



A Customer Magazine from Volvo Bus Corporation #1 2007

# ON THE MOVE



**Clear path for  
BRT in Mexico City**



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#### 4. Metrobús changing faces

BRT has helped improve the socioeconomic structure of Mexico City.



#### 8. Gothenburg's bus revival

Since the start, passenger numbers on the city's trunk bus lines has risen by 50 per cent.



#### 10. Wide model range

Volvo Buses has the widest range of BRT buses on the market.



#### 14. In the laboratory

"One lab, many sites" is the motto of Volvo Engine Development Laboratories.



#### 19. Strong aftermarket

The ambition of Volvo Buses is to provide outstanding service and parts availability to the customers.

## BRT is the future already today

Within public transport we are all facing a major challenge in the light of the very high concentration of population to our cities. This concentration is leading to an unsustainable situation with regard to congestion, traffic environment and inferior quality of life.

Cities that succeed in changing their infrastructure and in introducing efficient transport systems will increase their attractiveness.

One of the most important tasks for politicians, town planners and transport companies is to create an efficient, safe and environmentally friendly transport system that can grow and develop together with the city.

Here at Volvo Buses we have long experience of working together with cities that have created such transport systems. We call these systems Bus Rapid Transit, or BRT.

Thanks to attractive and comfortable buses, frequent departures, rapid mobility and good passenger information, many people have been enticed into leaving their car or motorcycle behind and choosing the bus instead.

In addition, BRT has the advantage that the cost of investments is considerably lower than the cost for rail-bound systems and that it is entirely feasible for the systems to bear their own operating costs.

By adapting the systems to local conditions, they can be used in all types of cities irrespective of whether it is a multi-million-inhabitant city in South America or Asia, or a smaller city in the western world.

We have all followed the debate on carbon dioxide emissions and global warming. Today both scientists and politicians are in agreement that we must limit emissions, and significantly. Here in the transport industry we have a great responsibility to contribute to this and I am convinced that with the help of BRT, we can take a big step on the road to a cleaner world and an enhanced quality of life for the inhabitants of our major cities.

Here at Volvo Buses we want to actively contribute to this development.

Håkan Karlsson  
President & CEO  
Volvo Bus  
Corporation



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Texts Ulrika Hallin  
Photo Ulrika Hallin, Volvo

## Metrobús Changing faces

# BRT helps improving the face of Mexico City

Building a secure and dependable public transport system does not only mean improved mobility. It also means renovating run down neighbourhoods around the stations and thus improves the socio-economic structure of the city.



Adriana Lobo

The first thing that catches your eye when arriving in Mexico City is the traffic. Lane after lane filled with cars. With 18 millions inhabitants the city is a giant and it takes hours

to travel through it.

Only some 20 per cent of the citizens use private vehicles, yet the city is already completely congested and the

public transport system is about to break down.

Just like the English and the weather, for the citizens of Mexico City the state of the traffic jams is what people talk about: choosing which route might be best for the next hour or two and estimating how long it will take to reach their destination.

“Facing the break down of the public transport system and the smog caused by the traffic, something had to be done”, says Adriana Lobo head of the NGO organisation Centro de Transporte Sustentable (CTS).

In 2002, the city government, then headed by Manuel López Obrador, started to plan for a change. A program of transport corridors was established, designed together with CTS. “To us it was important to create a sustainable quality system that was faster and economically efficient.” Adriana Lobo continues.

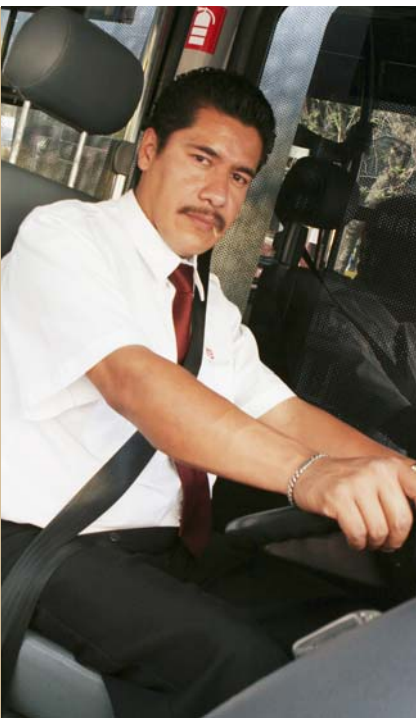
Since the Metrobús project started it has been elections and the new city government headed by Marcelo Ebrard, continues the process with enthusiasm.

