

## Press release

DEKRA at Eurobike 2021 trade show

### Putting electric bikes to the test

**The specific requirements that go into ensuring electric bike safety will take center stage during DEKRA's appearance at the Eurobike 2021 trade show in Friedrichshafen, Germany (September 1 to 4, 2021). International expert organizational DEKRA runs DEKRA Bicycle Services, a one-stop shop providing a complete range of services for manufacturers and retailers.**

DEKRA will be showcasing a new multifunctional component test rig at its booth (Foyer West, FW224), which specifically accommodates the strict requirements that come with electrically assisted pedal cycles (EAPCs). This supports static and dynamic tests – in accordance with DIN EN 15194:2018 – on EPAC components such as the unit consisting of frame, steerer tube, stem, and handlebars, the front fork, the pedals, and the seat post. All these components, as well as the system as a whole, must be able to withstand the high forces that can occur with speed pedelecs and e-bikes.

Furthermore, in its lab complex in Stuttgart DEKRA operates a new frame impact test rig in accordance with DIN EN 15194:2018 4.3.7.3. The rig simulates a frame and fork system in free fall from a set height with a rider weighing 90 kilograms. The criteria for passing the test include no visible cracks or fractures occurring, no suspension system components coming loose, and any deformation remaining within the specified tolerances.

In addition to mechanical strength tests, DEKRA can also carry out safety and capacity tests on batteries as well as tests on drive units or braking systems using roller test systems at its accredited laboratory locations. At DEKRA's dedicated EMC laboratory, the experts test out the electromagnetic compatibility of pedelecs and personal light electric vehicles. The organization's range of services also includes chemical lab tests on plastic components for environmental and product analysis as well as lighting equipment assessments and bicycle damage appraisals.

These tests prove compliance with all the applicable laws and regulations, such as the EMC Directive, German road traffic legislation, the Machinery Directive, the German Small Electric Vehicle Ordinance, and Germany's Road Vehicle Registration Ordinance (StVZO). The selection of test items depends on the category in which the vehicle is to be classified (i.e., motor vehicle, bicycle, L-category vehicle, or personal light electric vehicle).

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A type approval test is also required in Germany in order for electric scooters or speed pedelecs to be registered as road legal. In addition to the in-lab static tests, the DEKRA Technology Center experts at the Lausitzring racetrack carry out practical tests to evaluate everyday usability and roadworthiness.

### **DEKRA at Eurobike 2021**

September 1 to 4, 2021

Foyer West, FW224

[www.dekra.com/en/ebike-services](http://www.dekra.com/en/ebike-services)

### **About DEKRA**

*DEKRA has been active in the field of safety for almost 100 years. Founded in 1925 in Berlin as Deutscher Kraftfahrzeug-Überwachungs-Verein e.V., it is today one of the world's leading expert organizations. DEKRA SE is a subsidiary of DEKRA e.V. and manages the Group's operating business. In 2020, DEKRA generated turnover totaling almost EUR 3.2 billion. The company currently employs around 44,000 people in approximately 60 countries on all continents. With qualified and independent expert services, they work for safety on the road, at work and at home. These services range from vehicle inspection and expert appraisals to claims services, industrial and building inspections, safety consultancy, testing and certification of products and systems, as well as training courses and temporary work. The vision for the company's 100th birthday in 2025 is that DEKRA will be the global partner for a safe, secure, and sustainable world. With a platinum rating from EcoVadis, DEKRA is now in the top one percent of sustainable businesses ranked.*