

ROUTE PLANNER

ELECTRIC DRIVES

Concept E

Electric drives are the key to sustainable individual mobility. Daimler is pursuing various concepts here – for example, the BlueZERO concept car, which is close to series production. The vehicle’s three different electric drives utilize the sandwich floor concept.

12



BlueZERO

ASSISTANCE SYSTEMS

Detecting Danger

Daimler researchers are using radar and video sensors in conjunction with laser scanners to detect dangers even sooner, more precisely, and more reliably. The software that depicts the vehicle’s surroundings in real time is also becoming more sophisticated.

24

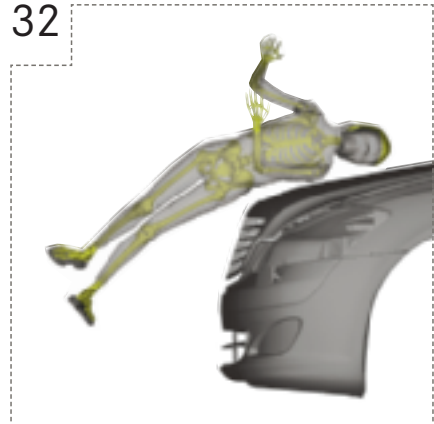


CRASH SIMULATION

Virtual Dummies in Bangalore

In this hotspot of the IT sector in India, Daimler engineers create mathematical models that help them to analyze in detail the strains that which the human body is subjected by a simulated crash. The virtual crash dummies they use are known as human body models.

32



ENGINE DEVELOPMENT

OM651 – the Base Engine

It's a compact diesel engine that's universally usable – in models ranging from the C, E, and S-Class to the GLK and vans from Mercedes-Benz. Its technological highlights include piezo injectors and a two-stage supercharging unit.

46



SAFETY

Night Sight

In the new E-Class, night driving will become even safer. The Adaptive High Beam Assistant automatically sets the optimal illumination distance for the headlights while the Night Vision Assistant PLUS actively points out pedestrians it has detected in the dark.

58



DRIVE SYSTEMS

- 12 The near-series BlueZERO concept car demonstrates three variants of a fully practical electric vehicle
- 46 The OM651 is a universally usable four-cylinder diesel engine with a whole host of innovations

INTERVIEW

- 22 Board of Management member Thomas Weber talks about Daimler's future strategy for research and development

SAFETY

- 24 The fusing of several sensors has made it possible to create increasingly sophisticated assistance functions
- 32 Virtual models of the human body vividly reveal the risk of injury in crash simulations
- 58 Variable intelligent headlights are helping drivers to see much more clearly in the dark

MOBILITY CONCEPTS

- 52 In the car2go project in Ulm, smart fortwo vehicles are not only available throughout the city; they can also be rented on the spur of the moment

HEADINGS

- 03 Starter
- 06 Interior
- 08 Showroom
- 30 Scanner
- 44 Smooth Running
- 44 Serial Number/Masthead
- 66 Reflector