>>>

### Future BRT projects

- An 8 kilometre long prolongation of the corridor in Avenida Insurgentes.
- 10 new corridors in Mexico City.
- 4 or 5 new corridors in the suburbs, the State of Mexico.
- In future perspective 33 corridors are planned.
- Some 15 Mexican cities are making feasibility studies for future BRT projects.
- By 2015 up to 27 of cities with more than 750,000 inhabitants will have BRT. This means that 58 million people will have access to BRT.
- In many future projects the stations are connected with bike paths.





*"I'd never go back to the old system, this is much better and less pressurised."*

*Bus driver  
José Manuel Villanueva*

#### Benefits

- Since the Metrobús was inaugurated in June 2005 in Avenida Insurgentes there is 50 per cent less benzene in the air.
- And 30 per cent less CO<sub>2</sub>.
- Some 252 microbúses and 90 regular buses without emission control were taken off the streets and replaced by 97 articulated búsés.
- During the rush hours 70 buses an hour leave the stations.
- The number of car accidents has reduced with 30 per cent.
- Before Metrobús it took 2 hours to travel on Insurgentes trough the city. Now it takes 1 hour.
- Nearly 80 per cent of the passengers say the service on Avenida Insurgentes has improved.
- 9 per cent of the passengers have left their cars at home in favour fro the Metrobús.

Source: CTS (Centro de Transporte Sustentable).

>>> Cost efficient, environmentally friendly and high quality, the three demands fitted perfectly to the BRT (Bus Rapid Transport) system. In addition the BRT system was fast and safe, bearing in mind both the personal safety of the passengers and in terms of reduction of traffic accidents. Metrobús was created and the first corridor was inaugurated in the Avenida Insurgentes in June 2005. It rapidly became an essential part of the city's infrastructure. "It immediately became a success," says Guillermo Calderón head of Metrobús, "people feel secure, and the buses are comfortable and fast." The corridor of Insurgentes is almost 20 kilometres long and goes from Indios Verdes in the north to Doctor Galvés in the

southern part of the city. "Before Metrobús it took 2 hours to travel the distance", says Guillermo Calderón, "With Metrobús it takes less than on hour and this improves the quality of life for the citizens." Mexico City has a vast network of privately owned buses. There are ordinary buses and micro-buses; many of them old, badly maintained and without exhaust emission control.

At first the drivers and the owners of these buses were somewhat sceptical towards the Metrobús project and it took 2 years to convince them of the benefits. Now some 250 microbuses and 90 regular buses have been replaced with 97 articulated buses, most of them

Volvo buses. The drivers work for CISA, the private company that organises the drivers and bus owners who operate the Metrobús together with the RTP (a public transport company).

For the drivers working in the Insurgentes corridor this means good benefits. As the passengers pay at the entrance to the station, they don't have to get involved in disputes with passengers over unpaid fares, and if a passenger starts to cause trouble, the driver contacts the Metrobús centre of surveillance and gets help at the next station.

Bus driver José Manuel Villanueva is happy with his new assignment. "I'd never go back to the old system",



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### Another BRT success in Mexico is Optibús in León

The Optibús was inaugurated in 2003 and is 25 kilometres long. Test projects exist in Puebla and Juarez. The latter will probably cross the border into the US city El Paso.



Jorge Coxtinica



Guillermo Calderón



Raúl Quintero

he says. "This is much better and less pressurised."

