

Structural durability

Applus IDADA offers complete engineering and testing services to study the structural durability of vehicles and components.



Simulation and testing techniques are correctly combined to define and validate the durability targets. From the testing point of view, accelerated testing programmes are required by automotive companies in order to reduce the time to develop new products. At Applus IDADA, we count on first-class state-of-the-art engineering tools, testing facilities and proving ground complex to give our OEMs and Tier 1 suppliers first-class support for the development of their products (around the world) considering durability criteria.

Our wide experienced and international engineering and technical team, mean our services cover all the phases of the development project: fatigue analysis based on Finite Element Analysis, the design of the accelerated test programme and the execution of the test itself.

Service breakdown:

- CAE Finite Element Analysis (FEA)
- Accelerated test design:

Based on the analysis and extrapolation of the information collected directly in market (Road Load Data) in order to design an endurance schedule using the accelerated fatigue surfaces of the proving ground or test benches. (For further information, see our pdf "Accelerated test design")

- Structural durability On Road test or Bench tests (components and subsystems):

Tests done on the specific test track surfaces or 4-poster road simulator combined with the expert failure analysis to obtain the most realistic results. (For further information, see our pdf "Test bench tests")

- Running test (vehicle).