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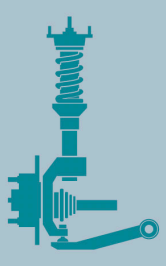
Siemens Digital Industries Software

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 expectations 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
		
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.

Realistic durability targets

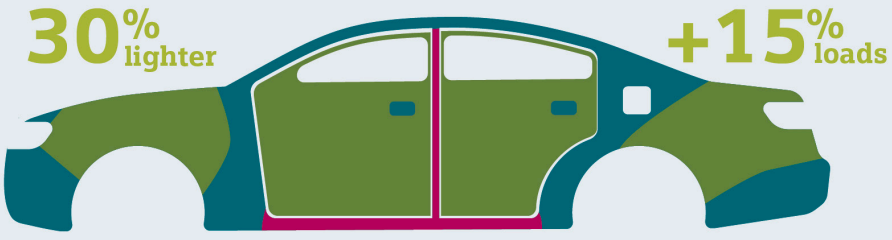
For efficient and accurate road load data analytics, companies require a combination of road load data acquisition hardware, load data analysis software and data mining services.

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 efficency standards.

Balancing weight, strength and durability



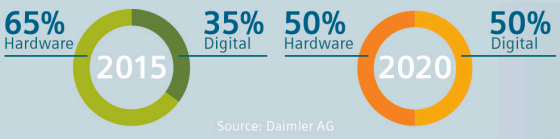
Reduce vehicle weight of chassis and body structures by mixing lightweight materials and optimizing geometry.

By combining 3D simulation, design exploration and engineering services, car manufacturers are able to ensure a lighter, stronger and more durable vehicle.

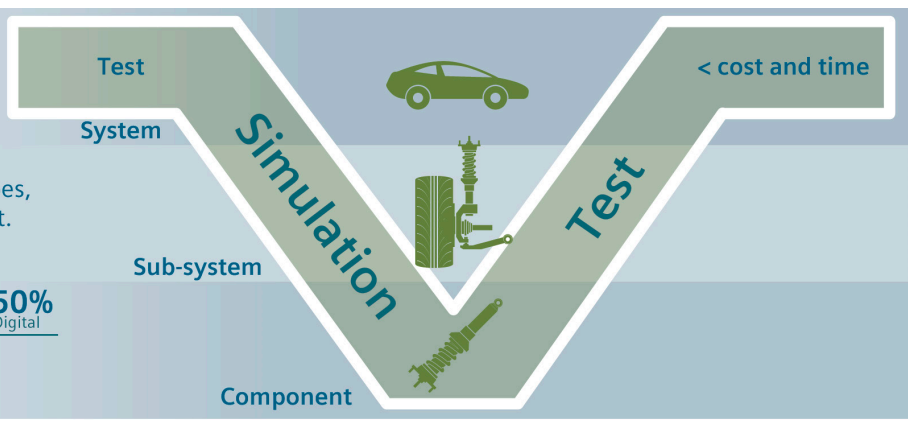
End-to-end durability engineering

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.



Source: Daimler AG



Combine experience, skills and application know-how

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

100x faster
Accelerated testing scenarios, designed with Simcenter durability solutions, significantly speed up vehicle development time.

Expertise
Streamlined for efficiency, the Simcenter testing, simulation and engineering expertise help meet customer's expectations.

Simcenter 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 meticulousy balance weight, strength and durability to avoid vehicle recalls and meet customer's expectations.

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