With the BRT and Volvo's telematics system ITS4mobility, the control centre can estimate the number of buses needed. In the rush hour one bus leaves every minute. Thanks to ITS4mobility the drivers are able to see the traffic flow. "The system also is a great help when there's an accident, as it helps us to see and thus solve the disturbances faster" says Jorge Coxtinica head of operations.

Most probably there will be connections with the suburbs, the State of Mexico with its additional 10 millions inhabitants. Currently the government of Mexico City plans 10 more corri-

dors in 6 years and building an extension of the Insurgentes corridor is about to start. The corridors will be spread in a network that is integrated with the rest of the public transport system, such as the metro. "The BRT and Metrobús project is an opportunity for us to recover the public spaces in the city," explains Raúl Quintero secretary of transport. "Our aim is to change the face of the city, to make it cleaner, safer and friendlier, as we construct the new corridors we'll plant trees, tear up concrete areas to plant grass and erect sculptures." He also explains that the government wants to help the street vendors around the bigger public transport stations to become established businessmen with regular stores.

"Metrobús is very much a socio-economic project," Raúl Quintero adds.

The commuter Alberto Rubio travels from the suburbs to Los Indios Verdes in a regular microbús. From Indios Verdes he can choose between the Metro and the Metrobús. "It depends on where I want to go, the Metro goes all over town, but the Metrobús is faster."

"People have confidence in Metrobús", concludes Adriana Lobo, "that is really one of the big advantages. Metrobús and BRT fulfil the task perfectly."

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*"It is clear that the reputation of buses has improved in this city."*

Magnus Lorentzon  
Project Manager at Västtrafik



Texts Per Andersson, Photo Anders Nilsson

## Improved reputation for Gothenburg's buses

The blue bi-articulated Volvo bus of trunk bus line 16 cruises over the crest of Götaälv Bridge, packed with passengers as usual during rush hour. A city traditionally known for its trams, Gothenburg's new trunk bus lines have become a great success, with an increase in passenger numbers since the start of over 50 per cent.

Along the northern shore of Götaälv River, old industries from the Gothenburg golden era of ship-building are transformed to areas of modern housing and business clusters in media, mobile communication and automotive technology. When this area is fully developed around 70,000 people will live, work and study here. In order to meet the demands of public transport, in 2003 trunk bus line 16 was initiated by Västtrafik, the regional public transport company. The line extends over 16 kilometres, from Högsbo to the south, through the central parts of Gothenburg to Eriksberg north of the Götaälv River. Since 2005 another trunk bus line, line 17, goes through the city, and by the autumn of 2007 another two trunk bus lines will be introduced.

"It was actually the upcoming two lines that first were considered as trunk bus lines, we thought that they had the biggest potential," says Magnus Lorentzon,

Project Manager at Västtrafik. He has been involved in the introduction of all trunk bus lines in Gothenburg, the second largest city in Sweden with a population of almost half a million people.

The trunk bus lines of Gothenburg are a typical BRT system, including high service frequency, fewer stops, fast boarding and disembarking and new non-stop services from termini to city centre, university, hospital etc.

"This type of service has been discussed in Gothenburg since the middle of the 1990's, and light rail has always been regarded as an option" says Magnus Lorentzon.

Trunk bus line 16 is partly operating in lanes that were under consideration for railway use.

"At least that was a theoretical assumption, but maybe not a solution that proved to be economically viable, not in the same way as the trunk bus lines," he says.

Gothenburg's trunk bus lines 16 and 17 have the unique quality of being profitable public transport, meaning a cost coverage of more than 100 per cent.

"This is much easier to achieve with this type of bus services than railway, if you include the cost of infrastructure needed for the two traffic modes respectively," he says.

The passenger turnout for the trunk bus lines was big from the beginning, big enough to sometimes make it difficult for passengers to get onboard the bus at some central stops. From southern Högsbo, where line 16 replaced existing bus services, the number of passengers has risen by some 30 per cent. Along the northern Götaälv shore, the increase is up to 75 per cent. Västtrafik has solved the pleasant problem of growing passenger numbers by introducing the bi-articulated, 24-metre long Volvo 7500, with a capacity of 165 passengers, during rush hour traffic.







