The first cornerstone: The overall vehicle concept

The overall vehicle concept forms the basis for the performance-orientated design of the driving properties. A long wheelbase provides excellent directional stability, large track widths and a low centre of gravity for low wheel load fluctuations while cornering. For the driver, this means high lateral acceleration, low load change responses and excellent stability. The balanced axle-load distribution in combination with rear torque distribution results in optimum traction and neutral self-steering properties. The requirements for the driving dynamics are consistently taken into account in the overall vehicle concept from a very early stage in a new model's development. For instance, the requirements are established in the vehicle package as early as the concept phase. These requirements guarantee, among other things, excellent braking performance in terms of installation space for the brakes and cool air supply to the brakes – even for the top model in the model line.