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BUS SPECIAL



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Mobileye warns ahead of time

Cover Story:
Scania's Long Bus

Body Builders
Light, sturdy, and long-lasting

Feature Story
Inside Tasik Selatar Bus Terminal



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HINO NEW XZU720L1 MINIBUS



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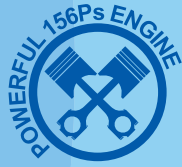
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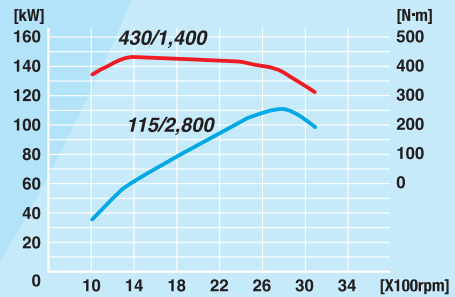
The **NEW XZU720L1** Mini Bus is ideal with its powerful 156Ps engine, 6 Speed Manual Transmission, 4x Disc Brakes, High Durability and Flexibility Suspension and Anti-Lock Braking System. Fuel efficient, economical and low maintenance. It has a great performance, emphasising on **Quality, Durability** and **Reliability**.



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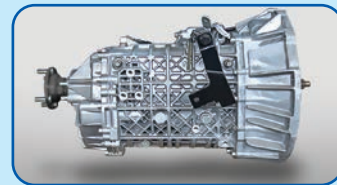


- N04C-VB** • Displacement:
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6 Speed Manual Transmission

6 Speed Manual Transmission allow for better use of engine power band, provide higher performance and also increase fuel economy and reduce engine breaking.



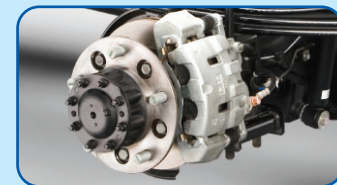
Stabilizer

The stabilizers have been lengthened and feature a link bracket, maintaining high effectiveness and stability.



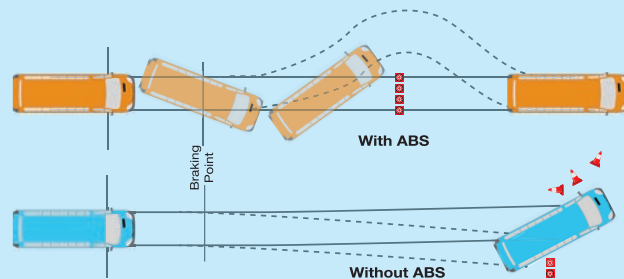
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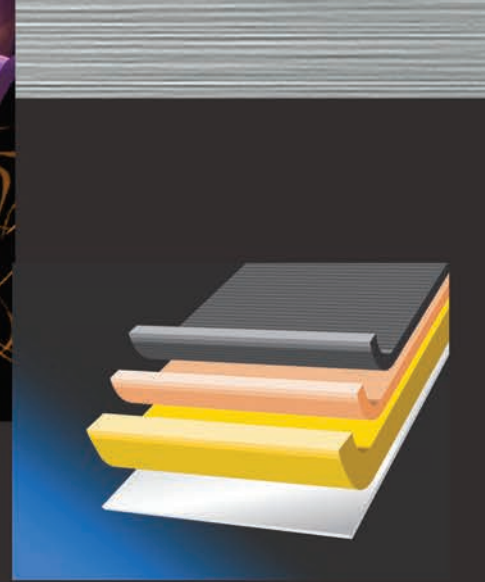


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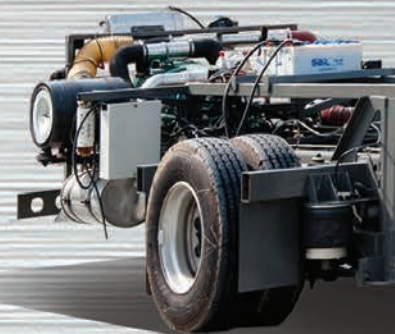
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Welcome on board our first Bus Special!

You are holding the first issue of the "Asian Trucker Bus Special" in your hands. It is a very proud moment for us and we do hope that the excitement transpires through the pages of this magazine. Launching a new product is always a fascinating process. Thanks to the great support from the industry, we were able to put this together quickly after we first proposed the idea.

Cement doesn't complain

So, why do we need a magazine for buses if we have one for trucks, the Asian Trucker? We recently went to Bangkok and Mr. Wongborphid put it just right: Cement doesn't complain about harsh breaking. In essence, the entire market is different. As a bus operator, you are dealing with humans, not with goods that you can move around at will, park someplace for hours or move for days without breaks to eat something or to go to the restroom. While the chassis might be mostly identical, everything else is different. Hopefully, some of your passengers will also enjoy this magazine and start understanding what it really means to get them home safely.

Safety first

Some of you may already know me and the fact that I am trying to promote safety on the road. It shouldn't be a surprise that we have a feature on a little device that can help you to prevent accidents. What is astonishing is that I am usually the only one that uses the seat belt on a bus. Perhaps if more people would read statistics about accidents and how the seat belt can help prevent injuries they would use it more often.

A transportation hub

The ambition is to make this special a hub for the industry just as we have done with the truck magazine. We have even visited a transportation hub to learn how you operate and what role buses play in your business. Together with my colleagues I am already working on the next issue of the Bus Special. We encourage you to let us know your news and notes or about any exciting events happening in your company. Our own exhibition, Malaysia International Bus, Truck and Component Expo, is coming up in May 2015 and we are hoping to get more visitors for buses to visit the show.

Crew bus

On a recent trip I have been on an Airbus, a mini bus and a crew bus as well as on a double-decker. Once you start looking out for buses, you find them everywhere. Interestingly, there are even fake buses, using the logos of global OEMs. Hopefully, I can soon share a bench on a bus with you soon to find out more about this vital means of transportation. Till then, let's "Balik Kampung" on a bus,

Stefan Pertz
Editor



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(From left, Hino Motors Sales (Malaysia) Sdn. Bhd spokesperson unless stated) Mr. Yuichi Naito, Advisor, Marketing Strategy & Product Planning, Mr. Johnny Chan, Executive Director, Mr. Nobuyuki Tanaka, Managing Director, Mr. Masaaki Honna, Director, Research & Development & Service Division and Mr. Muhd Suffian Affendy, Product Engineer with the brand new HINO XZU720L1 Mini Bus.



Hino Motors Sales (Malaysia) Sdn. Bhd unveils the new commercial vehicle offering, the HINO XZU720L1 Mini Bus that serves as a solution for the underlying transportation challenges in urban and suburban areas.



(From left) Mr. Nobuyuki Tanaka, Managing Director of Hino Motors Sales (Malaysia) Sdn. Bhd and Mr. Johnny Chan, Executive Director of Hino Motors Sales (Malaysia) Sdn. Bhd officially launching the brand new HINO XZU720L1 Mini B

Hino one step ahead with the new HINO XZU720L1 Mini Bus



On 27 March 2014, Hino Malaysia launched the new XZU720L1 Mini Bus. The new HINO mini bus is a smart solution addressing transportation woes such as traffic congestion, rising costs of transportation and high rates of carbon emission that typically impact the urban population on a daily basis.

With the growing demand for public transportation, HINO has introduced this new product at a very good time as an answer to the need for more efficient technology and environmental friendliness in Malaysia's market today.

The First Mini Bus Great Feature.

This newly launched product of HINO is targeting the big-scale of transport users such as town councils, corporations, travel industry and the public transport sector. The XZU720L1 mini bus is designed with a powerful 156P (115kW) engine, 6 speed manual transmission, four disc brakes, high durability and flexible suspension and the Anti-Lock Braking System (ABS). Furthermore, it comes with a fuel efficient engine management system, requires low maintenance, offers great performance, and is highly economical for various organizations to be considered as a shuttle to serve the growing urban population.

"We have great confidence that the new HINO XZU720L1 Mini Bus will be able to deliver in all keys area to provide solutions for impending transportation challenges and to satiate the growing demand of commercial vehicle in various sectors," said Mr Nobuyuki Tanaka, Managing Director of Hino Motors Sales (Malaysia) Sdn. Bhd.



Complete product line-up to address needs of market with Hino's brand new commercial vehicle offering.

Boasting great safety features, the HINO XZU720L1 Mini Bus is equipped with Anti-Lock Braking System (ABS) as well as front and rear Disk Brake, giving customers a peace of mind even while driving on various terrains. Added with stabiliser, both the driver and passengers can enjoy more than just safer trips, but smoother, more comfortable rides on the XZU720L1 Mini Bus. It is also comes with tubeless low profile tyres (215/75R17.5). This is an added safety aspect as the tire and the rim of the wheel form an airtight seal, with the valve being directly mounted on the rim. If a tubeless tire gets a small puncture, air escapes only through the hole, leading to a gentle deflation instead of a blowout which could lead to the vehicle veering off the road.

Unleashing a new value -for - money minibus that runs on a powerful engine

The XZU720L1 Mini Bus comes with a powerful 156PS (115kW) engine. Addressing the rising costs of transportation and the unhealthy carbon emissions from vehicles, the 25-31 seater XZU720L1 Mini Bus is fuel efficient because of its 6 speed manual transmission which effectively increases fuel economy while reducing engine breaking.

With the addition of the mini bus, HINO is now able to cover the entire range of buses needed by the industry in Malaysia. **T**



Mr. Nobuyuki Tanaka, Managing Director of Hino Motors Sales (Malaysia) Sdn. Bhd. sharing insights on the bus market in Malaysia, as well as Hino's footprint in the local commercial vehicle industry.



A full view of the latest mini bus by Hino Motors Sales (Malaysia) Sdn. Bhd, the HINO XZU720L1 Mini Bus. The Mini Bus comes with both the 25-seater and 31-seater variant, which are suitable for rural and residential areas, as well as shuttle services.



The newly launched HINO XZU720L1 Mini Bus is designed to deliver exceptional performance, durability, safety and comfort – ideal for commercial users.

When longer is better than bigger: Scania Long Bus



As safety is a concern for operators as well as passengers, Thailand's tour bus operators are looking at longer buses instead of double-deckers, while maintaining the same capacity.

Large portions of South East Asia's population depend on buses for their trips back home or for vacations. Extensive networks span Malaysia, Thailand and Vietnam with destinations like Singapore added to it. There is hardly a corner that cannot be reached by using a coach and the service levels cater to the different needs and budgets of travellers.

Thailand is a country that sees a lot of movement of labour force and inbound travel from European and other South East Asian countries. Concerns about the safety of passengers have triggered a new trend in the industry and many operators are opting for long buses instead of double-decker buses. In Bangkok we meet two of the leading operators to find out what exactly are the benefits of using the so called "long bus".

Comfortable rides made in heaven

First we step into the departure hall like ticketing office of Sombat Tour. The name would loosely translate into "Treasure sent from heaven". The lounge for passengers is spacious and comfortable. Perhaps a manifestation of the name's promise. Here you can also spot a pull-up banner advertising the Scania Long Bus as a new bus with 15 meters length.

Currently run by the third generation, Sombat Tour has been in operation for over three decades (The business used to carry a different name prior to that). Some 1 000 staff take care of passengers criss-crossing the country, primarily the northern parts of Thailand, which constitutes some 80% of the 27 routes the company offers. A whopping 300 buses are in operation and 500 drivers pilot them. With 90%, Scania buses make up the vast majority of the fleet and some 60 long buses are the pride and glory of Sombat Tour.



Latest technology

As Thailand is a large country, trips can take many hours. "Comfort for drivers and passengers is extremely important" says Tawee Wongborhid, Managing Director of Sombat Tour. According to him, the Scania long buses are equipped with the latest suspension to provide that smooth ride that make any trip enjoyable. He further says "You have to remember that driving a bus is hard work. For the driver, it is important that the vehicle is easy to operate. The Scania Opticruise helps drivers in their job." The technical highlights of the long bus have apparently made training courses events that are highly sought after. These courses are now seen as an added benefit offered by the company.



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Why these buses?

When asked why the company is using Scania, we are being given not just one, but a whole list of reasons that speak for this brand. As with every machine that has to run continuously, the service network is highly important and with the recent expansion of Scania's service network, the marque ticks that box.

"There is also the on-site service if you need it. But ultimately, it is the reliability of the vehicle that is impressing us" says Wongborphid. Some buses have clocked in over two million kilometres without needing any overhauling. The chassis is apparently designed in a way that daily operation is easy on the brakes and engine. Fuel consumption is another crucial aspect and Sombat achieves an impressive four kilometres per litre of Diesel, which is typically pumped at PTT, Thailand's flagship energy provider. The term "uptime" is something we keep hearing again and again as the operation is naturally one that runs 365 days a year. Interestingly, passengers are asking about the brand of the bus and copies have been reported whereby body-builders simply slap a Scania logo onto their knock-off. Copies are the highest form of flattery even when it comes to commercial vehicles.