One of the main goals of the trunk bus lines has been to raise the status of bus services in central Gothenburg.

“There was a general view that the bus service in this city was somewhat vague. Now we had a chance to make it more distinct, comparable to the trams in terms of service frequency, passenger capacity and so on. The trunk buses are visible and easily recognisable and because they traffic the city centre they are seen by many,” says Magnus Lorentzon. “I think this has played an important part in the success of the trunk bus lines.”

“Following the introduction of the two newest trunk bus lines in August of this year, the project will restart,” he says. “It is probable that they will be followed by other bus lines like them, rather than new tram lines. It is clear that the reputation of buses has improved in this city”.



Photo: Kasper Duzick

## Bus vs. Rail

The comparison between Bus Rapid Transit systems (BRT) and railways are both inevitable and necessary for making the correct decision when choosing an suitable public transport.

During the 5th International Bus Conference UITP in Bogotá, Colombia, Dario Hidalgo, PhD, Booz Allen Hamilton, presented a study that compared four transit alternatives in a number of different aspects. The alternatives were buslanes/busways, light rail/trams, heavy rail/metro and BRT.

Three important factors in comparing rail and BRT are commercial speed, passenger capacity and costs. When regular bus services are compared with light rail and metro, buses have much lower capital costs, but also lower speed and lower passenger capacity than the other two alternatives. Regarding high level BRT, even though the capital costs have increased, they are still considerably lower than rail, the passenger capacity is in fact higher than light rail and even comparable to metro, and the commercial speed is considerably higher than regular bus services. The conclusion is that BRT is able to provide the maximum value, with the lowest life cycle cost. BRT is likely to be more economical in capital costs and lifecycle costs both per-kilometre and per-passenger.

There are also other considerations that favour BRT compared to railway alternatives. BRT has short implementation times and are more likely to make use of the local capacity of both operators and industry. It is also more probable that vehicles and operations can be covered with fare box revenues, without the need for operational subsidies.



# Volvo Buses

Texts Håkan Hellström, Photo Volvo

## And the winner is...

Volvo buses have received high honours in both Finland and India. Volvo 8700 LE was named Commercial Vehicle of the Year 2006 in Finland, and Volvo City Bus B7RLE got the Commercial Vehicle Technology of the year 2006 award in India.

Volvo's low-entry bus, Volvo 8700 LE, was selected by Finnish transport trade magazine Ajolinja for its annual award, Commercial Vehicle of the Year. The honour was given for the bus model's environmental friendliness by low exhaust emissions. The 8700 LE already meets the Euro 5 emissions standard, not required for buses until 2009.

The bus model is also an important part of the new BRT system in Helsinki, an intercity bus like BRT called the Jokeri bus transit system. The Jokeri, a 30-kilometer bus line, has 29 low-entry, 14.7 meter-long bogie buses in service from Volvo, each with a capacity of 103 passengers. According to Ajolinja, the Jokeri has improved the cross-city connections in Helsinki and raised a lot of positive publicity for public transport. Since the bus line has few stops, this further reduces the emissions.

Volvo Bus has been present in India for six years and in the beginning of 2006, the City Bus concept was introduced in Bangalore, with very positive response from passengers and city transport authorities. The Volvo City Bus B7RLE model has recently been introduced in the city of Pune.

The Commercial Vehicle Technology of the year award is a collaboration between Car India and Bike India magazines and TV business news channel NDTV. The jury made the conclusion that "Volvo City bus deserves a special recognition for changing the overall outlook of commuters towards city travel. Volvo has paved the way for a modern bus system in India."

Volvo in India supports more than 1,200 buses through a network of 19 service & parts centres and a countrywide sales network.

Buses used in Bus Rapid Transit (BRT) systems all have some common denominators: high passenger capacity, easy access and high performance. Volvo Buses has the widest range of BRT buses on the market, satisfying the needs of every kind of customer and all types of traffic environment.

