

Press Release

FEV develops new EV-battery system sets benchmark in comprehensive safety and performance tests

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Aachen / Chennai (India), May 2025 - Indian automaker Mahindra and FEV, the innovation powerhouse for future mobility solutions, have developed a new high energy density lithium iron phosphate (LFP) battery for the Mahindra Electric Origin SUVs. The system has recently undergone an extensive series of tests to prove its compliance with international safety standards. The battery system performed outstandingly in the fuel fire test, the nail penetration and the rollover tests.

"The test results are another proof for the excellent cooperation between our companies. By bringing together our competencies, we were able to develop an innovative battery system that is optimally tailored to the needs of the Indian target market," said Dr. Thomas Hülshorst, Global Vice President Electric Powertrain at FEV. "With our extensive expertise in battery system development, Mahindra and FEV have developed a solution that exceeds the industry standards."

The battery system that is available in two variants with a total capacity of 59 kWh and 79 kWh will be utilized in Mahindra's Electric Origin SUV portfolio. In a joint effort, the partners developed the new battery system in just two years, saving development costs and time to market. The result is a system with best-in-class fast charging capability of 20-80% in 20 minutes, which sets an example in the industry and underlines the innovation power of both companies.

During the entire development process, all safety-relevant and performance-oriented tests on cell- and pack level were successfully passed. These tests were carried out under strict conditions at Mahindra's R&D facilities as well as at FEV's eDLP, the world's largest independent high-voltage battery test center, situated near Leipzig, Germany. All tests are based on the standards of international organizations such as IEC, ISO, UL, SAE and AIS, with AIS being the most important regulation for the Indian market. Constantly, the system showed extraordinary stability and reliability, fulfilling the requirements even in extreme situations.

The presale of the successfully tested battery system has successfully started in mid-February and is now going into series production. Meanwhile, the two companies are planning to develop further innovative battery systems in close cooperation.

R Velusamy, President Automotive Technology and Product Development, Mahindra & Mahindra Ltd., and Joint Managing Director, Mahindra Electric Automobile said: "The results of the current tests as well as our longstanding and collaborative

partnership makes us look to the future with great optimism. Our future joint products will also be designed to meet the highest safety standards and deliver a high energy density to enrich the market in the long term."

Footage



Caption: Outstanding performance and fulfillment of highest safety standards for Indian Electric Origin vehicles: Mahindra and FEV have jointly developed an innovative battery system available with a total capacity of 59 or 79 kWh. Source: FEV/Mahindra

About FEV

FEV has always pushed the limits.

FEV is a globally leading engineering provider in the automotive industry and internationally recognized leader of innovation across different sectors and industries. Professor Franz Pischinger laid the foundations by combining his background in academia and engineering with a great vision for continual progress. The company has supplied solutions and strategy consulting to the world's largest automotive OEMs and has supported customers through the entire transportation and mobility ecosystem.

As the world continues to evolve, so does FEV.

That's why FEV is unleashing its technological and strategic expertise into other areas, applying its forward thinking to the aerospace and energy sectors. Thanks to its software and system expertise, the company also leads the way

making intelligent solutions available to everyone. FEV brings together the brightest minds from different backgrounds and specialties to find new solutions for both current and future challenges.

But FEV won't stop there.

Looking ahead, FEV continues to push the limits of innovation. With its highly qualified 7,000 employees at more than 40 locations globally, FEV imagines solutions that don't just meet today's needs but tomorrow's. Ultimately, FEV keeps evolving – to a better, cleaner future built on sustainable mobility, energy and software that drives everything. For the company's partners, its people and the world. #FeelEVolution

About Mahindra

Founded in 1945, the Mahindra Group is one of the largest and most admired multinational federation of companies with 260,000 employees in over 100 countries. It enjoys a leadership position in farm equipment, utility SUVs, information technology and financial services in India and is the world's largest tractor company by volume. It has a strong presence in renewable energy, agriculture, logistics, hospitality, and real estate.

The Mahindra Group has a clear focus on leading ESG globally, enabling rural prosperity and enhancing urban living, with a goal to drive positive change in the lives of communities and stakeholders to enable them to Rise.

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