One added benefit of the long bus is that there is more space for luggage. However, more importantly, safety is improved as the centre of gravity is lower. The rider is smoother as a result with less chances of the bus tipping. The long wheel base adds to that.



Positive outlook

With the plan to add another 50 long buses to the fleet, Sombat Tours is positive about the coming years and expansions are planned for. The field next to the headquarters is soon to be turned into a fully automated washing facility for the buses. "We also continue to work closely with Scania. They even provide training to our mechanics so we can ensure that the fleet is always in top condition" Wongborphid praises the relationship with Scania. The only thing that he is unable to influence are the conditions of the roads, which according to him are a bit of a challenge. However, the air bellows of the Scania K-Series long bus should be able to handle a few bumps.

Record numbers

In SWE-Trans we meet with Vorapote Charintara, who is the President of the company. Celebrating their 20th anniversary on October 5th this year, the company has also made very good experiences with Scania buses. Although not long buses, the 130

buses are mainly Scania and all single-decker too. Although the low season currently sees some vehicles parked, the business is typically fully booked with tours going for as long as 10 days, taking tourists into Laos. A certificate is the proud evidence that SWE-Trans can be called upon when it comes to moving large numbers. The business once played a key role as key organiser of an event with 30 000 people that were moved using 500 buses to over 50 hotels. In either case, reliability matters.

"We too have found issues with double-decker buses" he says. Apparently, the company caters mainly to European visitors. According to Charintara, "They have high expectations when it comes to safety and comfort. Tourism is a key contributor to the economy in Thailand and we cannot afford to lose the confidence of travellers". SWE-Trans is the first operator in Thailand that introduced seat belts as a standard safety feature on board their buses.

Different demands

Similar to other countries, the profession of the commercial vehicle driver is not highly regarded in Thailand. "That said, it is easy for us to find drivers as we look after them and the new vehicles we have are easy to drive and therefore an added benefit" he says. Scania buses are easy to drive according to the drivers and the fleet sees the vehicles being replaced after six years. "It is crucial for us to have the right vehicle for our business. We transport people. There are fundamental differences between goods and passengers. Cement will not complain about harsh breaking or a defunct air-condition". As such, the people carrying business may be even more demanding than transporting goods.



Tech Specs of the Scania K-Series Bus

SUSPENSION

Front axle – 2 Air bellows with heavy duty shock absorber
 Rear axle – 4 Air bellows with heavy duty shock absorber
 Tag axle – 2 Air bellows with heavy duty shock absorber

Rims

Steel 9.00 x 22.5

Tyres

295/80 R22.5

BRAKE

- Full air brake 3-independent circuits for front, rear, and parking brake
- Disc brake, electronic controlled EBS
- Auxiliary brake ABS, Traction Control and Exhaust brake
- Brake safety controlled by BMS
- Automatic brake lining adjustment
- Scania retarder

ELECTRICAL SYSTEM

Battery – 24V x 2
 Alternator – 150Ah
 Battery master switch

FUEL TANK

Stainless 600L (300x2)

DIMENSIONS

Wheelbase (A) 7210 mm
 Front overhang (I) 2500 mm
 Rear overhang (J) 4790 mm

CHASSIS

Low front chassis and middle frame

FEATURES

Speed limiter
 4-ways adjustable steering wheel
 Cruise control on steering wheel

GEARBOX

GR875R, splitter gearbox
 8 Forward speed, 1 reverse gear
 Opticruise, automatic gear changing system without clutch pedal


ENGINE

Scania DC13 107, An in-line, 6-cylinder direct injection diesel engine with 4 valves per cylinder.
 Scania PDE injection system with unit injectors, turbo and charge air cooler and engine control unit EMS.
 Emission level: Euro 3
 Max. output: 410 hp (302 kW) at 1900 rpm
 Max. torque: 2000 Nm at 1000-1350 rpm



Humble beginnings and knowledge applied

Charintara started this business after having worked for sixteen years as a body builder for buses and trucks. With the knowledge gained it was easy for him to start his own transportation business. Naturally, the insights he had led him to seek out the OEM maker that offers him the edge he needs: after sales.

“One needs to look at the entire package holistically. The sales presentation needs to be convincing, the price reasonable. Durability and fuel consumption are further factors in deciding on a bus chassis. We found that Scania’s after sales service is the best in the market and ended the decision making process” is his longer answer as to why he chose Scania. 

Terminal Bersepadu Selatan (TBS)

Malaysia's first integrated bus terminal links with other forms of transportation in order to provide fast and efficient connectivity for travellers. Fajar heads on down to find out what it takes to build a state of the art transportation hub.

Terminal Bersepadu Selatan (TBS) has started its operation on 1st of January 2011 as a fully integrated hub that connects several modes of transportation. It is located just outside Kuala Lumpur, a short trip to the south. Here we are taking a closer look at the buses that arrive and depart from here. All bus companies that start their journeys from TBS will head to the southern sector. The idea behind TBS is to support Pudu Central Terminal and Jalan Duta Terminal. This is to avoid the congestion in the city and to make it easier for travellers to connect to other areas. The terminal hosts a total of 43 bus operators and sees some 500 buses daily. TBS manages about 40 000 users per day.

The design features the latest in transportation knowledge. The TBS was carefully designed by the government in collaboration with Maju Holding. The departure and arrival halls are located in separate areas of the terminal in order to manage the flow of passengers better as this will avoid the different groups of people to all converge in one spot. In addition, TBS features resting places such as surau, cafeteria and a lounge for the bus drivers.

Centralized Ticketing System

TBS uses a Centralized Ticketing System whereby the system allows to sell the tickets on behalf of all the bus operators housed there and in turn it supports the requirements of all bus operators. With this new system, there will be no competition

inside the terminal while it also reduces the noise of people screaming to sell their tickets. After all, the trip to see your relatives, business partner or to go on a vacation should start in quiet and with ease of use. Another advantage of this system is the ease of use for passengers as there is only one centralised counter to buy a bus ticket, thus limiting confusion and possibilities for touting.

Milling around the terminal, we wanted to find out what passengers think about the newly built facility and received quiet a number of positive reviews. Here are some:

Hazwan, 21, Student.

"The system here is very systematic and the terminal is much more modern than the old terminals in Kuala Lumpur. As a student, I often use the public transportation which is bus as I need to save on cost. Moreover not every stop has KTM facilities. Therefore TBS terminal is more convenient for a student like me."

Syahirah, 21, Married.

"I found the terminal has everything that a traveller needs. The thing that I like the most is the centralized ticket counter whereby I do not need to have to queue for very long as I can go to any counter to buy the bus ticket that I want. Public transportation is very important to the people that don't own a car or any other personal transportation like me but like to go anywhere. Furthermore, the bus arrival is quite punctual and in this integrated terminal they managed to solve the issue of ticket touts."

Alex Wong, 40, Singapore.

"I am quite surprised to see the terminal for the first time. I can say it is much better than the Singapore terminal. Previously I used the Pudu Terminal which is not up to standard for me from the aspect of safety. But now I can see enforcement agencies inside the terminal, which makes me feel safer."



WHEN THE ROAD LASTS MANY KILOMETERS, YOUR ENGINE NEEDS TO DO THE SAME.



Long journeys can increase your running costs. This is why Shell scientists developed Shell Rimula heavy-duty diesel engine oils that can last longer between oil changes and save you money on lubricants. Over time, these savings can make a big difference. When your business depends on lowering costs and increasing efficiency, you need an engine oil that will keep working for longer.

THE ENGINE OIL THAT WORKS
AS HARD AS YOU.

Shell
RIMULA





Safety and Security

TBS terminal has a total of 600 CCTV installed all over the terminal to ensure the safety of passengers. These monitor activity within the terminal for 24 hours a day. Security guards are placed at several points of the terminal to ensure quick action in case needed as well as being contact persons for those needing assistance. Within the premises one will also find the Terminal Management Centre where management engages with all of the parties inside the terminal. TBS also houses a number of enforcement agencies such as SPAD and PDRM which are positioned in a strategic area of the terminal in order to have high visibility for the public. Working hand in hand with government agencies (JPJ, MIROS) for enforcement activity such as regularly conducting spot-checks at the bus holding area and free medical tests for the bus drivers can be done inside the terminal.



“At the end of the day, it is all about engaging with the drivers because we value these people as we leave the passengers in their capable hands. Therefore we have to ensure that the driver’s needs are fulfilled,” said Mohammed Roslan Dato’ Shariff, Managing Director of Maju TMS Sdn Bhd.

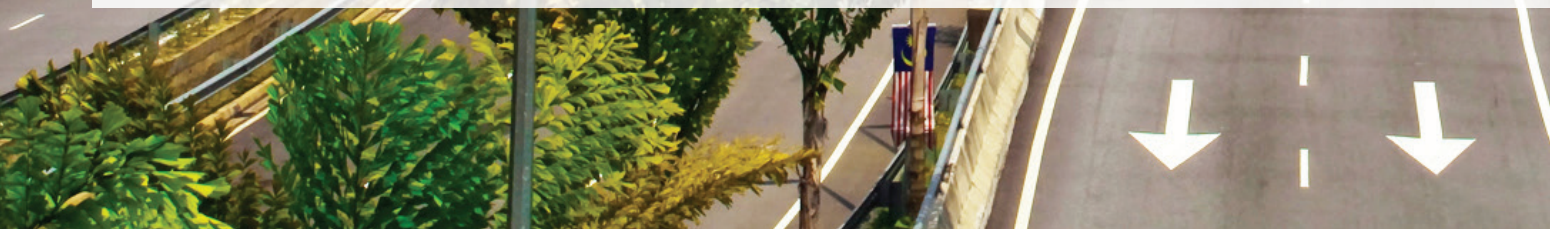
In terms of building features, TBS has reached a certified 72% to facilitate a person with disability. On top of that, TBS has in place a sophisticated emergency response plan whereby all of TBS’ staff are required to practice any possible scenario. This program stipulates that there are annual exercises, which also involve the Bomba for example. In case of a fire within the terminal, fire curtains will isolate the affected section. Naturally, emergency exits have been built into the superstructure to allow for swift evacuation in case of emergencies. Besides isolating affected burning areas, several parts of the terminal use fire curtains to prevent smoke emission. An aspect of the management’s obligation is that everyone from the management team will be send for training in the aspects of management, safety and communication. In case of emergencies, clear and precise communication is vital to avoid confusion and harm to people within the building.



“Our customer service centre will entertain any type of customer complaint. Other than that, we interact with our customers via social media medium such as Facebook, Twitter and our website. We do so, because we want to be attentive and proactive towards customers,” added Roslan.

Built with buses in mind

Like many other buildings that serve a very specific purpose, TBS was developed with the bus in mind. There are high ceilings in order to allow double deck buses to enter and curves have a big enough radius to allow the vehicles to manoeuvre with ease. We also wanted to find out what others have to say about the facilities:



Rasoo, 56, a driver for Melor Interline.

"I have been working as a bus driver for 28 years and so far I am very satisfied with the system and with the place that they have provided for the bus drivers (bus drivers lounge). It is comfortable and well equipped for our needs as drivers."

Suhaimi, 28, a driver for Metrobus

"The system that has been created here is more satisfactory and orderly. TBS provides more platforms for the bus departures and arrivals. With the latest facilities, system and technology we as drivers will be able to carry out our jobs efficiently."


Mohd Azreen, 35, TBS Staff

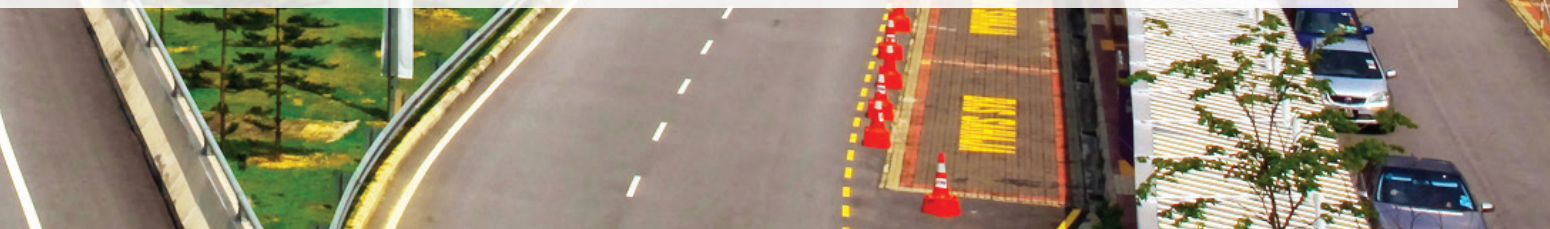
"I have been working in the customer service department for two years. When we receive complaints there will be several steps to solve them. We need to define the problem and carry out research as well to ensure whether the complaints are relevant or not. By having an advanced system, we always manage to address all of the problems. The most vital part is to always smile to the customers. We also entertain lots of visits from outside the country because they want to know about the level of sophistication of the terminal. We also educate people to encourage them to use public transportation often."

