PIRELLI: CYBER TYRE AWARDED AS THE MOST INNOVATIVE TIRE TECHNOLOGY AT THE AUTOTECH BREAKTHROUGH AWARDS 2025

Awarded as "V2X Innovation of the Year", Pirelli Cyber Tyre is the world's first system that collects data from tires and processes them to optimize the vehicle's control electronics.

Pirelli's technology has been recognized as decisive for the development of future smart and connected mobility.

New York, October 17, 2025 – **Pirelli Cyber Tyre** has won the title of **Vehicle-to-Everything (V2X) Innovation of the Year** at the **Autotech Breakthrough Awards 2025**, an international prize awarded by the Tech Breakthrough intelligence platform, which identifies the most innovative players and services in the automotive technology sector.

Cyber Tyre is the world's first intelligent system capable of collecting data directly from the tire, processing them through Pirelli proprietary software and algorithms, and communicating them in real time to the vehicle's electronics, enabling improved driving dynamics, safety, and integration with digital infrastructures.

"Cyber Tyre is a key technology for the future of smart mobility, which includes autonomous driving, connected vehicles, and the digitalization of infrastructures. By integrating intelligence directly into the tire, Pirelli Cyber Tyre makes transport systems safer, as well as sustainable and data-driven", writes AutoTech Breakthrough, explaining the reasons for the award.

"This recognition highlights the value of Cyber Tyre, which gives the tire a new role in the revolution currently taking place in mobility. In Software-Defined Vehicles (SDV), the availability of precise real-time data is essential: our technology enables, for the first time, the transmission of detailed information to the vehicle's electronics regarding the tire's status and road surface conditions, improving safety, performance, and efficiency. The system has already been adopted on high-end vehicles, with the goal of extending its application to an increasingly wider audience and to different functionalities towards other systems thanks to V2X connectivity", said Piero Misani, CTO of Pirelli.

Pirelli Cyber™ Tyre: how it works and main applications

Thanks to sensors positioned inside the tread, **Cyber™ Tyre** measures parameters such as pressure, temperature, tread wear, and load. These data, processed by Pirelli algorithms, are transmitted to a control unit that optimizes the vehicle's electronic systems, such as ESP, ABS, and traction control, significantly improving safety and driving experience. Thanks to collaboration with **Bosch Engineering**, the system is fully integrated into the vehicle's electronic architecture.

In addition to in-car functionalities, **Cyber™ Tyre** enables **V2V (Vehicle-to-Vehicle)** and **V2I (Vehicle-to-Infrastructure)** communication, contributing to the development of smart roads and smart cities, where the collected data help in urban mobility planning and maintenance. The various V2X (Vehicle-to-Everything) connectivity capabilities can enable warning functions for vehicles and drivers about real-time road conditions, interact with traffic lights and road signs, optimize public transport and fleet management, offering essential support for the development of autonomous driving.

Cyber Tyre technology is already on the market and has been adopted on several high-end models and is under development for various premium and prestige vehicle platforms. Recently, **Aston Martin** and **Pirelli** announced an agreement for the integration of the system into the British luxury brand's future models.