

# Technische Universität Dresden and AMST Unveil World's First Self-Driving Simulator at Dresden Automotive Symposium

**Ranshofen, 1 October 2024** – AMST and Technische Universität Dresden successfully launched the Dresden Driving Simulator (DDS), the world's first self-driving simulator, at the Dresden Automotive Symposium on 26 September 2024.

The DDS introduces a groundbreaking approach by bridging a critical gap in simulation technology. It is the first driving simulator capable of providing sustained accelerations, made possible through its innovative tire-bound motion platform. The DDS is poised to revolutionize the development and validation of Advanced Driver Assistance Systems (ADAS) and Highly Automated Driving (HAD), ultimately contributing to smarter and safer vehicles.

"We are proud to have developed a simulator that not only pushes the boundaries of what's possible in automotive simulation but also enhances the entire process of vehicle testing and development," said Franz Pflug, AMST Managing Director. "This collaboration with Technische Universität Dresden has enabled us to bring to market a unique technology that will support the advancement of ADAS and HAD systems, a crucial step in the future of mobility."

The innovation of the DDS lies in its tire-bound motion platform, which allows the DDS to deliver high-quality motion performance with unparalleled realism. Four pairs of steering and drive motors can accelerate the total system mass of ~5 t omnidirectionally with ~0.8 g. Powered by an onboard HV battery, the platform moves autonomously within an open space, communicating via Wi-Fi with a central control station. The self-developed motion control system can therefore be used flexibly and requires a travel area of 70 x 70 m to achieve the full quality of movement.

Prof. Dr.-Ing. Günther Prokop, Chair of Automobile Engineering at TU Dresden, added: "The Dresden Driving Simulator is a testament to the power of collaboration and innovation. By working closely with AMST, we've been able to create a solution that doesn't just meet today's needs but anticipates the future challenges of automotive development. The DDS will help engineers and researchers gain unprecedented insights into human-machine interaction, automated driving technologies, and vehicle safety."

The Dresden Driving Simulator is not only a technological milestone but also a celebration of AMST's commitment to innovation and excellence in the field of simulation. Moving forward, AMST introduces this disruptive technology to the broader market, with the potential to revolutionize automotive research, development and testing worldwide.

## About AMST

*For over four decades, AMST has been at the forefront of simulation technology, delivering innovative solutions primarily in aerospace medicine and aircrew training. Now, with the Dresden Driving Simulator (DDS), AMST has expanded its expertise into the automotive sector. Known for its technological leadership, AMST also offers advanced flight simulators, spatial disorientation trainers, and complex training environments. Many of the company's solutions are unique, designed to provide unparalleled immersion and realism. In addition to groundbreaking technology, AMST delivers a comprehensive service package that includes reliable technical support throughout the product lifecycle and expert assistance with the design and construction of turnkey training centers.*