TBS Activity

TBS creates awareness for their services inside and outside the terminal. They extend their services and acknowledge that the younger generation would like to engage with TBS. TBS is often taking part in a exhibitions, seminars, career fairs and safety campaigns. "It is always good to meet the people personally and to introduce to them the integrated technology that we provide in TBS," Roslan added.

TBS also conducts some ten guided tours per month for visitors from overseas or locally to showcase what the terminal can offer. In addition, TBS is developing the new ticketing system further in order to improve further in terms of userfriendliness. Eventually, passengers will be able to purchase a ticket from a smart phone without the need to queue at the counter. This will allow travellers to obtain the ticket whenever and wherever they are.

"I think there has been a lot of improvement especially through government initiatives in the transportation sector. These manage to unite everyone to achieve the objective of Vision 2020. We still have a long way to go, but I believe we are on the right track by having a modern terminal where we put security and safety as our top priority," said Roslan. 





Mobileye gives your bus the foresight to avoid collisions

Driving a bus through a crowded city or along a highway is a job that requires concentration and constant attention to other participants in road traffic. In cities, pedestrians require even more attention than vehicles as they do not have a protective metal frame to avert any harm. Thanks to modern technology it is possible to identify potentially harmful situations and to assist drivers with alerts and warnings.

The Cause of accidents

Virginia Tech Transportation Institute released findings of breakthrough research on real-world driver behaviour, distraction and crash factors. Nearly 80% of crashes, and 65% of near crashes involved some form of driver inattention within 3 seconds before the event.

The World Health Organisation reports that about 1.24 million people die each year as a result of road traffic crashes. Globally, between 20 to 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury. While accidents with injuries or death have an immediate impact on people, there is also a cost to society. National estimates have illustrated that road traffic crashes cost countries between 1-3% of their gross national product.

In February of 2009, Swiss insurance firm AXA Winterthur conducted a study on the link between collisions and cases of whiplash, and found that 1.5 seconds early warning can prevent 90% of rear end collisions, 2.0 seconds warning can prevent almost all crashes!

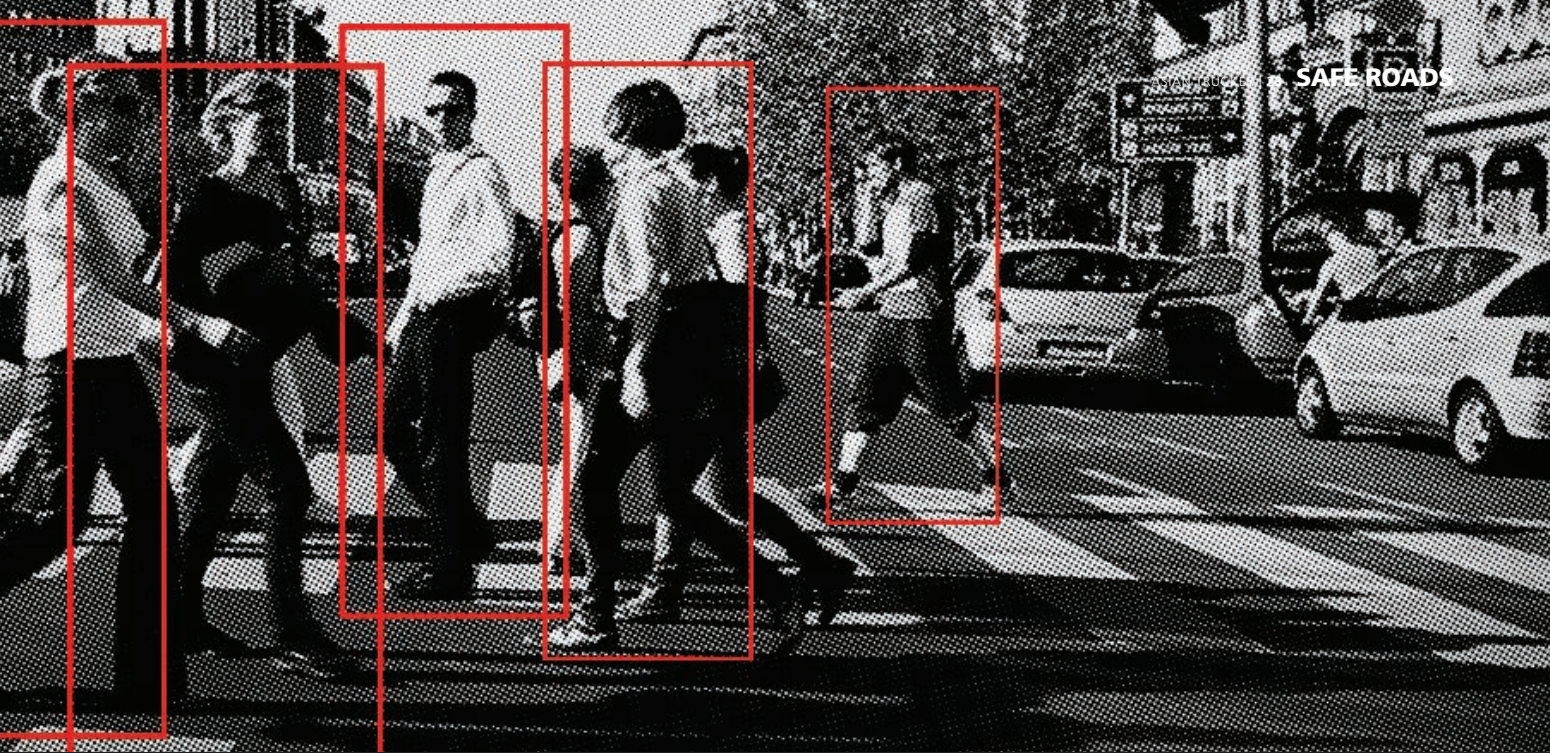
Now all you need is a little help from a device from Mobileye that can give you this early warning.

Adding an extra layer of technology can help to drastically reduce accidents and improve performance at the same time.



The Mobileye technology

Using sophisticated vision algorithms, Mobileye collision avoidance technology is able to 'interpret' a scene in real-time and provide drivers with an immediate evaluation based on its analysis. Automakers are now adopting this technology into their rapidly expanding safety feature applications known as Advanced Driver Assistance Systems (ADAS).



SAFE ROAD



The MobileyeSeries 5 offers a whole range of features, such as:

- Forward Collision Warning (Mobileye FCW)
- Pedestrian Collision Warning (Mobileye PCW)
- Headway Monitoring Warning (Mobileye HMW)
- Lane Departure Warning (Mobileye LDW)
- Speed Limit Indicator (SLI)

In addition to the wide range of driver safety solutions, the Mobileye 5-Series is integrated with Bluetooth connectivity. The Mobileye 5-Series provides the driver with audio-visual warning in critical real-time through Mobileye's Smartphone Application.

In Malaysia, Mobileye's appointed distributor is Pro ICE Sales & Service (M) Sdn Bhd. www.clas.com.my or clas@proice.com

Since its inception in 1999 Mobileye has led the way in machine vision technology for mono-cameras, supplying global vehicle manufacturers with the core System-on-Chip designed to specification for vision based solutions. Mobileye's key breakthrough was the realization that all the desired functions could run from the input of the mono-camera, pioneering a new path in machine vision technology. At the time, all other automotive suppliers were focused on stereo vision or alternative technologies such as radar.


The system uses images instead of radar, which allows for applications such as lane departure warning. For this, there need to be markings on the road, which in most major cities are well maintained. Highways are typically well kept too. Another advantage is that the Mobileye platform can interpret the images. Instead of just identifying objects, movements of the vehicle and objects around it can be interpreted. For instance, radar may identify an object to be at risk as it is straight ahead of the vehicle. However, the object most important to watch out for may be another object that is currently outside the path of the vehicle, but will be inside the driving path due to changes in direction of the object or vehicle. The Mobileye system works with CANBUS as well as with Analog signals.

Empiric study

While all this sounds fairly sophisticated, it simply means that the use of Mobileye's technology will reduce accidents.

In a study commissioned by the Ministry of Transport, Netherlands in 2008, some 2 400 trucks were monitored. A sample size of 400 trucks was operating without Mobileye. The estimated number of crashes during the test phase was to be between four and five accidents. The other 2 000 trucks were fitted with Mobileye technology. The basic assumption was that second sample size is five times bigger and the use of Mobileye technology would reduce the accidents by about 50 %. Hence the second, larger sample should have had between 11 - 13 accidents.

Some 77 Million Kilometers later the results came in to surprise everyone. While the sample without Mobileye had five accidents, as initially estimated as the high value. Meanwhile, the larger group of trucks fitted with the ADAS had zero accidents.

Another flagship customers is Transmilenio Bus, the largest public transport company in Columbia, South America. The operator carries over 1.7 million passengers daily. Through the use of Mobileye it has reduced collisions by 33%. Mobileye-equipped buses now travel on average 7 000 km between crashes, compared with 4,667 km before deploying Mobileye. 

Quietly and eco-friendly through the city

Ziehl-Abegg presents the ZAwheel at the Hannover Messe: Electric in-wheel hub drive without transmission

Benefits in an overview: Diesel engine drive

- Transmissions and drive train are inefficient at low speeds
- No energy regeneration
- Unused engine idling
- Noise
- Fine dust
- Exhaust gasses

ZAwheel wheel-hub drive

- Driving comfort
- Elimination of approx. 80% of the moving parts in the drive train
- Lower losses, higher efficiency and thus efficiency (~ 50%)
- Low maintenance
- In a typical city cycle 90% noise reduction 50% energy saving 0% CO2

Ziehl-Abegg is applying its more than 100 years of experience in the construction of electric motors. In the past such drives could be found in elevator motors, in fans and in special vehicles. "Our goal has always been to reduce the energy requirement, to minimise the operating noises and to construct high class motors that perform their duties lastingly and reliably", Ralf Arnold, Managing Director of Ziehl-Abegg, explains. The gearless wheel-hub drive was also exhaustively scrutinized and tested by various partners. For many years it has been in scheduled service use in various countries in field trials before deciding in favour of the market launch at this time.

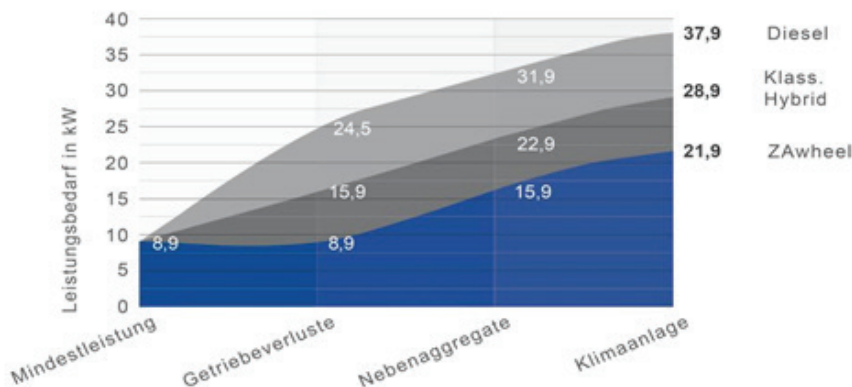
Consequently, the statements made on consumption and efficiency are based on verified measurements. "We have cut the energy consumption in half as compared with buses using combustion engines" the motor expert Arnold emphasizes. The fact is that combustion engines achieve an efficiency of just 22 to 30 percent. A conventional electric motor with a frequency inverter reaches 85 percent. "And we increase the efficiency to even 90 percent" says Arnold. That is possible because in the ZAwheel shift, differential, or simple reducing gears that are no longer needed. And that is because the motor sits in

the middle of the wheel. Of course it goes without saying that the energy does not get lost during braking; rather it is fed back into the battery. "It is exactly in commercial vehicles such as city buses, which have to start and brake often, that the efficiency is especially reaped through the energy recovery" Arnold underscores. On top of that road users, passengers and residents are spared 90 percent of the traffic noise. "A significant plus in life quality."

