 1.4 kg design. In addition to the performance improvements, the latest hardware generation of the X20 now features compatibility with the Universal Derailleur Hanger (UDH) standard. This advancement allows manufacturers to integrate more robust derailleur systems, which improve shifting precision, offer better protection against impact, and require less maintenance. Riders who already own an X20 bike will progressively gain access to the increased torque and power through firmware updates released by MAHLE throughout 2025.

“This upgrade is about giving riders more choice in how they ride — whether they want more support on climbs, a more dynamic feel on flat terrains, or simply a smoother experience overall. We’ve engineered a solution that delivers enhanced performance without adding weight or complexity. It’s an evolution of the X20 System — staying true to our ‘Light. Sport. Smart.’ philosophy,” said Jochen Sommer, Head of MAHLE SmartBike Systems.

The new X20 System can already be experienced across a wide range of bike models from MAHLE’s extensive list of brand partners — taking lightweight e-performance to new heights across road, gravel, and urban segments.

For further information:

Website MAHLE X20 Upgrade: <https://mahle-smartbike.com/x20/>

MAHLE SmartBike Systems website: <https://mahle-smartbike.com/>

Note for editors: This press release and the accompanying image material can be found at: <https://newsroom.mahle.com/press/en/>

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MAHLE SmartBike Systems unlocks more torque and power for X20 drive units



X20 is an ultracompact, light and smart system that creates a full range of new riding possibilities



X20 system upgrades for a more responsive and versatile riding experience



MAHLE has introduced UDH compatibility in the latest hardware generation of the X20 System



Riders who already own a X20 bike will progressively gain access to the torque and power upgrade

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About MAHLE SmartBike Systems

The company MAHLE SmartBike Systems is the specialist division for the design and development of drive systems for eBikes as part of the German MAHLE group, an international leader in sustainable mobility solutions for both present and future.

The more than 150-person-strong team is made up of software and hardware engineers, industrial and electronic engineers, quality specialists, 3D designers, creatives, production and materials experts, and a long list of professionals in addition to a further 80 people across the group's different centers in Spain, Germany, and Asia.

With the headquarters of this major project located in Palencia, MAHLE SmartBike Systems brings together MAHLE's R&D, Marketing, Operations and Sales activities within the eBike sector.

The ultralight and compact MAHLE systems are comprised of the motor, batteries, controllers, components, and all types of intelligent solutions for eBikes and are integrated and perfectly interconnected with each other in order to offer cyclists a completely personalized experience. Thanks to all these characteristics, more than 70 brands around the world, including those that as a result of their innovation are revolutionizing the cycling industry, incorporate MAHLE drive systems as the perfect choice in terms of integration, cost, and efficiency for electric mobility.

#ePoweredByMAHLE

About MAHLE

MAHLE is a leading international development partner and supplier to the automotive industry with customers in both passenger car and commercial vehicle sectors. Founded in 1920, the technology group is working on the climate-neutral mobility of tomorrow, with a focus on the strategic areas of e-mobility and thermal management as well as further technology fields to reduce carbon emissions, such as fuel cells or highly efficient, clean combustion engines that also run on synthetic fuels or hydrogen. Today, one in every two vehicles globally is equipped with MAHLE components.

MAHLE generated sales of €11.7 billion in 2024. The company has almost 68,000 employees at 135 production locations and 11 technology centers in 28 countries. (as at: 12/31/2024)

#weshapefuturemobility