



Volvo Bus Corporation

Press Information

TX – A PLATFORM FOR BETTER BUSES VOLVO.

Based on the new TX platform, Volvo Buses offers customers a wide selection of highly competitive products – a series of tourist coaches and intercity buses of high quality and dependable reliability.

The new buses offer good total economy for the operator, a safe and comfortable working environment for the driver and a comfortable journey for the passenger.

The new generation of Volvo buses based on the TX platform feature a high technical standard. New disc brakes and a new 12-litre engine are clear examples of intelligent technical solutions, as are the electronic system, the frame design and the advanced front suspension. There are many other examples too, but what is most remarkable about Volvo's TX platform is its immense versatility.

The platform's modules are designed and interfaced in such a way that they offer considerable flexibility in the form of different combinations of chassis and vehicle. This huge variety can be seen at the numerous shows and exhibitions this year where Volvo will be displaying one new model release after another.

Higher availability and lower costs

With the platform approach, the number of parts used is reduced by 40 percent, yet there are more models and variants than ever before. Costs are reduced both in the production plant and at the dealership – and these benefits are passed directly on to the Volvo customer.

Modularisation also means that service-friendliness improves – the workshop quite simply has an easier time. Longer service intervals and the possibility of

excellent advance planning of service and maintenance owing to the new electronic system contribute to both higher vehicle availability and lower total costs throughout the vehicle's lifetime.

Soft packages – and hard

Volvo Buses is immensely proud of the products emerging from the TX platform. It is easy to identify the customer's benefits – the versatility, all the various technical advances, the low fuel consumption – which taken together help cut the time and cost of repairs and maintenance by 10 percent over previous levels.

However, for the maximum possible customer benefit, it is also necessary to have a comprehensive range of soft packages alongside the hardware.

Individual financing packages and individual service solutions developed in close cooperation with each specific customer are just two important areas. Smart system solutions are also on the way, in which the bus and the transport system are linked into a single unit.

Efficient and economical engine

Volvo's new 12-litre engine has several valuable properties. The engineers have succeeded in significantly reducing fuel consumption and exhaust emissions – a combination usually considered an "impossible" achievement.

The electronically controlled engine itself meets all existing requirements concerning emissions of carbon dioxide, hydrocarbons and nitrogen oxides, but it can be made even cleaner. Carbon dioxide emissions have been cut through lower fuel consumption.

What is more, the engine is very powerful and, owing to its advanced electronic management system, very reliable too.

Safety and comfort

During the development of the Volvo Buses TX platform, one of the aims of the engineers was naturally to cut costs. However, they also focused equally on achieving higher quality as well as enhanced safety and comfort for drivers and passengers alike.

The box-section frame which is the very foundation of the TX platform's chassis, offers high quality from the outset. The use of stainless steel for the frame, and the efficient production methods used – including laser welding – ensure maximum quality.

The electrical and electronic systems are of multiplex type. They offer immense reliability and allow the operator to monitor the individual bus's condition and keep a watchful eye on service needs, while keeping the driver constantly updated about on-board status. The system is factory-prepared for linking up with a traffic-planning system or with the other vehicles in a large fleet.

Passive and active safety

Volvo's new TX platform has a large number of important features to enhance passive – injury-minimising – and active – accident-prevention – safety.

A deformable steering wheel reduces the risk of driver injury in a collision. The Volvo body is tested for roll-over strength, the front is reinforced and the bus is approved according to the R66 European safety requirements. Child booster cushions are available as an option and seat belts are naturally fitted as standard in all intercity buses and tourist coaches. Volvo's engineers have worked hard to delete all sharp and protruding details. A door brake prevents the vehicle from moving if a door is open, and soft door mouldings protect fingers and hands from being squashed.

The textiles used in the bus are flame-retardant, the engine compartment can be specified with a fire-extinguishing system and smoke detectors can be fitted in the luggage compartment, engine compartment and toilet.

Ergonomically designed driver's environment

All these safety details will hopefully never need to be put to the test since the buses have such a high degree of active safety. What is perhaps most important in the context of safety is the ergonomically designed driver's compartment. It gives the driver full control over both his operating environment and over the road, as well as allowing him to keep a watchful eye on passenger well-being. Like the passengers, the driver too benefits from a pleasant interior climate, and there is a commanding view of the road through large glass panels and effective rear-view mirrors.

The TX platform embodies characteristics such as efficient, electronically controlled and patented disc brakes. In order to minimise brake wear, there is an EBS engine braking system and the option of a compact retarder to further boost braking efficiency. Being able to maintain the right speed is a matter of safety for the bus operator, the driver and the passengers alike. Despite – or perhaps because of – the powerful brakes, average speed is higher, which benefits all concerned.

Lifecycle analyses

The TX platform is an excellent example of care for the environment. Environmental consideration is an important parameter even in the choice of material, and it is meticulously calculated in detailed lifecycle analyses. During production and in all workshop activities, strict attention is paid to Volvo's black, grey and white lists governing the use of chemicals. And of course, as much as possible of the bus is recyclable, when it finally comes to the end of its active life.

Operation accounts for at least 90 percent of the bus's total effect on the environment. For this reason, Volvo's buses are generally powered by fuel-efficient diesel engines, although natural-gas is an excellent alternative. The new 12-litre engine has been praised for its low fuel consumption, and even the advanced new transmissions help keep fuel consumption to a minimum.

Environmental declaration

Today's diesel engines meet the Euro 3 standards on their own, but with an oxidising catalytic converter, particulate filter and exhaust gas recirculation (EGR), emission levels can already now be reduced still further, to the levels that will come into force in 2006. Volvo's EGR system is called VEC (Volvo Emission Control) and it can be retro-fitted to existing buses that are up to five years old.

Noise too is a form of unwanted emission. With the TX platform, Volvo Buses has succeeded in considerably reducing exterior noise levels. Passengers also benefit, because of the low interior noise level.

All this is shown in greater detail in the environmental declaration that comes with every Volvo bus model.

Renewed product range

The launch of the recent new models based on the TX platform marks the almost total renewal of the Volvo Buses product range over the past few years. First out was the B7R city bus, in 1997, followed two years later by the low-floor variant, the B7LE.

2000 saw the launch of the TX platform, heralded by the Volvo B12M. Since then, three complete buses – the 8500, 8700 and 9700 intercity buses and tourist coaches – and the B12B chassis have been unveiled. All are derived from the new platform.

When it comes to bodybuilding, Volvo Buses follows two main concepts: aluminium, based on the unique "System 2000" from Swedish bodybuilders Säfte, and stainless steel, according to the Finnish "Carrus" model.

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