

AUTOMOTIVE

Mercedes-Benz performs world's first public two-car electric crash test

October 20, 2023



Mercedes-Benz's latest marketing effort exhibits the world's first publicly conducted frontal offset crash test between two fully electric vehicles. Image credit: Mercedes-Benz

By LUXURY DAILY NEWS SERVICE

German automaker Mercedes-Benz is pushing the limits of possibility for passenger assurance.

A new update sees the brand going beyond legal and ratings requirements to ensure rider welfare in the event of an emergency involving its electric vehicles. Launching the "Safety Symphony" campaign this week, Mercedes-Benz's marketing effort exhibits the world's first publicly conducted frontal offset crash test between two fully electric cars.

"Safety is part of Mercedes-Benz's DNA and one of our core commitments to all road users. And to us, protecting human lives is not a question of drive system," said Markus Schfer, chief technology officer and member of the board of management of [Mercedes-Benz Group AG](#), in a statement.

"The recent crash test involving two fully electric vehicles demonstrates this," Mr. Schfer said. "It proves that all our vehicles have an equally high level of safety, no matter what technology drives them."

World-first for safety

Mercedes-Benz models pass safety assessments with flying colors, the results arriving alongside new, slow-motion visuals.

Each traveling at 35 mph, an EQA and EQS SUV from the automaker collide head-on in a real-life accident scenario set up by the company's engineers. The crash receives the split-second treatment in newly-released campaign footage.

A campaign film documents the process of performing the world-first

Deploying by the end of October, the "Safety Symphony" campaign film is appearing alongside video clips, interactive quizzes and other materials across all Mercedes-Benz social media channels, displaying the hashtag [#AllForSafety](#).

While previous renditions of the test have been attempted with alternate materials meant to mimic the weight and velocity of vehicles, the imagery depicts the ways in which Mercedes-Benz has chosen to elevate the study.

Casting real cars, the decision rises to the top of the list as the manufacturer becomes the first to execute an exercise of this caliber worldwide.

The company shares that Euro NCAP, a Belgium-based voluntary car safety performance assessment program, had previously performed a frontal impact test using a 3,086-pound trolley with an aluminum honeycomb barrier intended to replicate the front of another vehicle, both traveling at 31 mph and colliding with an overlap.

Mercedes-Benz's electric EQA and EQS SUV, however, are "significantly heavier at approximately 2.4 and 3.3 tons, respectively," per a statement from the company.

From #EQA to #EQV since 2022 we have introduced battery electric vehicles in all segments that we serve. Which one is your favorite? pic.twitter.com/Rv1WrWFM9b

Mercedes-Benz (@MercedesBenz) February 5, 2023

With a 50 percent overlap, both models also moved at higher speeds in the brand's version of the test, making for an overall much more elevated crash energy than levels required by law.

Additionally, Mercedes-Benz proceeded with the use of what it calls "fifth percentile female dummies," recalling the industry's "Hybrid III 5th Percentile Female," representative of an approximately 4 feet 11 inch-tall, 108-pound person of the namesake gender just five percent of all women globally are smaller or lighter.

Placing dolls with minority measurements in the driver's seat of both vehicles serves a longstanding interest of culling results that protect as wide a range of passengers as possible ([see story](#)).

Trials were staged at the group's Technology Center for Vehicle Safety in Sindelfingen, Germany.

"This crash test involving two electric vehicles, which we have shared publicly for the first time in this way, underlines our commitment to building the world's safest vehicles," said Paul Dick, head of vehicle safety at Mercedes-Benz AG, in a statement.



Dr. Paul Dick is pictured at the group's Technology Center for Vehicle Safety in Sindelfingen, Germany. Image credit: Mercedes-Benz

"The four female and male dummies complied with the biomechanical limits in this extremely severe crash," Mr. Dick said. "This demonstrates our expertise in electric vehicle safety."

Experts note in a release that though the vehicles' "extensive deformation may seem alarming to the non-expert," the video asset shows that the units can "effectively absorb the energy of the collision by deforming."

Despite the impact, findings are evidence of the electric vehicles' bolstered safety features. Embedded within both electric models, passenger safety cells endured, kept intact after the crash and the ability to open doors remained accessible despite the impact.



An infographic outlines the three principles of occupant safety in the instance of a crash. Image credit: Mercedes-Benz

The instance suggests that, in the case of any trouble, occupants can exit either car on their own or with the aid of first responders, additionally proving that the high-voltage systems of the EQA and EQS power down automatically upon collision.

"We are working hard to achieve our vision of accident-free driving, which goes beyond the Vision Zero' objectives set by the WHO and the United Nations Regional Commissions," said Mr. Schfer, in a statement.

"We don't just want zero traffic fatalities by 2050 and a halving in the number of traffic fatalities and serious injuries by 2030 compared to 2020," he said. "Our goal by 2050 is zero accidents involving a Mercedes-Benz vehicle."

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