ZAwheel can be integrated into new or used buses. To accomplish that the entire drive train is replaced with the ZAwheel-axle unit and the necessary electrification is undertaken.

Background

Already back in 1897, Emil Ziehl had the idea of letting a rotor revolve around a fixed stator. This external rotor motor is state of the art in many areas. That is also the case in the fan sector where Ziehl-Abegg has been the technology leader for decades. And now Ziehl-Abegg is implementing this development in electromobility for commercial vehicles as an extremely sustainable solution.



The minimum power requirement of a city bus at circa 20 km/h amounts to 8.94 kW at the wheel. Added to that are the requirements for system-related losses, ancillary components and air-conditioners.

Graphic: A classic hybrid drive is significantly more efficient than a conventional combustion engine. With the gearless ZAwheel from Ziehl-Abegg, the efficiency is once more significantly increased.



About Ziehl-Abegg

Ziehl-Abegg (Künzelsau, Baden-Württemberg, Germany) is one of the global leading companies in the ventilation and drive technology sector with matching control technology. Examples of application areas of the products are heat and refrigeration plants or clean room and agricultural systems. Ziehl-Abegg set the basis for modern fan drives back in the fifties: External rotor motors that are the state of the art worldwide. Another sector is electric motors for example, which provide the drive in elevators, medical applications (computer tomography) or in deep-sea underwater vehicles. The topic of electromobility in road traffic was placed into the hands of the Ziehl-Abegg Automotive GmbH team in 2012. Sales and further improvement of a wheel

hub drive, which is already being used in several countries, are being developed there.

The high-tech company employs 1,800 staff in South German production plants. Worldwide, 3,250 employees work for the company. Sales in 2013 were 388 million Euros. Two-thirds of the sales are being attained in export.

Emil Ziehl founded the company in 1910 in Berlin as a manufacturer of electric motors. After the Second World War the company headquarters was relocated to South Germany. Ziehl-Abegg SE is family owned. Please visit www.ziehl-abegg.com for more information. **T**





Heavy duty diesel engine lubricants – what you need to know, and why

Shell RIMULA

Heavy Duty Diesel Engine Oils

While Shell scientists spend most of their working day thinking about lubricants, the majority of the wider world gives it little thought. The fact is, however, that there is a whole scientific practice dedicated to studying the fundamentals of how lubricants work – known as ‘tribology’ – and with good reason, as lubricants are essential to the successful operation of a truck or fleet.

The highest quality lubricants on the market today, like the ones developed by Shell, are the result of years of Research & Development and some of the best applied chemistry expertise in the world. Shell has carried out rigorous laboratory tests which demonstrate that if chosen and applied correctly, lubricants can deliver tangible business benefits. And these results are backed up by millions of dollars in savings that Shell’s lubricants and technical experts have helped deliver to customers across industries and continents.

To get the most out of lubricants for a bus or fleet operation, a better understanding of the role they play is a good place to start. Most readers are probably aware that their purpose is to keep the engine in good working condition, but a high quality lubricant must protect the engine against three essential areas:

- **Wear** – Keeping moving metal surfaces separated is a vital function of the oil. Failure to do so results in ‘hotspots’ and wear. High quality engine oils contain molecules that adapt to hot and cold conditions and produce protective films that keep the metal surfaces apart, helping prevent wear.
- **Acids**— If unstopped, acids can attack and corrode parts of the engine, such as the bearings. A high quality heavy-duty diesel engine oil contains powerful neutralising agents that are active when the acids come in contact with the oil to protect the engine.
- **Deposits** – Piston and general engine cleanliness is critical to ensure proper operation and long engine life. For instance, a buildup of excessive piston deposits can result in ring sticking, abrasion and wear of the cylinder, shortening engine life and increasing oil consumption. To combat this, a heavy-duty diesel engine oil must contain molecules that help keep the engine clean and carry away particles that can cause deposits.



By providing optimal engine protection, a lubricant can help lower maintenance costs and minimise the revenue losses that can result from downtime while doing unplanned truck maintenance. Shell, working in collaboration with leading original equipment manufacturers, has developed its range of Shell Rimula heavy-duty diesel engine oils designed specifically to provide outstanding protection against acids, deposits and wear. The Shell Rimula portfolio includes mineral oil based products such as Shell Rimula Shell Rimula R4 X as well as the semi-synthetic Shell Rimula R5 LE and the fully-synthetic Shell Rimula R6 LM.

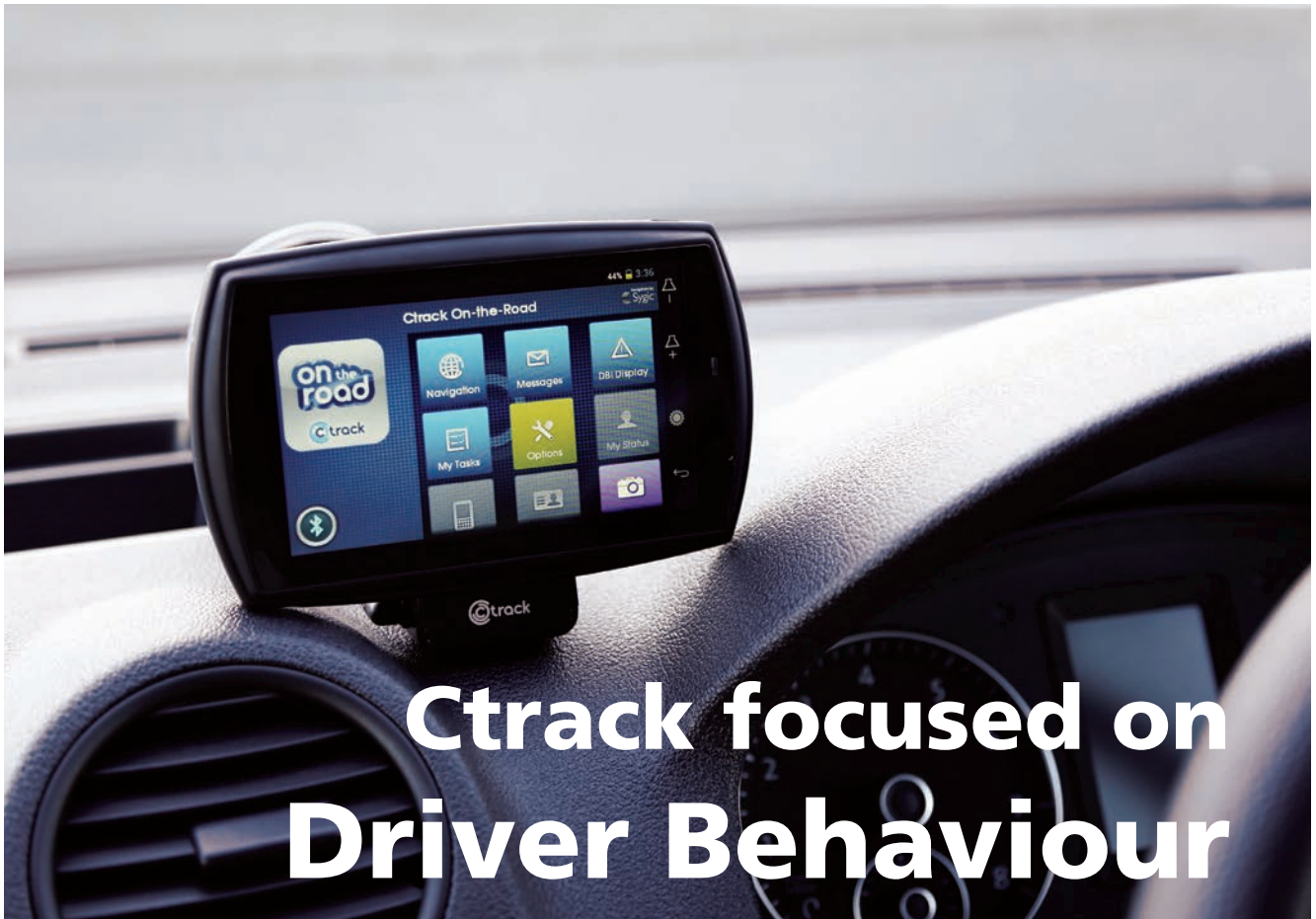
And customers have reported real savings with the use of Shell Rimula: Miri Transport Company Sdn Bhd (MTC), a Malaysia bus coach company operating in Sarawak was concerned that its engine lubricants gave a short oil-drain interval especially in tough road conditions covered with tar and several steep hill climbs. MTC is looking for ways to increase their fleet efficiency in term of part usage, uptime and overall maintenance cost. The Shell team also recommended that the company change its lubricant to Rimula R4 X 15W-40. On top of that, LubeAnalyst was used to monitor the maximum oil drain interval and the LubeVideoCheck was used to help MTC inspect their engines from time to time. The company found that it could increase its oil-drain interval and achieve cost savings through lower

lubricant consumption, fewer unplanned overhauls and reduced equipment downtime. As a result, the company has reported a total annual saving of RM53,224 annually for their 60 unit of buses.

Synthetic Technology

Compared to some mineral oils, synthetic products can do more for your business by helping to extend equipment life such as the engine, gearboxes, axles and transmissions. The latest generation of synthetic lubricants also fulfils additional functions that can help improve cost efficiencies. With traditional lubricants, there is a perceived trade-off between engine protection and fuel economy, since to reduce the energy necessary to pump the oil (and therefore use less fuel), the lubricant has to be less viscous (thinner).

In Malaysia, Shell Rimula's fully-synthetic flagship product – Shell Rimula R6 LM – contains high quality synthetic base oils and advanced additive technology that kick into action when needed, helping keep equipment protected and clean. Synthetic base oil technology provides enhanced additive activation plus an enhanced additive system to give extra protection against deposits and wear. Shell Rimula R6 LM has an exclusive low-SAPS technology controls blocking and deactivation of diesel particulate filter (DPFs) and catalysts. **T**



Ctrack focused on Driver Behaviour

Omar Hatmi, Managing Director, Ctrack Asia Sdn. Bhd. shares his insights and learnings about how vehicle tracking can improve the performance of bus drivers.

One must ask the question, why is an aspiring to be first world society like Malaysia so reactive in its approach to tackle the larger than life problem that is "Road accidents due to buses being driven poorly". Having worked for HINO in Pakistan for 10 years I remember all the focus we had on Health Safety and Environment (HSE) and to educate the driver. It did work in a place like Pakistan so why not Malaysia?

But more often than not bus operators start the whole process with 'savings' as the buzz word. Save a bit here, save a bit there, make the bus look pretty so the passenger feels safe and rests his life in the hand of the bus operator. I will focus on Malaysia, my adopted home and what I have seen since being in the country. For a start let's give credit to the roads and highway infrastructure that exists across the country, which is of the highest standard. I do ask the question here, why would anyone put RM 300 000 to RM 600 000 on the road without simple safety features like

- Trained and monitored drivers
- Safety belts
- High quality passenger seats with Children friendly seats
- Certified bus body manufacturing, standardize bus body weight, tilt safety and follow power to weight ratio recommended by the manufacturer
- Inter-active telematics system for driver behaviour feedback and tracking to improve productivity

A bus operator can adapt Ctrack and its various preventive measures to ensure 100% visibility of his fleet, investment and reputation. How many bus operators know what happens once the bus leaves their premises till that unwanted phone call comes. Or worse you see your company logo on breaking news. We by no means wish anyone unwanted bad luck, but spending less than RM 5/day to safeguard investment, reputation and your business has to make sense.

With over 30 years experience in telematics and over 800,000 tracking units deployed in 56 countries, Ctrack has a proven track record to help the industry. We have solved many fleet operators issues by remaining focused on these key areas

1. 100% visibility
2. Reliable and proven technology
3. Key indicators to take business decisions
4. Provide advance warning on poor drivers
5. Driver scorecards and analysis
6. Real time alerts and escalation
7. Cross border tracking with no roaming costs
8. Lowest cost tracking communication from Wi-Fi to Satellite
9. Driver evaluation and training using telematics data
10. Accident alert and analysis
11. Manage a Green fleet

We will talk briefly about each of the above-mentioned key areas now

South East Asia's largest exhibition specifically for commercial vehicles | Now 40% bigger!



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The 2nd Malaysia International Bus, Truck & Components Expo 2015

第二届马来西亚国际巴士, 货车及组件展览

The 2nd Malaysia International Bus, Truck & Components Expo 2015 [MIBTC 2015]

caters specifically to the needs of the regional trucking, logistics and bus industries, serving as an exclusive platform that gathers all the best from leading manufacturers, equipment suppliers and service providers.