"The passenger capacity of BRT buses doesn't rely on bus length alone, interior bus layout is a very important factor," says Christer Boman, BRT Manager of Volvo Buses. "Easy boarding and disembarking is vital for maintaining a good flow of passengers. A flat floor layout, combined with platforms inside each door, ensures fast passenger movement and short standstills at bus stops."

Volvo provides bus models both with high floor for platform boarding or low floor for street boarding. To further improve the passenger flow, Volvo Buses offers alternative positioning of the doors. This is mainly due to the fact that the high reliability and performance engines of Volvo's buses are mid-mounted or side-mounted - optimal for city and BRT operations.

"Time tables are often very tight, and consistent speed and reliability are important," says Christer Boman. "A continuous flow of the BRT system is central for keeping the systems attractive to passengers, bus operators and authorities."



### Feeder bus

Volvo B7RLE

**Length:** 12 metres

**Engine:** Rear-mounted 7-litre diesel engine, 290 hp.

Low entry for easy street boarding

# - A model manufacturer



## Volvo High Floor

Volvo B12M

Bi-articulated

**Length:** 24-26.8 metres

**Passenger capacity:**

Up to 300 passengers

**Engine:** Mid-mounted 12-litre diesel engine, 340 hp

High floor for level free boarding.

## Volvo Low Floor

Volvo B9SLFA

Articulated

**Length:** 18.5 metres

**Passenger capacity:**

Up to 160 passengers

**Engine:** Side-mounted 9-litre diesel engine, 340 hp

Low floor for easy street boarding



## Volvo Low Floor

Volvo 7700

Bi-articulated

**Length:** 24 metres

**Passenger capacity:**

Up to 200 passengers

**Engine:** Side-mounted 9-litre diesel engine, 340 hp

Low floor for easy street boarding

## Volvo High Floor

Volvo B12M

Articulated

**Length:** 18.1 metres

**Passenger capacity:** Up to 175 passengers

**Engine:** Mid-mounted 12-litre diesel engine, 340 hp

High floor for level free boarding.



# Arbesko launches new safety shoes with unique characteristics

**Arbesko is a market leader for safety shoes and work shoes in Sweden. The company is constantly working to develop high quality ergonomic and stylish shoes that make heavy working days lighter.**

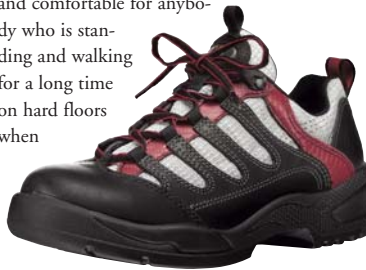
**Now Arbesko is taking a further step in its product development by launching a unique gel cushion which provides maximum relief and dampens the pressure against both the heel and the ball of the foot – Energy Gel Duo.**

Long work shifts on hard floors or physically strenuous tasks require professional work equipment of a high quality. The foot is often the very part of the body subjected to maximum strain which is why quality shoes are of the utmost importance. Arbesko has been producing shoes with a focus on health and ergonomics since 1952. By means of active research the company has successfully developed several models that ease and relieve the body both at work and during leisure time. The range includes models that largely suit all work groups, everybody from hairdressers to lumberjacks.

**Energy Gel Duo – Something new for anybody who does a lot of standing and walking.** One of Arbesko's major successes throughout the years is Energy Gel, a gel located in the heel of the shoe designed for shock absorption and relief. Arbesko is now developing this idea further

and is offering "double" shock absorption by means of Energy Gel Duo, a gel that acts under both the ball and the heel of the foot.

"We have further developed the success of Energy Gel – an elastic gel cushion in the heel of the shoe – and we have supplemented it with a gel plate in the "ball" as well. The result is efficient shock absorption both in the heel and in the front section of the shoe. Energy Gel Duo is particularly suitable and comfortable for anybody who is standing and walking for a long time on hard floors when



working postures that include prolonged standing often increase the strain and pressure on the front part of the foot", says Peter Svensson, Commercial Manager at Arbesko.

