

HEDRO | MERCEDES-BENZ

Sensors with Edge Computing to Make the Engineer's Routines Easier

Mercedes-Benz and Hedro accelerate testing routines with smart wireless sensors.

THE CHALLENGE

Vibration testing for new car models is a complex task that requires the use of many sensors, ranging from tens to hundreds, to measure vibrations throughout the entire vehicle. Traditionally, this process involves the time-consuming installation of wired sensors, which includes routing cables to the correct locations and securely attaching all components to ensure high-quality data collection. Additionally, this method implies carrying a large computer along to process the sensor data.

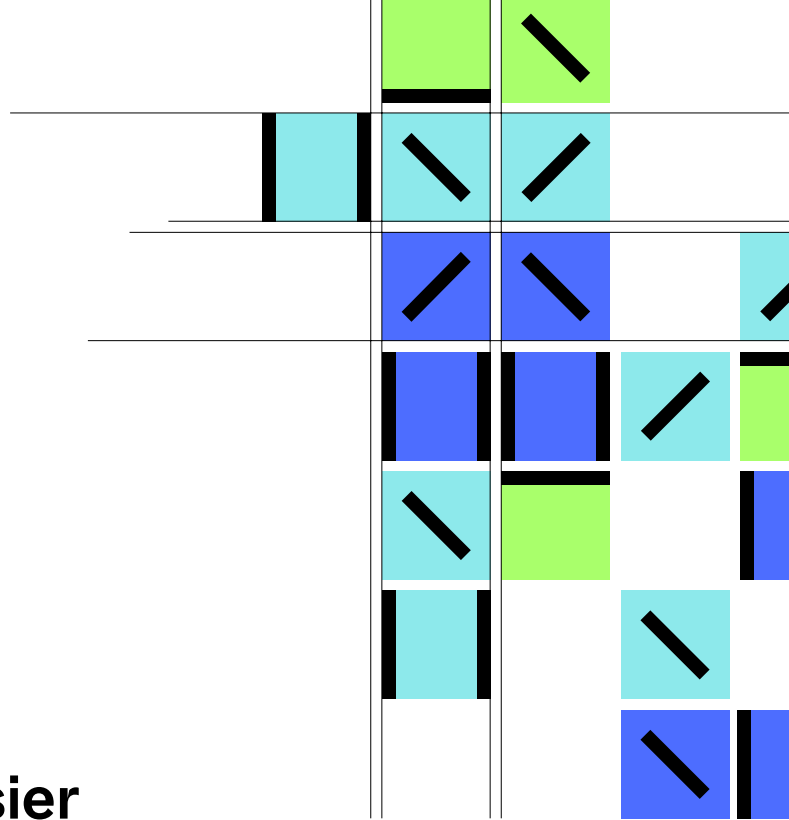
THE SOLUTION

Hedro is developing a solution that utilizes state-of-the-art wireless sensors with integrated algorithms capable of performing precise calculations directly within the sensors before transmitting data to the server. By leveraging edge computing, this technology enables the simultaneous operation of hundreds of sensors on a single vehicle. This approach can support Mercedes-Benz in reducing the time and complexity involved with conducting vibration tests.

THE OUTCOME

As part of this pilot project, Mercedes-Benz and Hedro have conducted successful tests in certified vibration laboratories to verify the quality of the sampling. Additionally, they also performed tests on actual vehicles to compare results and begin evaluating a shift in methodology from traditional testing approaches.

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HEDRO

WEBSITE

hedro.com.br/home/

FOUNDED

2016

HEADQUARTERS

Entre Rios de Minas, Brasil

NO. OF EMPLOYEES

10–50

ABOUT STARTUP AUTOBAHN

STARTUP AUTOBAHN powered by Plug and Play is an open innovation platform that provides an interface between innovative tech companies and industry-leading corporations. The basis of the program is the partnership that develops between startups and the corporate business units. The two entities hold an equal footing from the get-go: together they evaluate the potential for a joint venture, move forward to pilot the technology, and work to achieve the ultimate goal – a successful production-ready implementation. Designed with the intention to exceed startup acceleration, STARTUP AUTOBAHN powered by Plug and Play moderates a community for collaboration with a focus on implementable results. Over the years, the platform has successfully cultivated over 400 projects with more than 300 startups since its founding in 2016.



Hedro Smart Sensors retrofits industrial machines and connects them to the Internet of Things.

Hedro Smart Sensors' technology allows digitizing the brownfield to Industry 4.0, without the need to buy new machines. This is achieved by retrofitting the old machines and connecting them to the internet of things (IoT) in a quick way.

ACKNOWLEDGEMENTS

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