It is the only international-scale business-to-business trade exhibition in Malaysia focusing on the commercial vehicle market and its supporting industries.

Participation is open to manufacturers, buyers, and operators who are interested in selling, promoting and marketing their products at international level.

It's held at the **Malaysia International Exhibition & Convention Centre [MIECC]** in Kuala Lumpur, Malaysia on **14 - 16 MAY 2015**.

2015年第二届马来西亚国际巴士, 货车及组件展览 [MIBTC 2015]

是专为迎合区域运输, 物流, 巴士, 货车和组件行业需求而主办的贸易展览. 此展览集聚了所有业界领先制造商, 设备供应商和服务供应商, 将为业者提供一个独特的商业平台以建立新的或加强现有的业务关系.

它是马来西亚唯一专注于巴士, 货车, 商用车, 区域运输, 物流和组件行业市场的国际大型贸易展览会.

欢迎制造商, 采购商以及亦于销售, 宣传和将产品推向国际的运营商登记参加这个国际贸易展览.

这为期二天的展览活动将于2015年5月14日至16日, 于吉隆坡, 马来西亚绿野国际会展中心 [MIECC] 举行.

14 - 16 MAY 2015

Mines International Exhibition & Convention Center [MIECC]

Seri Kembangan, Selangor, Malaysia

马来西亚绿野国际会展中心, 吉隆坡, 马来西亚 [MIECC]

Also hosting



Organised by





100% Visibility

Imagine that a bus typically in a four hour journey will churn over 14,000 records of activity while the driver goes about his tasks. This data if with CANBUS will include engine information, speeds, driver behaviour and much more readily available for analysis by Ctrack with over 45 onboard driver or vehicle triggered events like

- Over speeding
- High G-force
- 4 levels of accident indications even roll-over
- Harsh acceleration & braking
- Harsh bumping & cornering
- Excess Idling
- Illegal stops & Route deviation
- Freewheeling downhill
- Greenband driving using CANBUS data for engine alerts
- Bus door usage
- Driver voice and video interface

Having the ability to be in touch all the time with your bus allows to improve HSE compliance in all aspects of operations. Best of all preventive operations becomes an everyday activity.

- Real time visibility of worker availability
- Increased number of jobs/loads completed, reduced number of unaccounted-for stops
- Optimized asset usage
- Improved Service Levels

Reliable and proven technology

Ctrack is a full featured, scalable, remotely upgradeable mobile solution ideal for the tracking and management of the Professional Hauler, Logistics and Supply Chain Management, Mobile Workforce Management, Public Transport and Emergency Services applications.

Ctrack is a mobile data gateway platform designed to maximise investment by being expandable to cater for future requirements and trends by interfacing to third party solutions such as barcode scanners, satellite navigation units, voice communication, fuel level indicators, temperature loggers, onboard weighing systems and fare collection solutions.

BENEFITS

Cost Reduction

- Fuel savings due to proper driving
- Time sheet corroboration
- Maintenance cost savings
- Reduced accidents/Insurance cost savings
- Increased Productivity and Efficiency
- Improved competitive edge

PRODUCT FEATURES DEFINED

- **Vehicle Location (Polling)** - Access vehicle location via SMS from any authorised mobile phone.
- **Full Track and Trace** - The system records position at 1 minute or less predefined intervals, allowing you to view a trail of vehicle movement.
- **RoadTrack** - Records positional data every time the vehicle changes direction e.g. cornering.
- **Daily Health Check** - Automatically ensures that the system is fully operational, every day complete with daily movement summary.
- **Over the Air (OTA) Diagnostics** - Remote system diagnostics and firmware upgrades.

Safety and Security

- **Panic Alarm** - An SOS emergency alarm that can be activated via remote or wired button.
- **E-Panic Alarm** - An SOS emergency alarm that can be activated via mobile phone.
- **System Tamper Alarms** - Alerts you when GSM jamming, box tampering or GPS interference is detected.
- **Remote Immobiliser** - Allows you to remotely shut down a vehicle, when needed, especially if unhappy with driver's performance
- **Tamper Immobiliser** - Automatically shuts down a vehicle when specific tampering is detected. (User defined).
- **Power Alarms** - Alerts you when power is disconnected, or when either the internal or vehicle battery level is low.
- **Unauthorised Movement** - Notifies you when a vehicle moves while the ignition is switched off such as when it's being towed.
- **WatchMode** - Self activated feature that monitors and alerts via SMS of any vehicle movement once parked
- **Crash and Rollover Detection** - Specific safety sensors will alert in the case of vehicle crashes and rollovers.
- **Crash and Incident Reporting** - Downloadable crash and incident data from Ctrack MaXx.
- **BorderGuard** - Alerts when vehicle approaches a country's border.

Driver Behaviour

- **ABC'S** - Allows monitoring of acceleration, braking, cornering, over-speeding as well as harsh bumps and excessive idling.
- **Tacho (RPM and Green Band)** - Provides valuable Tachograph data, including: RPM, green band driving, speed, idling and more.
- **Ctrack On the Road** - The complete onboard system that saves time and money through navigation, outward camera, voice and messaging, optimal routing, driver contact and providing a driver's own behaviour portal.
- **Area Management** - Allows you to configure preferred areas, no-go areas and waypoints for geo-fencing.
- **Route Monitoring** - Static and timed route management.
- **Cameras** – shortly introduced for inward recording
- **Area Management** - Allows you to configure preferred areas, no-go areas and waypoints for geo-fencing.
- **Route Monitoring** - Static and timed route management.

Key indicators to take business decisions

Adapting technology sometimes can be a hard task especially for businesses not using data as an analysis tool. With Ctrack and the 24x7 Call Centre all tasks can be outsourced easily to save the burden of extra manpower to manage technology. Ctrack prepares analysis and co-ordinates pre-selected alerts so that the right response is being given.

Provide advance warning on poor drivers

With Ctrack on a daily basis information starts to flow related to driver's and vehicle's utilisation. A post journey analysis or a month end analysis is readily available. Not only would the data tell you how the bus was driven but also the effective utilisation of the asset, which needs to earn the planned income. Once bus is assigned to a job, it is very easy to generate a cost comparison too and focus on wastage if any. With Ctrack On the Road driving patterns are captured and can be analyzed coupled with the replay option in the software directly by the driver.

Driver scorecards and analysis

With all the data available and analyzed by Ctrack it is very easy to access drivers in three categories of Green, Yellow and Red. Red category of course is the one whose scores are below acceptable limits and needs to either improve via training or a more stricter decision be taken. With the Driver ID function all suspended drivers on presenting their tag to start the bus would be denied to start the vehicle.

Driver evaluation and training using telematics data

Ctrack generates unique data on driver performance and the same can be used to train the driver. After all the data captured is based on KPIs of the fleet owner and compliance will mean a more responsible driver.

Accident alert and analysis

Ctrack generates four levels of alerts based on the G-force detected by the 3-axis accelerometer. This allows the correct action to the incident especially in case of a roll-over alert for the road side assistance and ambulance services. Ctrack also gives data for 90 sec before and 30 sec after including position, speed and incident along with the replay to fully analyse what happened.

Manage a Green fleet

It should be every Bus Operator's prerogative to achieve a 95%+ score on all drivers and vehicles and operate a Green fleet. By achieving this milestone and then managing it efficiently on

a daily, weekly and monthly basis and share the results with drivers so they are part of the continuous improvement plan.



Mr. Omar Hatmi, Managing Director, Ctrack Asia Sdn. Bhd.


Monitoring and Managing for your growth

No matter how big your fleet of buses and coaches, you should make sure you have data to base your decisions on. With vehicle tracking you can not only know where your vehicles are, but you also see in real time how the drivers behave. Immediate alerts allow you to intervene and to take actions to improve driver behaviour. To address the specific needs of each fleet, Ctrack offers various solutions and products that will fit your business.

About Ctrack

Ctrack Asia Sdn. Bhd. is part of JSE listed DigiCore Holdings and specialises in vehicle tracking, fleet management solutions and insurance telematics for a global client base. With nearly 30 years of innovation, technical and implementation experience, Ctrack is recognised as a world-leading provider of advanced machine-to-machine communication and telematics solutions that adds value to this global base of customers with mobile assets.

Ctrack's end-to-end research, design, development, manufacturing, sales and support of customised solutions for customers is serviced by a global network of staff and team members in more than 50 countries. The company's technology and electronic division designs and develops a robust range of asset management and monitoring systems using GPS satellite positioning, GSM cellular communication systems and other advanced communication and sensory technologies. The result is innovative and advanced machine-to-machine communication that provide Ctrack customers with 24x7x365 information and monitoring of their mobile assets that help them to achieve operational efficiencies and cost reduction targets. Operations span six continents, with over 1,000 employees and over 800,000 systems sold.

To service customers in South East Asia, Ctrack Asia joined hands with Mega Fortris Malaysia to form a joint venture under Mega Fortris Ctrack Solution Sdn. Bhd. (MFCS) in Malaysia to serve customers in Malaysia, Singapore, Thailand and China shows our commitment to the region. 



You may contact Ctrack's partner in Malaysia, Singapore and Thailand:

Mega Fortris Ctrack Solutions Sdn. Bhd.

• +60 19 3356918

• sales.malaysia@ctrackinasia.com

• www.ctrackinasia.com



SPECIFICATIONS

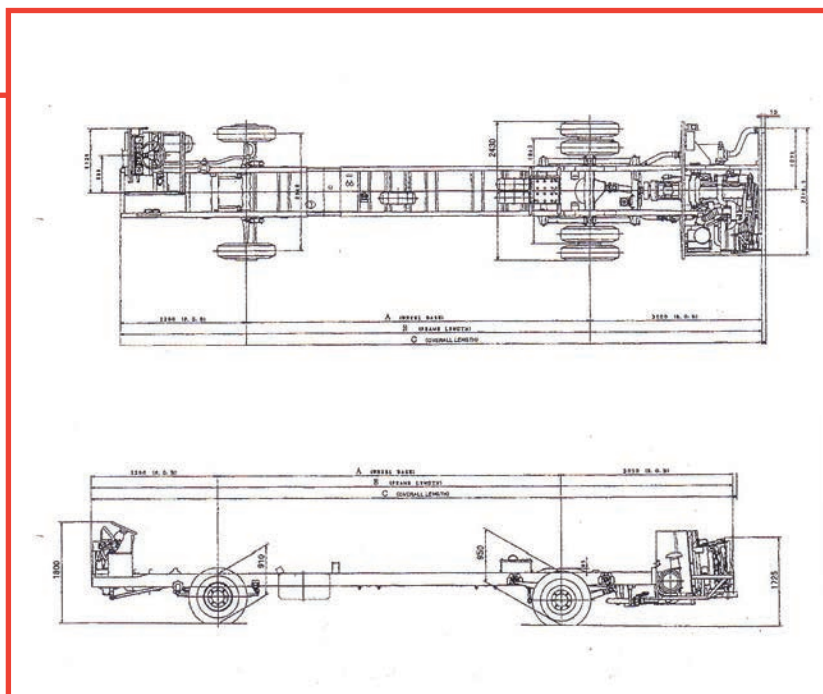
RK1JSLL

PERFORMANCE & GEAR RATIOS

GVW Rating : 16,000 kg

PARTICULAR	DETAILS	
Max Speed Km/H		125
Gradeability (Tan ϕ) %		37.7
Transmission Gear Ratio	MODEL	MF06S
	1st	8.189
	2nd	5.340
	3rd	3.076
	4th	1.936
	5th	1.341
	6th	1.000
	Reverse	7.142
Rear Axle Carrier	MODEL	SH 16
	Ratio	4.300

ENGINE	HINO J08C TK (EURO 2)
Max Output (JIS Gross)	184 kW {250 PS} at 2,500 rpm
Max Torque (JIS Gross)	554 Nm {56.6kgf.m} at 1,500 rpm
Type	Diesel, turbocharged and intercooler, 4 cyc, vertical, 6-cyl, in-line, overhead valve, water cooled, direct injection
Piston Displacement	7,961 Litres
Bore & Stroke	114 mm x 130 mm
CLUTCH	
Type	Dry single plate with damper spring
Control	Hydraulic with air booster
Diameter	380 mm
TRANSMISSION	
Type	Six (6) forward and one (1) reverse speed direct drive, syncromesh 2nd - 6th



FRONT AXLE	
Type	Reversed Elliot, "I" section beam
Capacity	5,500 kg
REAR AXLE	
Type	Full-floating, single reduction, single speed by hypoid gearing
Capacity	11,000 kg
BRAKE	
Type	Internal expanding, leading and trailing shoes on all wheels
Service	Full air, dual circuits
Parking	Spring brake acting at rear wheels
STEERING	
Type	Telescopic and tilt steering column with locking device recirculating ball with hydraulic booster integral type
SUSPENSION	
Front	Parabolic leaf spring with double acting shock absorber and stabilizer
Rear	Parabolic leaf spring with double acting shock absorber and stabilizer

WHEEL & TYRE		
Wheel Type	8 - stud disc wheels	
Rim Size	7.50 x 22.5	
No. of Tyres	Seven (7) including one spare tyre	
Tyre Size	11R22.5 - 16PR	
FUEL TANK		
Capacity	250 Litres	
ELECTRICAL EQUIPMENT		
Batteries	Two (2) x 12 volt, series connection	
Capacity	120 A.h at 20-hour	
Alternator Type	With built-in rectifier and separate voltage regulator	
Capacity	24V - 120A	
DIMENSION AND WEIGHT		
Chassis Mass	kg	5050
Wheelbase	mm	6000
Overall Length	mm	11270
Overall Width	mm	2430
Front Overhang (at frame end)	mm	2200
Rear Overhang (at frame end)	mm	3000
Front Track	mm	2040
Rear Track	mm	1840
Turning Radius (on Tire)	mm	9200



GIIB - Engineered for safe retreads

Customers in over 60 countries trust the retreading solutions provided by Goodway. Here are several reasons why you should trust them too.

