The new era of durability engineering
Deliver lighter, stronger more durable vehicles

Strength and durability analysis

Reliable vehicles  Vehicle durability engineering  Virtual prototyping
Increasing customer expectation for quality and high mileage.  To guarantee reliable and durable designs durability engineering is an integral part of development.  Validate strength and durability performance before committing to a physical prototype.

Predicting product performance
To deliver reliable and durable designs and avoid excessive warranty claims, engineers need to combine high fidelity 3D models with real measured data for an optimal strength and durability analysis.

Road load data analytics

Emerging markets  Globalization  Customer usage data  Realistic durability targets
The emerging markets are the key source of growth for the global automotive industry.  Account for geographic differences in customer preferences and product requirements.  Incorporate local roads, driving habits and vehicle loading to set realistic durability vehicle targets.  For efficient and accurate road load data analytics, companies require a combination of road load data acquisition hardware, load data analysis software and data mining services.

Multi-attribute balancing

Finite oil reserves, growing metro areas and the rising demand for mobility require new solutions in all areas of transport.  Increasing demand for eco-friendly vehicles to meet stricter regulations and fuel efficiency standards.

Balancing weight, strength and durability
Reduce vehicle weight of chassis and body structures by mixing lightweight materials and optimizing geometry.  By combining 3D simulation, design exploration and engineering services, car manufacturers are able to ensure a lighter, stronger and more durable vehicle.

End-to-end durability engineering

The race for a reliable vehicle has never been fiercer, with ever more design variants in an ever shorter time.
Car manufacturers seek solutions to shorten the vehicle development cycle, reduce prototypes, accelerate testing and reduce development cost.

Gain 6 months
Optimize the number of prototypes and assess strength and durability performance earlier in the development cycle.

Slncenter solutions assist you in acquiring and analyzing road data to set realistic durability targets and virtually validate strength and durability performance. Our solutions offer an end-to-end durability engineering approach, accelerate your time-to-market, and meticulously balance weight, strength and durability to avoid vehicle recalls and meet customer’s expectations.