

STARTER



Thomas Weber, Daimler AG Board of Management member responsible for Group Research and Mercedes-Benz Cars Development

Dear readers, Today, automotive mobility means not only safety and comfort but also, and above all, efficiency. These were the principles that helped us develop the universally usable diesel engine known as the OM651. The series production of this new high-tech four-cylinder diesel engine is now in full swing. First, however, the “world engine” had to demonstrate its capabilities during some 100,000 hours on the test rig. It succeeded, and is now spearheading a generation change among diesel engines. You can read all about the OM651 on page 46.

The future belongs to electric drives, which hold the key to sustainable individual mobility. Daimler has been investigating electric drive concepts for years. The most recent example is the Concept BlueZERO, which is now close to series production and exemplifies the advantages of the modular system approach. Starting out with a single bodysheet platform, three different electric drive systems – based on a lithium-ion battery, a fuel cell stack or a range extender – can be implemented. This results in vehicle ranges that satisfy all customer requirements. To find out more, turn to page 12.

Night rides in the new E-Class from Mercedes-Benz will be even safer in the future, thanks to new lighting functions. The Adaptive High Beam Assistant automatically ensures the optimal illumination distance for the headlights. The new Night View Assist system illuminates the road with a dazzle-free infrared light and proactively notifies the driver of any pedestrians it detects in the dark. Both functions complement the tried and tested Intelligent Light System. You can find out how these systems make the new E-Class even safer on page 58.

Safety is one of Daimler’s core areas of expertise, so we are continuously refining our safety assistance systems. For example, our researchers have now attained a new dimension of quality thanks to “sensor fusion.” Here, data from visual and radar-based systems are used to monitor the car’s surroundings, thus greatly enhancing vehicle safety. The car recognizes impending dangers long before the driver does – and can react to prevent accidents. You can find out how such systems work on page 24.