"Engineered for safety" is the tagline of this company in the retreading sector. Asian Trucker wanted to know just how far they go with this approach and met with the marketing team and visited the production facilities in Nilai, just outside Kuala Lumpur. What we found was impressive as the safety briefing was one of the most comprehensive we have ever gone through. And that was just the beginning!

Leading in many markets

Goodway Rubber Industries Sdn. Bhd. is one of the leading players in the market specialising in compounds and other rubber related production. Their focus is mainly on the development, manufacturing and distribution of various compounds such as technical compounds, retreading compounds, tyre compounds and retreading services.

In the past 24 years, Goodway has grown by leaps and bounds in the industry through the products and services they offer. According to them, it has come to the point where customers around the globe just know them as "Supercool", not even recognising that it is Goodway that is behind the brand that fights the tyre's enemy number one: heat. Growth has taken them abroad, having expanded with manufacturing plants into different parts of the world including East and West of Malaysia, China, Indonesia and Australia. Additionally, they have also established distribution offices and warehousing facilities in the USA to ensure that they are as close as possible to customers.

To underline their ambition, Tai Qisheng, Head of Sales & Marketing, elaborates "GIIB continually strives to be the most reliable rubber compound and technology provider through innovative effective products and services to our customers. Backed with a wide range of specific expertise from a team of well-experienced professionals in the industry, we will usher in new waves of excitement into the industry as we provide the best we can to our customers."

After a listing on the stock exchange in 2004, today GIIB products can be found in some 60 countries. The sales in the Malaysian market still constitutes between 25 % and 30 % for the company.





Everyday tyre safety

When a mother waves goodbye to her child in the morning as he leaves on the school bus, she expects that he will be safely back home again when school ends. As long as her child is travelling in the bus, the child's safety is the responsibility of the bus driver.

How the driver carries out his responsibility depends on several factors. One of the most crucial is the choice of retreads used on the bus. Not every retread is the same. The real difference lies in the rubber compound.

Behind each quality retread is a story. It tells of the careful preparations made even before the birth of the retread until it runs on a vehicle. What is unseen is the great care that goes into the manufacturing of a quality retread which prioritises safety; the many years of research, skilled workmanship and experience to ensure that each retread is safe for use before it is fitted onto a bus. What is evident, however, is that a high quality retread can be relied on to perform, even in emergency situations. Knowing how safe a retread is, starts with asking the right questions.

Right source

The first question to ask is: who manufactures the retreading material? A reliable source often is ISO certified.

Right process

As equally important as the retreading material is the retreading

process. There is no point in having quality materials if the process fails. Does the process adhere strictly to a retreading process SOP and is the process audited by an independent body?

Maintenance

Nothing lasts forever but regular maintenance of retreads will make them go a long way while still remaining safe. Is the retread closely monitored for wear and tear and does it undergo strict scheduled checks?

Training

Is the driver trained to drive safely, have the right driving habits and attitude and is she or he regularly sent for refresher courses?

If you get this right, you may be able to join the many GII B customers that have an excellent track record of using retread tyres. Examples of GII B customers that use retreads on their buses include:

- Kowloon Motor Bus – the world largest double-decker bus company in the world, has been using Supercool for more than a decade. In Hong Kong, retread is allow to be used on steer axle.
- Public transport in Singapore

Given this vote of confidence by some of the biggest companies in public transportation, there should really be no reason why junior couldn't be riding the school bus on retreads if these are maintained correctly.



Quick fact
 Tyre cost is only 2% of the entire operational cost of a fleet, but it determines the success rate of the other 98%. It makes good business sense to carry out proper tyre management and maintenance and ensure a safer driving environment for all.

Super efficient and safe

We asked BOB what GIIB is doing in order to stay competitive. His answer is simple, yet will get you thinking just how you going to do that: constant innovation. According to him, these innovations need to be done in all processes, the testing and development of new products. To streamline the operation, an entire team is currently working the numbers and finding new ways to do things. As a result, the company has increased productivity, minimized accidents and further improved consistency in their products.

Throughout the factory, simple yet highly efficient measure have been taken to eliminate errors. "Mistakes cost money. Either you eliminate them or you have to add the cost to the products. The first approach is not only better for the company, but also for our customers". One of the simplest, yet most effective measures implemented is perhaps a simple line on the floor, signifying the size of a container. If the goods to be loaded are not fitting into the scheme on the floor, they won't fit into a container. Container loading times have decreased from two hours to some 20 minutes through ingenious measures like this.

Wherever we walk in the factory, safety is a priority. Marked lanes, safety vests, signs and other tools stand ready to provide a safe and healthy working environment. BOB has gone to the extent that the company has banned smoking on their premises.

Road Safety and other events

They could just provide safe tyres and leave the rest with the clients and users. But they don't. GIIB takes the initiative to go right to where the fleet operators / bus operators are. In road shows across Malaysia, they set up mobile stations to check tyres and to ensure the pressure is right and handing out safety vests, giving truckers the extra service they need in their daily life on the road. These activities, fully supported by PLUS, are hugely successful and a testament to the



approach of total safety. Every safety campaign conducted by Goodway will be analysed and constructive recommendations are being suggested to increase the safety level of not only commercial vehicle drivers, but road users in general.

Asian tyres have over the years gained a fantastic reputation and they are now said to be on par with European standards. GIIB has been actively participating in "Reifen", the world's largest tyre exhibition, hosted in Germany to promote Malaysian made products. Believing that GIIB products and services are of top quality and safety, they have confidentially penetrated the European region.

Safe factories produce safe retreads

Management at GIIB aims to educate as many bus drivers and bus companies as they can on using only safe and quality retreads. GIIB does this so that every parent who uses buses to send children to school need not worry about their precious ones' safe return every day. The company has taken the responsibility to ensure that young lives are not unnecessarily put at risk just because bus operators lack the knowledge to make informed, conscientious decisions about getting safe retreads for their wheels. GIIB is determined to protect the safety of the next generation.

When it comes to "Balik Kampung", many may see blown out tyres on the roads. One common misconception is that these are retreads. The simple truth is that if you mismange any tyre, it is a safety risk and even a brand new premium tyre may burst when overloaded with too little pressure. In fact, the process of manufacturing a brand new tyre is pretty much the same as the application of a new tread liner to a new casing. An easy way to ensure that your vehicle is safe is to ask the right questions about the safety of your retread. Here are some additional pointers that will help you in your daily operations.



Know Your Source of Retread

Get your retreads from a reputable manufacturer with a proven track record of consistently high quality rubber compound.

▪ Supercool Retread Franchisee and Supercool Business Partner (SBP)

Retread with someone you know. Don't hand your casing to a retreader you don't know. All SBPs are audited to ensure that they follow Supercool's Standard Operating System (SOP) on the retreading process.

▪ Maintenance, Management & Control of Tyre

Proper tyre inflation, balancing, rotation and tyre change are crucial for safety on the road. Keep to the tyre maintenance schedule.

▪ Training for Drivers

All commercial vehicle drivers must undergo training to have the right driving attitude, behaviour and habits. Training should be conducted continuously to remind drivers of their responsibility and how to be a safe operator of commercial vehicles.

Says Tai "Right from the Research and Development phase of our operations, we insist on placing safety above product performance and cost at every stage of our product development. We still make concentrated efforts to ensure that health safety defines our choice of raw materials and chemical applications in processing our rubber compound. Safety remains our main focus when GIB products are finally put into service."

It is thanks to all their customers around the world whose constant demand for the best products keeps encouraging them to uphold their philosophy in business: to consistently offer only highly reliable rubber compounds. GIB has pledged to continue to strive to remain a responsible rubber compounder that delivers safe rubber compounds which meet strict safety requirements.



The real reasons for tyre failures

The latest report on Malaysia's commercial vehicle road accidents shows an increase of 56% in ten years (2001-2010), most of which was due to negligence and improper vehicle care. Fleet operators are generally profit-driven businesses; they don't see the urgency of following strict maintenance procedures if the cost to do so is high, but the wear and tear on tyres and improper maintenance is an extremely unsafe combination.

Retread failures are not usually caused by tread adhesion problems. If peeling does occur, it is rare and localised; small pieces of pre-cured retread may separate from the tyre but no steel is contained in the separated pieces. The real issues are the condition of the casing and the retread process. Defects in the casing and an improperly conducted retread process affect the reliability of the retread.

Tread detachment happens when there is tyre fatigue. The possible reasons for tyre fatigue are many. Constant scuffing of the tyre due to severe misalignment of the steering or axle causes fatigue-inducing heat to be generated. Breaks on the tyre crown and sidewall because of hard impacts to the tread surface can break a tyre's structure. Tyres age even when not in use as the rubber compound hardens and becomes less elastic. For safety's sake, tyres that are six years old and over must not be installed. Age cracks and impacts result in internal rusting of the steel cables which weakens the steel and its bonding to the rubber. Other causes of tyre fatigue include under-inflation, overloading, excessive speed, unrepaired injuries, repair defects and mounting damage.

Stay safe. Recognise the signs of impending tyre failure and know how to prevent that from happening. For more information, give GIB a call or attend their informative seminars. **F**



Meet BOB: the GM that lives, breathes and teaches safety

Your everyday GM may just fly a desk. Hardly a dangerous job. Known as "BOB", this manager takes safety to another level. Even in the office or during lunch in a mamak he wears a safety vest (Given the way some motorist behave, maybe not a bad idea when you head for your break)

Born on the Cook Islands, BOB has not only spent a lifetime career in tyres, but he has also created a reputation for safety. "We have to bear in mind that there are lives at stake. When one of our products fails, there could be severe consequences. That said, you cannot just look at the product, but you also have to create a safety conscience among your workers and office staff. Responsibility for human lives for corporation has to be holistic!" he states.

Hailing from the China Technical Institute he has a degree in Engineering with major in Tyre Retreading. Starting his career in Bandag, New Zealand, he also worked for Bridgestone before joining Goodway some 16 years ago. Currently, he manages a workforce of 400 staff.



Wheels On The Bus

We have all been on one. A Bus is typically a vehicle for “mass transportation” of people. It can be of long distance travel, regional trips or inter-city journeys. People sometimes refer to these vehicles as coach or city bus. Typically, buses can be broadly categorized as

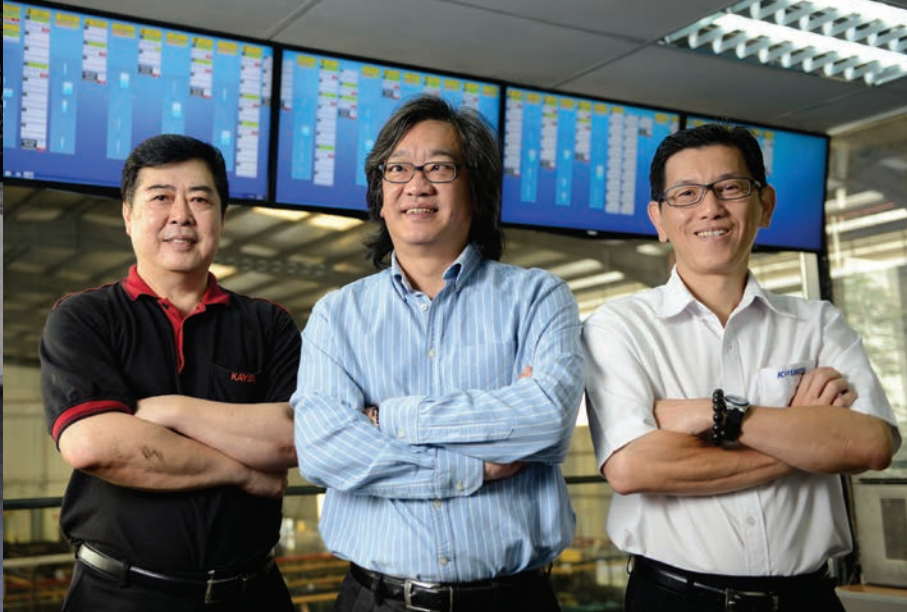
- City Bus or Town Bus or Stage Bus (stops at many stages) within the city or town
- Inter-city Bus (characterized by trips with multi-stops in-between)
- Express Bus (usually long-distance non-stop trips)
- Other specific categories:- school bus, factory bus, tour bus & mini bus

In the early days, the chassis of the bus was the same as used in trucks. The only difference was to build a different body on the same type of chassis; hence, tyre application used to be the same concept. Traditionally, the tyres used on bus and truck are same in sizes as there is no differentiation on bus tyre segment in this region.

