



DR.-ING. ULRICH HACKENBERG
Member of the Board of Management
of Volkswagen Brand with responsibility
for Development

“INCREDIBLY EASY TO OPERATE AND HIGHLY VARIABLE”

The new Sharan combines passenger car comfort with the high flexibility of an MPV. ATZ asked Dr. Ulrich Hackenberg, Member of the Board of Management for the Volkswagen Brand with responsibility for Development, how these objectives were achieved. The MPV uses the good properties of the transverse component system like electromechanical steering and parking brake as well as variably electrically controllable dampers.

Dr. Ulrich Hackenberg is an engineer who holds a seat on the Volkswagen brand board of management, with responsibility for development. He is an enthusiastic motorcyclist and has spent almost all his professional life in the Volkswagen Group, switching several times between Audi – where he started out in 1985 – and Volkswagen. His career began in preliminary development, where he led the Vehicle Mechanical Systems main department, and enjoyed a meteoric rise from 1989 onwards. First of all as Technical Project Director for the A4, soon followed by additional functions as Head of Vehicle Concepts and Head of Technical Project

Management for the entire product range. From 1998 to 2002, Mr. Hackenberg was in charge of the Body Development area at VW, and he additionally took on responsibility for development of passenger car concepts. Following the takeover of Bentley, he restructured the Technical Development there as a member of the board of management. From 2002 to 2007, Ulrich Hackenberg was back in Audi where he directed Body Development with the emphasis on bodywork, interior equipment and vehicle safety. From 2003 onwards, he was also responsible for concept development and the Electrical/Electronic Systems area.

1 The new Sharan seems much more like a car than its predecessor. Nevertheless, do the driver and passengers still enjoy all the benefits of a Minivan?

That was precisely our development target with the new Sharan. In contrast to its predecessor, it is a modular system using the basic technology of the transverse component system and it benefits from the acknowledged good chassis properties, precision in electromechanical steering, chassis with variably electrically controllable dampers and electromechanical parking brake. The MPV properties are characterised by the concept of the seat system (including second and third seat row). The second row seats are comfortable as well as functional with regard to access to the third row, as well as the ability to fold them down into a flat loadbed. In spite of having the typical high seat position of an MPV, the Sharan drives like a car both in terms of comfort and handling.

2 Sliding doors, fully recessing seats: The added value has been significantly boosted. How have you managed to keep the costs for the end user at a reasonable level?

Our development engineers and production engineers have contributed all of their expertise to hone the Sharan for production. For example, the production times and therefore production costs have been significantly reduced. Modified concepts throughout the entire vehicle structure have made a significant contribution to this. At the same time, we have significantly improved the quality.

3 Nowadays, families in particular are environmentally conscious. What does the Sharan do to assuage the environmental conscience of mums and dads?

I can reassure all parents: Like scarcely any other vehicle in its class, the Sharan combines utility value and efficiency. Its four direct-injection turbo gasoline engines (TSI) and turbo diesel engines (TDI) have been made up to 21 % more economical – including through the use of BlueMotion Technology such as stop/start and braking energy recuperation. In addition, both TDI engines are equipped with an SCR catalytic converter (SCR = Selective Catalytic Reduction) which specifically eliminates nitrous oxides (NO_x) and makes the Sharan one of the cleanest MPVs in the world, even as a turbo diesel. Furthermore, there is the

overall concept of the vehicle: although the new Sharan is 220 mm longer and 90 mm wider, its overall weight has been reduced by a good 30 kg. At the same time, its height has now been reduced to 1.72 m. The drag coefficient of $c_d = 0.299$ also represents a top value in the MPV segment. This combination of low-consumption engines, lower weight and lower air resistance make the new Sharan extremely efficient: The result is the world's best value in the class of only 5.5 l/100 km (equivalent to 143 g/km CO₂) in the 103 kW Sharan 2.0 TDI.

4 What is the highlight in the new Sharan that you are particularly proud of as the developer?

The highlight of the new Sharan is its ingenious overall concept with up to seven seats – incredibly easy to operate with only one hand and highly variable with the new “EasyFold” seat system. Furthermore, the rear seats can be reached through sliding doors for the first time. In addition, there is the high-end quality and uncompromising safety in conjunction with a body design that is as likeable as it is functional. And all this is combined with the driving properties of a car. That's the new Sharan.

