Press release

New cooperation between Vehico and Kistler Group

The combination offers integrated solutions for vehicle dynamics and active safety testing systems

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The Kistler Group, known for its market leadership in dynamic pressure, force, torque and acceleration measurement technology, has entered into a cooperation with Vehico, located in Braunschweig (Germany), a manufacturer of driving robots and vehicle control systems for vehicle testing. As a result, an extensive package of sensor technologies and driving robots will now be available from a single source.

The number of vehicle tests continues to rise, partly due to changing legal regulations and consumer test requirements. With the progress made with Advanced Drivers Assistance Systems (ADAS), the number of system verification tests is growing exponentially. It is therefore vital for manufacturers to carry out all testing as efficiently and economically as possible.

To guarantee smooth driving dynamics and the functionality of ADAS systems, vehicles are tested and evaluated using driving robots in combination with sensors from Kistler. Kistler’s sensors measure different forces affecting the vehicle and the driver, for example on brakes, the steering wheel and on the wheels themselves. Vehico’s driving robots provide objective vehicle testing, precise and reproducible tests up to driverless testing by automatic steering, gas, and brake robots. In addition, Vehico platforms can simulate other road users, from walking pedestrians to fast-moving vehicles.

Making the testing processes easier is at the heart of the new cooperation. Rather than choosing sensors and robots individually, customers can now obtain an extensive portfolio from a single source. All individual components can be perfectly matched, reducing time and effort at the point of installation and improving reliability and reproducibility.

Evaluating vehicle dynamics and active safety

The driving robots are used for development of vehicle control and ADAS systems, and for the evaluation of production vehicles. The sensors provide data that allows rating the quality and reliability of the installed dynamic control and ADAS technologies. Kistler also offers solutions to evaluate the huge volume of data that is being generated. The measurement data management system MaDaM
and the post-processing software jBEAM together help to gather, analyze and visualize virtually any set of data.

“Kistler’s and Vehico’s expertise in the field of vehicle dynamics and ADAS complement each other. All customers will be able to benefit directly for classic vehicle testing, the development of new types of assistance systems and autonomous vehicles,” says Dr. Lothar Ganzelmeier, Managing Director of Vehico.

“By combining our long-standing expertise in dynamic vehicle testing and vehicle safety with Vehico’s innovative technologies in driving robots, we are now able to extend our portfolio and services for vehicle development and testing. Now we can measure, evaluate and improve the quality of dynamic control and ADAS systems from start to finish. We help to accelerate and simplify testing processes for our customers”, says Alexander Putz, Project leader ADAS testing systems at Kistler.

Image material (please name the Kistler Group as picture source)

Sensor systems by Kistler combined with Vehico platforms improve the reliability and reproducibility of vehicle testing.

Torque sensors by Kistler combined with steering robots by Vehico measure driving dynamics and the functionality of ADAS systems.
About the Kistler Group

Kistler is the global market leader for dynamic pressure, force, torque and acceleration measurement technology. Cutting-edge technologies provide the basis for Kistler's modular solutions. Customers in industry and scientific research benefit from Kistler's experience as a development partner, enabling them to optimize their products and processes so as to secure sustainable competitive edge. Unique sensor technology from this owner-managed Swiss corporation helps to shape future innovations not only in automotive development and industrial automation but also in many newly emerging sectors. Drawing on our extensive application expertise, and always with an absolute commitment to quality, Kistler plays a key part in the ongoing development of the latest megatrends. The focus is on issues such as electrified drive technology, autonomous driving, emission reduction and Industry 4.0. Some 2,200 employees at more than 60 facilities across the globe are dedicated to the development of new solutions, and they offer application-specific services at the local level. Ever since it was founded in 1959, the Kistler Group has grown hand-in-hand with its customers and in 2019, it posted sales of CHF 466 million. About 7% of this figure is reinvested in research and technology – with the aim of delivering better results for every customer.