**Modell 355** Model 355 is one of the new safety shoes from Arbesko equipped with Energy Gel Duo. The model is a light super-comfort shoe which meets all conceivable needs that could arise during long work shifts. Equipped with the new Energy Gel Duo, the shoe has maximum shock absorption both in the heel and in the "ball". In addition to the shock-absorbing functions the shoe is also equipped with aluminium toe caps for maximum safety.

*For further information, visit Arbesko's website: [www.arbesko.se](http://www.arbesko.se)*

## RUUKKI – your partner in component manufacturing

**Ruukki is an expert** in metal-based products, components and systems, which it supplies to the construction and mechanical engineering industries.

Ruukki's high-end expertise in steel structure design, efficient manufacturing, as well as in product development and design, make it the ideal partner for any machinery manufacturer.

**Examples of large welded components** Ruukki supplies include frames, cabin frames and heavy duty chassis for commercial vehicles. Parts and components used in machinery and various heavy vehicles are subjected to high dynamic loads and wear. This means the welding in particular must satisfy stringent quality criteria.

**Customers include many** leading globally-operating European companies, such as Volvo Bus. Ruukki and Volvo Bus have been working in close cooperation for more than 35 years. Work with Volvo Bus and other customers has helped Ruukki evolve into a successful partner with an extensive portfolio of products and solutions for the engineering industry.

Ruukki is continually further improving its performance to meet customer demands on e.g. quality assurance and lead times. Ruukki's flexible logistics ensure accurate deliveries for customer processes.

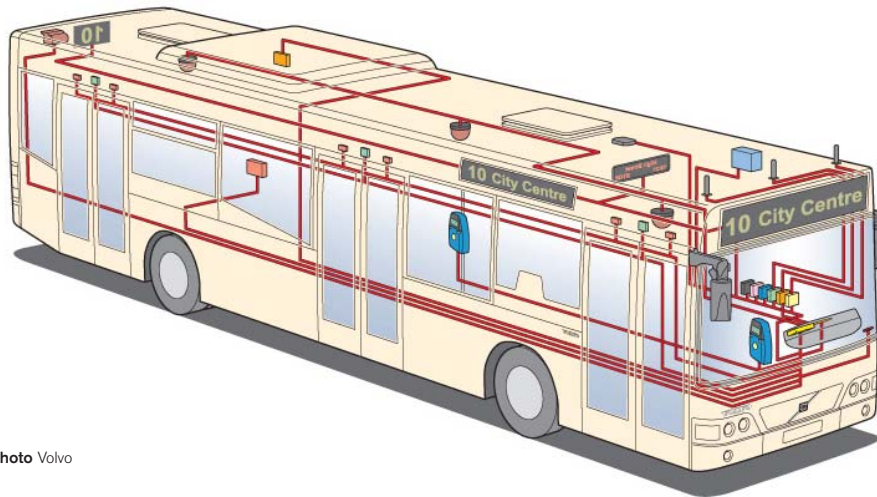


*Prototype frame for Volvo Bus bi-articulated buses.*

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Texts Håkan Hellström, Photo Volvo

# The benefits of Bus Intelligence



Many benefits of Volvo buses are obvious to all: quality, safety and attractive, modern design. But there is a lot more to this than meets the eye; it is the intelligent transport system of Volvo buses that truly makes them a smarter choice.

Volvo was the first bus manufacturer to present a factory-fitted, fully integrated solution that included both vehicle and telematics system. It is a complete offer of hard and soft products, straight from the production line, and a guarantee of high quality and fast commissioning for Volvo's customers.

Volvo's telematics system, ITS4mobility, is the core of the intelligent bus, as it is the technical solution that connects the different functions: such as automatic vehicle location, timetable/headway adherence, two-way text messaging, next-stop bus announcement, fuel consumption and service planning. These functions are of great benefit to drivers, passengers, bus operators, traffic supervisors and public transport planners. The intelligent bus registers, stores and continuously distributes detailed information about the bus, the driver and the traffic situation and makes it available at a control

centre through wireless communication.

