

PIRELLI: THE WORLD'S FIRST COMPANY TO DEVELOP TYRES THAT INTERACT WITH THE 5G NETWORK

CYBER TYRE DETECTS AND TRANSMITS INFORMATION RELATED TO LESS THAN OPTIMAL ROAD SURFACE CONDITIONS TO THE VEHICLE AND OTHERS NEARBY THROUGH THE NETWORK

Turin, 14 November 2019 – Pirelli is the first tyre company in the world to transmit information detected by intelligent tyres regarding the road surface via the 5G network. In Turin today, the company presented the "World-first 5G enhanced ADAS (Advanced Driver Assistance Systems) services" use case. The demonstration took place during "The 5G Path of Vehicle-to-Everything Communication" event organized by 5GAA – Automotive Association, of which Pirelli is a member.

Pirelli, Ericsson, Audi, Tim, Italdesign and KTH together staged a demonstration that took place on the roof of the Lingotto building showing how a vehicle equipped with the sensor-fitted Pirelli Cyber Tyre and connected to the 5G network was able to transmit the risk of aquaplaning detected by the tyres to a following car. This was thanks to 5G's ultra-high band and low latency.

The tyre is the only point of contact between the vehicle and road and, thanks to the technology which Pirelli is perfecting, it communicated with the vehicle, driver and, thanks to the potential of 5G, with the entire roadway infrastructure. The Pirelli Cyber Tyre, equipped with an internal sensor, will in future supply the car with data relative to the tyre model, kilometers clocked, dynamic load and, for the first time, situations of potential danger on road surfaces, from the presence of water to poor grip. This information will enable the car to adapt its control and driving assistance systems, greatly improving the level of safety, comfort and performance. In addition, it will provide the same information to other cars and the infrastructure. Thanks to the potential of 5G, Pirelli is able to place the tyre inside a wider communication context which involves the enter ecosystem of on-road transportation, actively contributing to the development of solutions and services for future mobility and systems of autonomous driving.

This year Pirelli also presented its Italia Track Adrenaline, a product for lovers of track days, which includes a line of sensor-fitted P Zero Trofeo tyres. Track Adrenaline is a true track engineer in virtual form, which monitors tyre pressure and temperature in real time and combines this information with telemetric data to provide the driver indications and suggestions on how to improve his or her on-track performance.

The "sensoring" of tyres is an integral part of Pirelli's "Perfect Fit" strategy, focused on the development of "tailor made" products and services to meet the needs of carmakers, fleets and drivers in general, with a view to the future and the changes underway in mobility.

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