

# Tire wear testing programme

Tyre wear is generally considered to be caused by inadequate vehicle settings (pressures, alignment) or damaged vehicle parts (worn suspension). Vehicle set up, the driving profile, weather, road conditions also have a direct effect on tyre wear.



Applus IDIADA has developed its own **tyre wear test procedure**, which is focused on three main

## Vehicle set up

Vehicle's load condition, tyre pressure, tyre balance, are always controlled and configured with the right settings at the beginning, during and end of Tests can be conducted **with more than one vehicle** to compare different tyres (with same dimension vehicles to regulate the wear of the tyres).

## Test conditions

Different **driving profiles** are tested and proposed to offer the proper test type conditions in particular. off-road testing conditions are key to configure a wear test, always using the same route definitively and measured to analyse them. IDIADA has developed its own testing programmes depending on

## Driving severity



The driving mode to which the test vehicle is exposed to has also a direct effect on tyre wear. The vehicle is instrumented with accelerometers to acquire the longitudinal and lateral forces to obtain the "useful" differences between driving styles as well as assessing the impact of acceleration on tyre wear. The result is a statistical number obtained from the raw accelerometer value.

## **Tyre measurements we perform**

The wear, hardness, weight, temperature, heel-and-toe are measured with different mileage intervals (initial and final measurements) to obtain the tyre wear test results. All the previous data is monitored and misleading results are avoided.