With the advance in today's modern technology, buses have been further developed into many different types serving different market requirements. The engineering safety requirements for the varying types of buses would vary depending on its use or application according to the above segment and even within the same segment, it can further split like in the case of city buses:

Types of Buses	Descriptions
Single Decker	Two axle rigid bus, transit bus (city bus) used mainly for mass public transportation There are two types of single decker: Low deck – for city use with easy entrance / exit High deck – for long distance or regional travels
Coach	Used on longer distances for inter-city bus service often with luggage compartments and with comfortable seats
Double Decker	Two axle, two storeys or decks, often used for touring; also for city use. However, like the single decker, the body of the vehicle is build based on the applications and chassis type





Similarly, tyres should be manufactured with different engineering process technology for different types of applications in mind.

The mobility of the bus relies on the power transmission to its tyres. Therefore, the safe movement of people, vehicles and goods heavily rely on the tyres on the road. The tyre plays a significant role but moreover it is also a concern in operating tyre cost.

This is because the tyres are made of various tyre material compounds to enhance the tyre wear resistance and promote fuel economy. The tyres are also designed to address road safety challenges with different tread design patterns that help to minimize irregular wear for road safety. Another important feature of the tyre are the kerf features on the tyre which also improves the riding comfort, braking and overall driving functions of the bus.

One important factor in the urban tyre application are the side walls, which could be damaged when the tyre scrapes along kerbs. Hence some manufacturers specifically design tyres for urban usage by taking away the high speed requirement and replace it with thicker side walls. This will protect the side wall and reduce the damage on kerbing. As the application is for lower speed in urban use, the manufacturer could then increase the tread depth on this type of tyre as heat build-up is not so sensitive as well as the movement of the tread.

In managing the fleet operations, top priorities should be given to the safety for the bus passengers. Managing the tyre would be one of the key aspects. The right methodology in tyre care will ensure the proper use and longevity of the tyre. Proper SOPs in maintenance, like regular pressure checks to ensure correct recommended pressure, tyre inspection for damages or injured tyres are among the checks that can help to avoid any unforeseen tyre failure. This will promote tyre safety as well as help to minimise breakdowns whereby improving the tyres potential lifespan.

Hence, fleet operators would also need a sound scientific basis in good tyre management in all their tyre products used, services for tyres, technical knowledge and use of equipment, tyre operation and management.

Kit Loong Commercial Tyre (KLCT) has developed a professional management approach in managing fleet operations to meet the commercial demand for safety and remaining competitive (as result of operational efficiency) with cost effectiveness measures, allowing the bus operators to gain control of its fleet mobility leading to better CPK (Cost Per Kilometre) value resulting better profitability. 

Light, sturdy, and long-lasting



Fiber-reinforced composites in bus manufacture: new high-tech materials offer optimum strength and enduring resistance while featuring an extremely low weight.

With its fiber-reinforced composite sheeting manufactured in a continuous production process, German-based LAMILUX provides sophisticated, time-tested, high-tech materials for bus manufacture. Used both inside and out, these materials offer great advantages with their extremely light weight and exceptional strength. Completely corrosion-free, they feature excellent resistance to hail storms. These fiber-reinforced composites particularly impress thanks to their long service life, robustness, and resistance to weathering, chemicals, and ultra-violet light. Manufacturers can use them to build lightweight vehicle bodies due to their low mass per unit area.

As structural components in roofs and side walls, these FRP materials produce a strengthening effect and offer resistance to

high compressive and flexural stress loads. Hail storms and impacts at specific points in minor accidents do not usually cause any damage thanks to the materials' high impact resistance. If dents or cracks should appear, the blemished surfaces can be quickly touched up while individual sections in segmented structures can be simply replaced.

Highly resistant to UV light, hail, and weathering

Due to their optimum resistance to UV light, weathering, and corrosion, these materials are extremely long-lasting and do not fade for a long period of time. LAMILUX has provided proof of these excellent characteristics through extensive, internationally recognized test methods, such as the XENO test (DIN EN ISO 4892-2), the SUN test, the salt spray test (DIN EN ISO 9227), and long-term weathering tests.





Customized colors with no paint finish required

It is not only the mechanical, chemical, and physical properties which impress: these fiber-reinforced composites also captivate with their highly attractive outward appearance thanks to their smooth, pore-free surfaces. Personalized colors can be added from the full RAL and NCS system ranges or in customer-specific tones. The color particles are introduced into the sealing gel coat layer during the actual production process of the material itself.

This not only means that applying a subsequent paint finish is unnecessary. The color will also not flake off due to corrosion or chip off due to deformation or scratches, as is usually the case with conventional paint finishes on aluminum or steel sheeting. However, these fiber-reinforced composites can also be produced and supplied in a neutral white ready for a subsequent paint finish.


Low weight and excellent insulation properties

Using these sturdy, yet very lightweight materials can greatly reduce the overall weight of vehicles in comparison to designs featuring steel paneling. These materials also provide better insulation in the overall structure since they exhibit lower thermal conductivity than steel paneling and thus eliminate more thermal bridges.

Custom-produced material with a great many variations

LAMILUX manufactures its fiber-reinforced composites in its four self-developed flat production systems over one hundred meters long. These systems are regarded as the most modern of their kind throughout the sector. Their highly automated, computer-controlled production technology enables us to manufacture fiber-reinforced composites twenty-four hours a day in consistent, optimum quality, which can be reproduced at any time. Our production lines thus produce customizable materials, the properties of which can be tailored to specific requirements and intended use.

LAMILUX quality: testing and approvals, certified by TÜV

The company is the world's first manufacturer of fiber-reinforced composites opting to have its laboratories and testing facilities certified by TÜV Süd Group, the internationally renowned testing organization, thus ensuring optimum quality standards. Almost 20 laboratories and testing facilities have been successfully appraised and checked overall. Its fully developed test methods and test series enable LAMILUX to maintain the characteristics in its materials on a permanent basis, thus guaranteeing the great benefit of its construction materials in practical use for the long term. LAMILUX Composites GmbH has been producing fiber-reinforced composites for almost 60 years. Thanks to its technologically advanced continuous manufacturing process, large production capacities, and wide product range, this medium-sized company leads the sector across Europe. 





Road safety is a global concern

MAN travels international roads and Managing Director of MAN Bus & Truck Malaysia, Hartmut Mueller shares insights into how we are going to ride safer in the future with buses from Germany.

With a career spanning three decades in trucking, Mueller is poised to bring some new ideas to Malaysia. "You need to excite customers about your vehicles! How are you going to achieve that if they cannot test drive them? This is something very common in Europe, but isn't practiced here" is one of the many insights he shares with us and his colleagues.

Today he is looking back at some 12 years with MAN, which he joined after his stint at Iveco. He headed the Munich Centre, taking care of some 25 factory outlets and workshops. Having been successful with that, he was then invited by the board to be the head of World-Wide Sales-Steering. In 2011 – 2012 he went to Paris, to head one of the biggest MAN companies in Europe, MAN France as COO. The last station before coming to Malaysia was the post of Head of International Key Accounts. Such customers make up some 10-15 % of MAN's total turnover and are therefore highly important.

AT: Can you share a bit about the history of MAN vehicles, the trucks and buses that take goods and people around the world?

HM: The company was founded in 1758 and the first truck was produced in 1915. Our first bus was launched in 1923, shortly after the truck. What is interesting to note is that the Diesel engine was invented in 1897, so it has taken very little

time for industrialists to see beneficial uses of this invention. MAN origins can be traced back to two different industries: an ironwork factory, St. Antony, founded in 1758 and a machine factory which was founded in 1840 and was then called Sandersche Machine Factory. In 1921, these two lines merged into what is now known as MAN. Volkswagen took over the company in 2013.

MAN stands for industrial innovations and we have been traditionally market leaders in several segments. Some noteworthy ones are ship engines with up to 100 000 horse power, printing machines, power generators and cranes. As we have played a vital part in the post World-War II era, we are proud to say without MAN the development of the German industry would not have been as swift and successful as it happened.

AT: How about in Malaysia? MAN Buses are often seen on the road, and we understand that Prasarana uses 150 MAN buses. Can you share with us the reasons why MAN buses are very popular in Malaysia?

HM: In Malaysia we are offering engine variants from 280 - 460 HP, covering the main applications for transportation in the heavy vehicle segment. Our chassis are between 10 and 12 meters long and will be configured to the needs of each customer. Besides a good image, our products are having a high level of durability. There are 24-Hour Rescue teams on stand-by to assist with any urgent repairs in case of a breakdown.



Our vehicles are built with low consumption and high efficiency in mind. For bus operators, this translates into a low Total Cost of Ownership, paired with the confidence that there is a solution in case of a breakdown.

AT: In terms of technology, are there any special features on MAN buses, especially in Europe? Are there any differences as compared to the buses and coaches in Malaysia?

HM: Yes, there are some fundamental differences. For

example here we are using engines with Euro 2 specifications, whereby in Europe we are already selling Euro 6. In Malaysia we are running a CKD production, requiring body builders to complete the bus. In Europe you can get the complete bus from us.

Besides that, in Europe we are market leaders in various fuel technologies, such as gas, biogas and Hybridbuses. Furthermore, we offer driver assistance systems, which are fully accepted in the market.







AT: As our topic is about coach safety, and is one of the issues that keeps cropping up, especially after an accident, can you tell us more about coach safety in Europe, in terms of design, seat belts, driver's training?

HM: There are two aspects to this. One is the technical specification of the vehicle. All our buses or coaches are designed according to the EG or ECC norms in terms of roll over tests and a range of crash tests. All our assistance systems in MAN chassis are deliverable to Asia. Then we fit seat belts for the safety of passengers.

The other aspect is the driver. MAN offers special driver training in order to ensure that the bus captains safely operate the vehicle. This goes beyond the drivers license that they have to pass. What we have is an ongoing training program with seven modules, including technology and fuel efficient driving. We teach the theory, but also do practical sessions.

AT: Do you think the road conditions are a factor in road safety? Is there a difference in highways around the world?

HM: Yes, there are certainly differences in the highways around the world. For example, in Germany you have to build roads that withstand frost, snow and ice and at the same time can take heat. Our summers can get hot too! You may find roads that are winding up a mountain, or long straight flat highways. Each will pose a different challenge for the driver as they navigate these roads.

The surface of the roads play an important role as well as they influence braking behavior or steering. Signage is another issue. You need to mark dangerous sections of roads. In many countries lighting the highways is an issue. There are many aspects as we can see. What it takes are basically three components to road safety: safe roads, vehicles with the latest in safety features and a well trained and safety conscience driver.

Technical innovations always lead to significant reduction of accidents. We are looking into a lot of things at MAN to improve the safety on board or buses. There are lane departure warning systems, overtake warning systems and automatic

braking systems we are continuously working on. We are now at stages where brake warning systems would not only warn a driver but actively break the vehicle.

Some advanced systems even offer a birds-eye view of the surroundings of a bus to allow a driver to see what is happening around the bus and to avoid any blind spots.


Advantage MAN

As anyone in the industry will tell you, durability is one of many aspects that clients need to take into consideration. Here, MAN is having the edge when it comes to on road / off road applications. The 6 x 4, 8 x 4 and 8 x 6 variants of the heavy duty trucks have long since proved their worth in the tough conditions found in the region. Regarding other applications Mueller says "Yes, we offer special purpose vehicles that could be head-to-head competition for 4 x 4 vehicles of other brands, also our TGM and TGL trucks are fantastic, but the sales volumes here in Malaysia don't make it viable to bring them in (yet)." The approach will be to provide the market with specialised heavy duty trucks that have been successful and offer satisfying solutions.