The telematics solution of Volvo Bus is a module-based, real-time system and has several strong features, including full factory integration.

"As Volvo is responsible for all parts of the system the customer gets an optimised solution with all necessary functions included," says Victor Castillo, Telematics Specialist at Volvo Bus. "This eliminates the need for duplication of hardware and services and requires less spare parts resulting in cost efficiency. The system is also totally open and has all possibilities to be extended with new functions and subsystems in several steps."

When required, the system can be retrofitted in old Volvo buses as well as other bus brands.

ITS4mobility has three main modules, namely Traffic Control, Travel

Information and Fleet Management. These are common elements in most telematics systems, but the integration and inter-relation between these three elements are unique features to Volvo Bus. When buying an intelligent bus, the customer makes a one-stop shopping, fully integrated from factory, meaning for example that all warranty and support issues are channelled through Volvo without the involvement of third parties. Furthermore, the driver enjoys of one single graphic user interface (i.e. display + keyboard) for managing several different functions, giving him a safer and more ergonomic workplace environment.

"Volvo is a supplier that delivers an intelligent solution that extends well beyond the bus itself," says Victor Castillo. "Our customers can sign one single agreement and receive a multi-functional, intelligent bus ready to be used on the day of the delivery."

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Lars Hast, Director Global Engine Development Laboratories Product Development, Ulf Johansson, Senior planner and Rolf Fridén, Senior Advisor engine program.



Ulf Gustafsson test cell technician.

Texts Håkan Hellström  
Photo Anders Nilsson

# Worldwide Volvo lab works on emissions and fuel consumption

There was a time when the only demand on the engine in a bus was that it had to be powerful enough to pull the bus. Not so anymore. Today there is an almost endless list of demands, of which the most important concerns fuel consumption and various emissions.

One organisation that knows all about the demands put on a modern bus engine is Volvo's Engine Development Laboratories, which performs most of the advanced and intensive testing necessary for development and production of diesel engines.

"Our motto is 'One lab, many sites,'" says Lars Hast, who is Director Global Engine Development Laboratories and leads the approximately 400 persons involved in the organisation around the world.

The laboratories are a part of Volvo Powertrain, a business unit within the Volvo Group, the world's largest producer of heavy diesel engines.

"It is important to be big today," says Lars Hast. "You need big resources to develop the advanced technology that gives you engines with low fuel consumption and low emissions."

Volvo Powertrain has have laboratories in Gothenburg, Lyon in France, Hagerstown in the U.S., and Curitiba in Brazil. In addition there is a lab in Malmö, Sweden. The aim is that all engine labs shall work in the same way,

with the same equipment and be correlated."

Correlation means that any test made in for example Gothenburg will show the same result if it's made the same way in any of the other labs. In order to achieve this, a lot of effort goes into calibrating and correlating all instruments in the labs. One way of doing this is taking measurements of so called master engines, with very well known characteristics. These engines are circulated within the various test rooms in the laboratory, as well as between the different labs.

About 150 persons work at the engine lab in Gothenburg and many of the tests they perform are related to new regulations concerning emissions around the world. Emission regulations vary a lot between different countries and for example between the EU and the US.

"Not only do the regulations vary," says Rolf Fridén, senior advisor for the engine programs at the lab in Gothenburg, "even the way to measure differs."

Work is under way to harmonise emission regulations internationally, but

there is still a long way to go.

"We hope that around 2012 there will be a harmonised system for emission control between the EU and the US," comments Rolf, who has been working with engine development for more than 40 years.

The lab in Gothenburg has 26 test cells where the engines are run in varying cycles, depending on the aim of the test. Computers, seeking to optimise the engine functions under different conditions, control most tests. In some rooms you can simulate high altitudes, in others a cold climate.

In other rooms diesel engines are being tested for long time wear. The longest test involves running an engine more or less continuously for so long that it corresponds to it being run in a truck or a bus for 450,000 kilometres.

