PRESS INFORMATION

The new Volvo V50

Built according to Volvo's consistent environmental philosophy

- **Materials and technologies selected to minimise risk to health**
- **New engine technology produces environmental benefits**
- **Particle filter for diesel engine**
- **Premair®**
- **Pollen filter is standard**
- **Interior Air Quality System a new option in a compact Volvo**
- **Environmental Product Declaration from the start**

Careful selection of materials and technologies

The Volvo V50 is being produced at one of the most modern production plants in the world. Both the manufacturing methods and the materials and substances used in production have been chosen to minimise the risk to health for both production personnel and people outside the plant.

Examples: Chromium-free body material pre-treatment, water-borne exterior paints, CFC-free materials

The car has been designed with low emissions as the focal point, in order to have the smallest possible negative impact on the surrounding environment.

Examples: Aluminium low-friction engines, effective catalytic converters with three-way technology – located close to the engine, oxygen sensor (Lambda sensor) both upstream and downstream of the catalytic converter, system for recovery of evaporated fuel vapour (EVAP).

Like all Volvo cars, the Volvo V50 has been designed for a high recycling rate.

Examples: 85% by weight of the materials in the car can be recycled; plastic components are labelled to facilitate recycling; recycled felt and wood-fibre materials are used in certain interior trim components.

Lower fuel consumption and lower emission levels

The new petrol engines are a further development of Volvo's low-friction engines.

The manifold and turbo unit in the T5 engine have been cast together in high-alloy cast steel which is particularly heat resistant (1,050°C). It therefore requires less cooling in the conventional way with petrol.

As a result, the engine can be run on a leaner fuel mixture, thereby reducing fuel consumption and exhaust emissions, especially when driving at high speeds.

The new plastic inlet manifold also produces positive environmental effects. The minimal heat-conducting ability of plastic results in cooler inlet air and thereby more efficient combustion.

The Lambda sensors have been improved to heat up more rapidly and to be activated more efficiently in cold starts. This helps to reduce emissions.

The five-cylinder engines in the Volvo V50 have radiators featuring Volvo's patented PremAir® system, which has been developed in collaboration with the Engelhard Corporation. PremAir® is a system that uses a catalytic coating on the radiator. It converts up to 75% of the ozone passing through the radiator into harmless oxygen.

The plans also include a Bi-Fuel engine – in other words, an engine that can be run on natural gas, biogas and petrol.

Comply with next generation of emission regulations

The five-cylinder engines have been upgraded to comply with the next generation of North-American and Californian emission regulations for this decade.

These regulations are the most rigorous emission standards in the world and they have contributed to the additional development of techniques to accommodate the HC and NOx standards – as well as improving durability. Volvo offers this refined technology for emissions on the new five-cylinder engines in every market.

Particle filter with automatic regeneration function

It will be possible to specify the new diesel engine for the Volvo V50 with a particle filter which significantly reduces unburned soot particles in the emissions, thereby reducing the negative environmental impact. The system is cleaned (regenerated) automatically, as the contents of the filter are burnt off at regular intervals. An additive in the fuel enables this process to take place at a moderate temperature (approximately 450°C compared with the normal 550°C or thereabouts). The entire process, including the supply of the fuel additive, takes place without the driver noticing anything. The regeneration interval is adjusted to match driving conditions and the driver's driving style.

Cleaner inside than out

Like other Volvo models, the Volvo V50 has been developed to offer its passengers a clean and healthy cabin. A cabin pollen filter is standard. In addition, Volvo's Interior Air Quality System (IAQS) is now also available as an option in this compact model. IAQS features an active carbon filter. The system automatically removes impurities and odours from the incoming air and makes the interior air cleaner than the air outside the car.

All the materials that are used in the interior have been selected and tested not to cause known allergic reactions and reduce the risk for other known health problems that can be caused by interior material.

Examples: Low PVC content in interior trim materials, chromium-free leather, surface treatment of interior fittings to prevent the emission of nickel, ÖKO-TEX-certified fabrics (the ÖKO-TEX label is an international registered symbol for the testing of textiles and leather. This certification ensures that textiles and leather are free from substances that can cause allergies or ill-health).

Environmental Product Declaration from the start

Like other Volvo models, the Volvo V50 is accompanied by an environmental product declaration (EPD), something Volvo was the first car manufacturer in the world to introduce. Volvo Cars' EPD is based on an holistic approach with the emphasis on health, resource utilisation and ecological consequences. It gives the car buyer an overview of the environmental impact of the car throughout its service life, making it easier to compare the eco performance of Volvo's various models and engine alternatives.

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