Mueller's view is that the markets here are still growing and will sooner or later offer opportunities for a wider range of products to be sold.

Personal views

With him in Malaysia are his wife and son, who are settling in nicely. To get a grip on the region, regular trips within Malaysia and to surrounding countries are planned and scheduled. "Malaysia is a little pearl to me. The infrastructure is good, which makes this country interesting in both aspects, business-wise and for the personal life" he states. The market can expect a lot to happen as there still are still a lot of ideas to be transferred from Europe to Malaysia and Asia.

The immediate next stop for Hartmut Mueller is SS2 in PJ for a test of a special kind: Asian Trucker will put the truck-man up to the task to eat durian(s). 

Vienna gets on board with MAN

Transport company Dr. Richard opts for 64 MAN city buses

Austrian passenger transport company, Dr. Richard, has placed orders for 64 MAN Lion's City buses. The company operates routes on behalf of Wiener Linien and has relied on MAN vehicles for 40 years now. MAN's Lion's City impressed in vehicle tests when compared with the competition: Together with the great value for money which the buses represent, low fuel consumption was also of key importance in Dr. Richard's decision to opt for MAN. 15 vehicles are already in service between Rennbahnweg and Prater. The remaining buses are scheduled for delivery in May 2014. MAN's Lion's City buses comply with the Euro 6 emission standard.

"After several test runs using Euro 6 buses, MAN impressed both in terms of fuel consumption compared to the previous model and also in regards to their tried and tested technology. The comparatively lower life-cycle costs was ultimately a key factor in our decision. We are now able to draw on the initial experience from regular service with the buses and at this time feel vindicated in the decision we have made" said Mag.

Johann Strasser, Technical Director at Dr. Richard.

The 12 metre-long MAN Lion's City low-floored buses are powered by a 320 HP engine and fitted with the ZF EcoLife six-speed automatic transmission with topography-dependent control. With two doors, they can accommodate 87 passengers, providing seating for 34. Mobility-impaired passengers can take advantage of a double wheelchair space. The air-conditioning system with 33kW cooling capacity ensures comfortable temperature control on warmer days. A passenger information system assists in route management. For security reasons, the driver's cab is separated from the passenger area by a glass door. Two additional, 10.5 metre-long MAN buses are used on routes with particularly narrow or winding streets.

Dr. Richard is Austria's second largest bus company with a fleet of around 800 vehicles. In 2005, Dr. Richard was one of the first customers worldwide to take receipt of city buses from the MAN Lion's City range.



Yutong Rectrl Saves Fuel by 30%

Technological innovation leads the improvement and upgrade of the bus industry in China. In 2013 Yutong launched the Rectrl technology. Compared with buses powered by conventional energy, buses equipped with Rectrl systems can save fuel by over 30 percent and cut PM emissions by more than 90 percent.

As a leader in China's bus industry Yutong, on November 26, 2013 in Zhengzhou, officially launched Rectrl. Zhu Guanghai, vice director of Yutong New Energy Technology Department stated: "Rectrl can be widely used in energy-saving and new energy buses such as hybrid and plug-in buses. The vehicles equipped with Rectrl systems can save over 30 percent fuel and cut over 90 percent PM emissions than the conventional vehicles."

This development was recognised as a timely help for creating a better urban public transport and boosting energy conservation. The Rectrl system is a cutting-edge technology consisting of "four electrifications" and "four intelligentizations", which can greatly enhance the fuel-saving and emission-reducing development of urban public transport.

Industry insiders believe that Rectrl can not only bring a reliable, integrated and intelligent operation solution, but also trigger a new round of revolution in the environment protection technology of the industry, thus promoting the emission reducing efforts to a new era.

Yutong began its research of energy-saving and new energy buses early in 1999. After years of research and



development, Yutong has made this breakthrough in this field and became the standard of China's energy-saving and new energy bus development. The latest statistics show that nearly 6,000 units of Yutong's fuel-saving and new energy buses have been delivered to over 60 cities in China, such as Zhengzhou, Tianjin, Hangzhou, Kunming and, covering more than 20 provinces.

Golden Dragon Bus on its Way to Green Energy



A recent research report shows that by 2015, China's bus fleet will reach 600,000 units, among which, 83,000 units will be powered by new energy, accounting for 13.8% of the total.

Green Vehicles

Peng Dongqing, Deputy Managing Director of Xiamen Golden Dragon Bus Co, Ltd stated: "The national policy plays a vital role in the development of the bus industry. As a manufacturer, Xiamen Golden Dragon has increasingly realised the significance of developing green vehicles." Golden Dragon states that the company's hybrid buses have reached high market visibility with a total number of 2,500 units in operation. Plug-in hybrid buses and electric buses have

been put into use in several cities, including Fuzhou and Xiamen.

From Ultracapacitor to Pure Electric Buses Purely powered by electricity, XML6125JEW electric citybus is Xiamen Golden Dragon's knockout product. Boasting all the strengths of electric and hybrid buses, XML6105JEW plug-in electric-gas hybrid city bus is also a superstar. Thanks to the company's advanced BMS technology, the green bus can cut oil consumption by 50%.

Impressive Market Performance

In early 2013, Fuzhou Bus Group bought 153 hybrid buses from Golden Dragon. Since then, the energy efficient and green bus fleet has been working smoothly and

delivering impressive oil economy. Zhang Xiaozhuan, Deputy Managing Director of Fuzhou Bus Group said regretfully that the company should have bought at least 300 units new energy vehicles from Golden Dragon.

Mr. Peng noted that currently only plug-in hybrid and pure electric buses can enjoy government subsidies, showing that the government intends to further promote the development and popularisation of new energy vehicles. To maintain its fast growing pace, Xiamen Golden Dragon is expecting to play a more significant role in the coming new era of green vehicles.

SUPERCOOL Business Partner- COLTRAC achieves extremely high audit rating of 97.8%

Specialised on commercial tyre retreading, Coltrac Sdn Bhd has recently undergone a rigorous audit, resulting in a top rating according to European standards. This qualified COLTRAC to the authorised Supercool retreader in Malaysia and we recognised them as GILB Supercool Business Partner (SBP) The company uses 100 % GILB retreading materials and has been accredited by GILB for the use of their retread liners. Coltrac is also ISO certified, ensuring that processes are strictly adhered to.

"To be competitive, we need to apply stringent processes. This is where we excel" said Tom Tai, Managing Director of Coltrac. According to him, the difference between a successful business and one that is truly excellent is found in the way processes are managed and checked. "For our industry, we have to produce five more tyres for every one that fails. Hence, the avoidance of mistakes is paramount" he explains further. Having undergone extensive auditing for

five days, the factory in Seksyen U5, Shah Alam achieved a superb rating of close to 98 percent.

Not only has the factory achieved a very high quality standard, but retreaded tyres sent for testing to the Netherlands exceeded expectations. "Typically, retreads are being tested for 72 hours continuously. We have sent 30 tyres for testing and after some 118 hours the lab stopped the test, saying that these retreads are performing beyond the normal rate" Tai says not without a certain pride.

Present in the factory during the interview was BOB, General Manager of GILB. He explained the collaboration with Coltrac and states that it is mutually beneficial. Said BOB "The better our SBP perform, the better it is for us too. Yes, we invest a lot of time and effort, but at the end of the day, the success will trickle down to us as well". GILB assists partners with services that will help to streamline factories and

improve performance. For example, GILB writes and translates all procedures for the staff managing the tyre retreading process. "For us, the most important thing is that the (commercial) retreads don't fail. In order to get to that point, we also do quarterly assessments" BOB further said.

According to GILB, the company provides a "Cradle to Grave" solution and is now working on innovative solutions to further enhance the offering of the company. Currently, RFID chips are being attached to all tyres processed by Coltrac, which indicates that a move towards total tyre management is waiting in the wings.



Yutong Bus Makes Debut in Oman



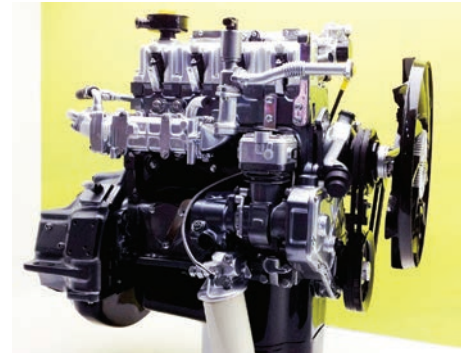
Yutong, a leader in China's bus industry, launched a new bus in Muscat, Oman in February 2014 and were joined by commercial officials of the Chinese Embassy in Oman. The new bus ZK6122H9 was developed for the road conditions of Oman and the operational experience in other Middle East countries like Saudi Arabia and United Arab Emirates. At the ceremony the bus was highly praised by the guests for its appealing appearance, excellent workmanship and advanced technology. In a speech Yao Xiaozhou, Counsellor of China Embassy in Oman, said he was convinced that Yutong would set a new benchmark for Chinese bus builders in Oman with its superior product and service.

Yutong have taken an interest in the markets of Middle East and Gulf region since 2003 and in 2006 Yutong began making sales in this area. Since then Yutong has delivered 2,200 buses in the region. In Saudi Arabia, sales volume reached 1,500 units. In addition, Yutong has established a spare parts centre in the United Arab Emirates. Representatives from Petroleum Development Oman (PDO), local state-owned and private transport companies, as well as international tourism and vehicle rental companies, attended the event.



Westport and Tata Motors Launch Natural Gas Engine

Westport Innovations, engineering the world's most advanced natural gas engines and vehicles, and Tata Motors Limited, India's largest automobile company, have launched a new spark-ignited (SI) natural gas 3.8L turbocharged engine featuring the Westport WP580 Engine Management System (EMS). Designed to support many engine configurations, the Westport WP580 EMS is also scheduled to be applied to Tata's 5.7L engine targeting medium-duty applications in late 2014.



Thomas Rippon, Executive Vice President of Westport stated, "By combining our unique technology and Tata's leadership in India's commercial vehicles market, we are able to introduce new natural gas products and target the mainstream transportation markets in one of the world's fastest growing markets for natural gas vehicles. The Westport WP580 offers breakthrough price, performance, and flexibility for OEMs allowing them to use this advanced technology even in cost-effective markets such as China and India."

Rajendra Petkar, Head Power Systems Engineering, ERC of Tata Motors added, "India has one of the largest natural gas light-duty vehicle fleets in the world, and

we see an enormous opportunity for natural gas trucks and buses with the development of fuelling infrastructure. By expanding our portfolio of natural gas engines, we are focused on increasing our market share of the natural gas vehicle and engine market."

Meeting current and future emissions profile: The system is designed to meet Euro VI emission standards. India's total annual medium- and heavy-duty truck and bus sales are projected to reach over 289,000 units in 2014. Tata's 3.8L and 5.7L engine with Westport WP580 EMS are primarily targeted for light-duty vehicles and medium-duty buses. The combined addressable market is projected to be more than 493,000 units in 2014 based on Westport analysis.

Scania expands its operations in Taiwan

Scania is strengthening its position in the Taiwanese bus market. The company has recently received orders for 180 bus chassis. In order to provide high uptime for bus and truck operators, Scania will add new workshops to its Taiwanese service network.

and city buses. The new buses will join the company's tourist coach and intercity service fleets.

"Scania's share of the bus and coach market in Taiwan has grown over the past three years," says David Lin, Sales and Marketing Director at Scania's Taiwanese subsidiary Griffin Automotive. "The coach segment is growing and in 2013 we almost achieved a 10 percent market share."



Major bus and coach bodybuilder Bo Sheng Body has continued its long-term cooperation with Scania by ordering 80 Scania K 400 coach chassis. Bo Sheng Body's main focus is on the tourist coach segment and delivery of the new chassis has already commenced. In addition, Taiwan's leading bus operator U-Bus has ordered 100 Scania K 400 coach chassis. U-Bus has a fleet of some 1,500 buses and operates intercity services as well as tourist coaches

In recent years, Scania Taiwan has secured orders from several major intercity operators. The increased number of buses and coaches is resulting in greater demand for service. "We will open two new workshops during 2014," says Per Lilljequist, Managing Director of Griffin Automotive. "These will further enhance our service network and will allow us to offer Scania bus, coach and truck operators the best possible service."

The two new facilities will bring the total number of workshops operated by Scania in Taiwan to ten. In addition to these, there are also two customer-based workshops.

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