



THE AUTONOMOUS MOVER FOR EVERYONE: WORLD PREMIERE OF HOLON VEHICLE AT CES 2023

- New BENTELER brand HOLON presents world's first autonomous mover built to automotive standards
- Vehicle to combine sustainability, inclusion, comfort and safety
- Design by Pininfarina, a long-term partner of HOLON
- Partnerships with Mobileye, Beep and Cognizant Mobility, among others.
- Pilot projects being prepared for the USA and Germany; US production start planned for end of 2025

Las Vegas, January 4, 2023 – HOLON, the new brand from the BENTELER Group, will present its

autonomous, fully electric and inclusive mover for the first time at the **Consumer Electronics Show (CES) 2023 in Las Vegas**. The vehicle is the **world's first autonomous mover built to automotive standards** – in other words, a leader in safety, ride comfort, and production quality. The HOLON mover operates autonomously and with a maximum speed of 60 km/h (37mph). It has a range of about 290 kilometers (180 miles).

Marco Kollmeier, Managing Director of HOLON:

“Our mover is an answer to social megatrends: Urbanization, climate change, demographics – mobility needs to change. With our mover, we are proving that emission-free, safe, comfortable and inclusive passenger ▶



transportation is possible. And thus provides the answer to traffic problems that are becoming prevalent in cities. We are delighted to unveil the vehicle to the global public today.”

Areas of application for the mover are on-demand services, such as ride pooling and ride hailing, but also normal scheduled services. The first pilot project has already been announced: in Germany with Hamburg’s Hochbahn, the country’s second-largest mass transit company. In the U.S., the mobility provider Beep will be responsible for implementing the first vehicles. Other areas of application and thus customers include private institutions such as campuses, airports and national parks.

Marco Kollmeier continues: “Our mover is specifically designed for autonomous driving. This is reflected in every step of the development and every detail. The result is the world’s highest-quality vehicle of its kind. As such, we are creating a new dimension of smart, sustainable mobility that ideally complements public and private passenger transport.”

MOVER DESIGNED FROM THE GROUND UP TO BE INCLUSIVE

The vehicle catches the eye with an **asymmetrical design that combines maximum functionality with high recognition value**. The vehicle has been designed with a generous spatial concept for **up to 15 passengers**, thereby closing the gap between personal and public transport concepts. The comfortable, subtly offset seating arrangement provides a sense of privacy while meeting all safety requirements.

“The vehicle design combines two character traits – friendly and inviting as well as technologically advanced and clear. That goes for both the exterior and interior. It immediately makes the HOLON mover a design icon,” explains **Silvio Pietro Angori**, CEO of the renowned Italian design company **Pininfarina**. “Every detail of the vehicle is designed to make passengers feel more

comfortable and safer than in any other mode of transportation.”

HOLON is pursuing the goal of allowing everyone to benefit equally from the freedoms offered by mobility. The mover is therefore designed from the ground up to be inclusive. Electric double-wing doors with photo-electric sensors and an automatically extending ramp with lowering function are included as standard for barrier-free access. The automatic securing of wheelchairs inside the vehicle combines comfort with safety. Information in Braille and an audiovisual guide provide additional support for visually impaired people during the journey.

AUTONOMOUS, DIGITAL AND SUSTAINABLE

The SAE Level 4 mover is based on **Mobileye Drive™**, the industry’s premiere commercial self-driving system. “Our autonomous driving system is designed to make ground-breaking mobility concepts possible – like the HOLON mover. Seeing the mover come to life is proof of the robustness and scalability of our approach,” says **Johann Jungwirth**, Senior Vice President, Autonomous Vehicles at **Mobileye**.

The scalability of the HOLON mover is ensured by a triad of features that help the vehicle make the right decisions on the road: an advanced sensing system that makes use of different redundant sensors, an innovative mapping technology as well as a formal model for driving policy. The combination of these technologies makes the HOLON mover an industry-leading mobility concept.

Sustainability is an integral part of the HOLON brand.

The mover is therefore completely electrically driven. Over-the-air updates ensure that the vehicle is always kept up to date without the need for workshop visits. Throughout the development, emphasis has been placed on the use of sustainable materials. ▶



STRONG PARTNERS FOR THE FUTURE OF AUTONOMOUS MOBILITY SERVICES.

Amongst others, an additional development partner for the vehicle besides Pininfarina and Mobileye is the electronics and IT specialist Cognizant Mobility.

HOLON relies on key partnerships for the vehicle's operation in service. Leading mobility-services provider Beep is HOLON's first important partner in the United States, providing turnkey services and a technology platform for service management, governance and user experience. "Automotive-grade autonomous shuttles provide a critical form factor for reducing congestion and emissions, providing first- and last-mile transportation, and extending mobility equity," said **Joe Moyer**, CEO of Beep. "The unique and transformative value of shared, autonomous electric transportation is

rapidly proving itself in our current deployments and use cases. With this new mover, HOLON is setting a standard for this kind of vehicle, and we are excited to introduce it to our current and future customers."

Production of the HOLON mover is scheduled to start in the U.S. at the end of 2025, with additional production capacity to be built in Europe and the Middle East/Asia in the following years. The particularly flexible platform architecture makes it possible for HOLON to also bring further variants onto the market in a timely manner – both for passenger transport and for cargo applications. Last mile delivery is a particularly important field of operation.

With HOLON, BENTELER is underlining its ambitions in the global business of autonomous mobility. ▲



ABOUT BENTELER

BENTELER is a global company serving customers in the automotive, energy and mechanical engineering sectors. As metal processing specialists, we develop, produce and distribute safety-related products, systems and services worldwide.

In the 2021 financial year, our turnover was 7.285 billion euros. Under the strategic management of the holding company BENTELER International AG, registered

in Salzburg, Austria, the business operations are organized into the divisions BENTELER Automotive and BENTELER Steel/Tube. Our approx. 25,000 employees at 92 locations in 27 countries stand for first-class manufacturing and sales expertise - passionate and close to the customer. BENTELER. The family of driven professionals. Seit 1876.
www.benteler.com

ABOUT BENTELER AUTOMOTIVE

BENTELER Automotive is the development partner for the world's leading automobile manufacturers. With around 22,000 employees and more than 70 plants in about 25 countries we develop tailored solutions for

our customers. Our products include components and modules in the areas of chassis, body, engine and exhaust systems, as well as solutions for electric vehicles.

ABOUT HOLON

HOLON is a legally independent entity and a subsidiary of BENTELER Automotive. With well-founded know-how in automotive technology and industrialization as well as the continuous implementation of new technologies for electromobility, the company develops

autonomous movers for the vehicle market of the future. To do this, HOLON works with technology companies, local public transport companies and mobility-as-a-service providers.
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