





The New VW Polo

New Standards in the Compact Class

The fifth generation VW Polo combines a sporty and dynamic appearance with quality and value. It also sets new standards in terms of vehicle safety. The new Polo is one of the first vehicles in its class to have been designed to achieve a five-star score in the EuroNCAP test, which has been modified and made more demanding from February 2009 onwards. The even more sumptuous range of equipment available raises the level into that of more exclusive vehicle segments. Highly efficient TSI and CR engines are used in this class for the first time. The six-speed conventional stepped automatic transmissions offered in the previous model are replaced by a seven-speed dual clutch gearbox.

1 Development Targets

The former Polo with in-house name A04 was positioned for quality and value retention. Its successor with in-house name A05 continues to develop these attributes, whilst at the same time being more sporty and dynamic as well as offering higher value in its look and materials. For example, the slush-moulded dashboard in the Polo A05 offers look, feel and value at the level of the VW Golf VI. This means the Polo A05 sets a new standard in its class.

Compared to its predecessor, it has a track that is 30 mm wider and a wheelbase that is 5 mm longer. The roof has been lowered by 14 mm. In terms of length, the vehicle has grown by 54 mm to 3970 mm.

At 2470 mm, the wheelbase of the Polo A05 is now about the same as a Golf III.

The length of the Polo A05 also puts it only 48 mm behind the Golf III. This means the new Polo has grown, and this factor is reflected in the interior with more generous shoulder room, with very comfortable sitting possible even in the second seat row.

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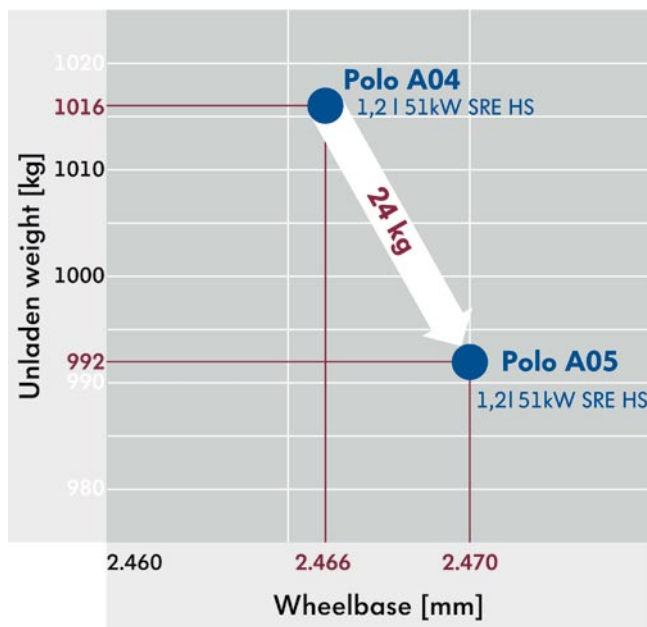


Figure 1: Wheelbase vs. unladen weight Polo A04 – Polo A05

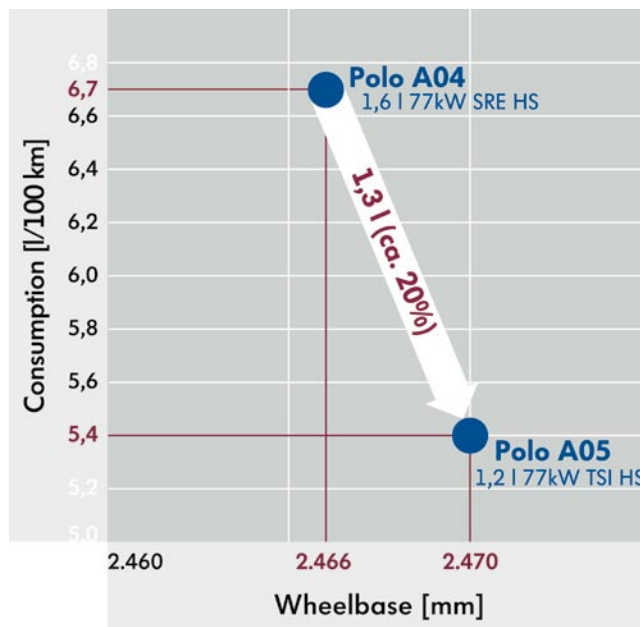


Figure 2: Wheelbase vs. consumption Polo A04 – Polo A05

Although the wheelbase and the vehicle's length and width have been increased, its weight has been reduced. This is shown by way of example in **Figure 1** which shows the VW Polo with 1.2 l gasoline engine and 51 kW power. This car is 25 kg lighter than its predecessor, and falls inside the 1000 kg unladen weight threshold.

The three and four-cylinder naturally aspirated engines with 1.2 l and 1.4 l cubic capacity are familiar from the previous model, but have been improved, and the new Polo A05 is also available with highly efficient TSI technology, the first time it has been used in this class.

A comparison between the 1.2 l TSI engine with 77 kW power and manual gearbox in the Polo A05 and the 1.6 l SRE engine generating the same power in the previous model, as shown by way of example in **Figure 2**, it can be seen that consumption has been reduced by about 20 %. This is the result of a successful downsizing in combination with high-efficient TSI technology.

The 1.2 l TSI engine with 63 kW or 77 kW engine power can be fitted either with a six-speed manual gearbox or a seven-speed dual clutch gearbox that replaces the classic converter automatic transmission in this series.

In addition, 1.2 l and 1.6 l common rail diesel engines with diesel particu-

late filters are available for the first time, and cover a performance spectrum from 55 kW to 77 kW.

Alongside the agile and high-torque engines, a chassis tuned for sporty and dynamic driving as well as a new design language lend the overall character of the Polo A05 a much more sporty flair.

The design of the new Polo continues the new optical line of the Golf VI in this class. It is characterised by a clear, authentic design which generates a high level of brand identification, in particular at the front end. Sporting attributes are provided at the front by more slender headlights and, for example, the honeycomb structure at the lower air inlet. The side-on look features a striking character line running from the headlights back to the tail light. The optical appearance of the Polo A05 can be uprated even further with optionally available alloy wheels from 15-inch (185/60 R15) to 17-inch (215/40 R17). 15-inch alloy wheels are fitted as standard on the "Highline" equipment line.

The range of equipment available for the new Polo has been uprated compared to the previous model. Some examples include a soft dashboard from "Comfortline" onwards, decorative touches in the interior such as chrome frames around the air nozzles in the higher equipment lines, a variable load bed for achieving

great flexibility with two load levels, and a ventilated glove compartment. ESP including ABS and hill drive assistant is also a standard feature now.

The environmental targets for the technical development have been reached with the environmental properties of the new Polo. Indeed, the new Polo has better environmental properties than its predecessor, taking account of the entire life cycle. This positive result is documented in the environmental commendation for the new Polo and has been confirmed by TÜV Nord in the course of certification according to ISO 14040/44.

2 Life Cycle Measures

Following the initial start-up of the four-door body variant as LHD and RHD vehicles, a two-door variant will be built about half a year later. The "BlueMotion" model variant will be launched at the start of 2010, with its target CO₂ emissions value of 87 g/km. Further body variants will be a "Cross" variant and a "GTI" like in the previous model. To coincide with the GTI, an innovative panoramic tilting roof will be offered as optional equipment. ■