"In my opinion Volvo is the world leader in diesel engine technology today, but this doesn't mean that we can rest. We need to have a very clear strategy for the future, to find the ways, the small steps of development, to make our engines even better," says Rolf Fridén.



## Research on the bus system of the future

Rising demands for urban mobility in growing cities around the world is one of the biggest challenges of future public transport. This challenge was one of the incentives for the International Association of Public Transport, UITP, to launch an ambitious programme to meet the demands: The Bus System of the Future.

Last year UITP made the conclusion that the public transport sector faces a number of serious challenges for the future; one of them is urban development. In 2007 over 50 per cent of the earth's population will live in cities, by 2015 this figure will be 60 per cent; a fact that makes it easy to predict a big rise in the demands of public transport. Not to take these challenges serious could result in heavy losses in public transport, severe congestion and a deteriorating public infrastructure, according to UITP. They also see the immediate answer to avoid this, the development of sustainable transport solutions that can grow and evolve with the city.

This UITP initiative has resulted in a research project in the European Union Transport Work Programme, the European Bus System of the Future. The project involves vehicle manufacturers such as Volvo, operators, public authorities, research organisations and user groups. The aim of the research is to develop an innovative, high quality bus system that will demonstrate the full potential of urban bus networks, using clean vehicle technologies. The project outcome will be the design and validation of a new generation of urban bus system that will stimulate European cities to deploy new bus lines making public transport more attractive.

## Transportation Coatings



More than just color.

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Early Monday morning is hectic as usual at the Swebus facility in Botkyrka, south of Stockholm. Buses are getting ready for the fast pace and high demands of coming rush hour traffic. A bus not fit for fight could mean one or several cancelled trips during the day. If the list of reported problems over the weekend are longer than usual, the availability of spare parts could play a decisive role if this will be a day of chaos or not.

Texts Håkan Hellström, Photo Jennifer Nemie



Jan Suomela, Parts Manager at Swebus in Botkyrka

## An important part of the Volvo offer

Jan Suomela is Parts Manager at Swebus in Botkyrka and one of the crew responsible for keeping the 130 Volvo buses in operation. Every week scheduled deliveries of Volvo original spare parts arrives at the parts storage. In addition, several deliveries per day from Volvo Bus Center provide for the spare parts needed when a bus has malfunctioned.

"I get the spare parts usually on the same day or the next day after the order is made," says Jan Suomela. "High availability of spare parts is crucial since a bus out of operation will get immediate consequences for the bus services. The production goals of Swebus could not be possible to reach without constant, fast access to spare parts."

Jan Suomela has worked at Swebus since 1977 and has had contact with Volvo Bus Center in Huddinge for the last 15 years.

"They provide very good service, we have had excellent contact over the years. Volvo's electronic catalogue system for spare parts really simplifies the ordering."

Swebus AB is one of the leading public transport companies in Sweden, responsible for about 30 per cent of the country's total amount of public bus transport. Swebus has about 2,700 buses and 7,000 employees.

The ambition of Volvo Bus is not only to offer the best products on the market; it is also to provide the customers outstanding service and parts availability, with fast and reliable distribution. This will guarantee Volvo's customers the highest vehicle uptime possible. Even though the local organisation may vary, the ambition is global. Volvo Bus Center in Huddinge, just south of the Swedish capital of Stockholm, provides service and spare parts for regional customers of Volvo Bus.

"Our customers are either operating in Stockholm or visiting the city," says Lennart Klang, Service Manager at Volvo Bus Center. "It doesn't matter who the client is, the requirements are always the same; if there is a problem it should have been fixed already yesterday. Not to be able to take care of a problem due to the lack of spare parts, or any other reason, will give us a great deal of bad will. This makes parts availability extremely important."

Volvo Bus Center receives daily deliveries of spare parts from Volvo's production facilities and central warehouses.

"The goal is to supply 96 per cent of all chassis related spare parts within 24 hours," says Björn Winell, Parts Manager at Volvo Bus Center. "This is a goal we are very close to achieving today."



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