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The Majestic Mack

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EDITOR'S NOTE ASIAN TRUCKER | 4



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Truck Driver Appreciation Week

rom September 11 – 17, 2016 in the United States, America celebrated National Truck Driver Appreciation Week. What are some of the things they did for drivers? Billboard, print and digital advertising encouraged everyone to #ThankATruckDriver.

Educating the Public

Trucking Moves America Forward (TMAF), an industry-wide education and image movement once again honoured professional truck drivers in celebration of National Truck Driver Appreciation Week (NTDAW), with a dedicated educational campaign.

"Our nation's professional truck drivers work tirelessly for us every day, delivering the products and supplies that keep our lives moving – and they do it consistently and safely. For that, and much more, we owe them our gratitude during NTDAW and throughout the year," said Kevin Burch, co-chairman of TMAF, president of Jet Express, Inc. "We are so pleased to extend our education campaign this year, which is aimed at showcasing the necessity of truck drivers."

Critical to Daily Life

Todd Spencer, executive vice president of the Owner-Operator Independent Drivers Association added: "It's easy to take for granted the fact that the trucking industry is critical to our daily lives and our economy. While we need to celebrate 3.4 million drivers each and every day, this week is a specific reminder that these hardworking professionals strive to go the distance and deliver the goods, and most achieve accident-free milestones each year."

TMAF unveiled a targeted advertising campaign that was created to inform, educate and inspire. The "Amateur/ Professional" campaign depicts professional truck drivers in three informal or amateur scenarios – such as a baker, explorer or swim coach – showcasing their human and family sides.

More than Drivers

TMAF billboards were placed along major city highways and freeways which portrayed #TruckingLife. A combination of print and digital advertisements served to remind consumers that professional truck drivers not only keep the country moving, but they are also friends, family and neighbours who strive to arrive safely to their delivery destinations.

Also during NTDAW, an op-ed campaign included editorials from TMAF leadership and professional truck drivers published in daily newspapers and industry trade publications. These editorials aimed to educate and inform the general public on the responsibilities of the driver and their commitment to safety.

Contribute to Quality of Life

The Sioux City Journal in Iowa ran an editorial on September 13 under the headline 'OTHER VOICES: Trucking professionals make our lives easier, day in and day out' by Brenda Neville. Ms Neville wrote: "Each day trucking makes an incredibly important impact on your life and Iowa carriers are proud of the critical role they play in ensuring your quality of life. Take a look around at the products in your kitchen, the supplies in your office or the clothes on your back.

"Iowa's trucking industry is responsible for ensuring that you have what you need at all times. This is a significant responsibility that the trucking industry is proud to handle seven days a week, 365 days a year, despite unrelenting weather conditions, road construction, distracted commuters and intense regulatory oversight."

It's Time to Say Thanks

She concluded by saying: "Please join us this week in saluting lowa's dedicated trucking professionals during National Truck Driver Appreciation Week to say thanks, offer a handshake or give a wave to the unsung heroes who make our lives easier, day in and day out."

I wonder how many truck drivers there are in Singapore who here someone from the general public say "thanks" and offer a friendly hand. I think they would be overwhelmed to have an entire week dedicated to them. All too often, when I tell people that I write about the trucking industry they respond, "There's a trucking industry in Singapore?" If ever we are going to have a week to honour professional truck drivers we have to start by recognizing their existence.**7**

SOUTH EAST ASIA'S LARGEST COMMERCIAL VEHICLE EXHIBITION 18-20 MAY 2017



Back for the third time, Asian Trucker invites you to be part of the largest dedicated exhibition for commercial vehicles in Southeast Asia. Co-organized by Asian Trucker Media, two highly successful commercial vehicle exhibitions were previously held in Malaysia. Following the success of the past event, we are returning with the show in May 2017 under a new, more inclusive name.

MCVE, organised by Asian Trucker, will be held in the Mines International Convention and Exhibition Centre from 18th to 20 May 2017. Fringe programs, including the Asian Trucker Networking Night, will run concurrent. Please visit www.mcve.com.my for details and updates. Access is free of charge for delegates.

> To book your booth or to learn more, please contact Nicole Fong via nicole@asiantrucker.com or +6012 207 5528

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COVER STORY ASIAN TRUCKER | 6

The Majestic Mack

In a private audience, His Majesty, Sultan Ibrahim Ismail Ibni Almarhum Sultan Iskandar Al-Haj, talks to Asian Trucker about the truck that has made headlines all over the world: a one of a kind Mack.



What we knew about the truck was that it had been built in Australia, is the world's most expensive truck and a vehicle that has been highly customised. Upon arrival in Malaysia, the truck was on public display as it would be forming part of a convoy that would tour Johor in an annual event organized by His Majesty. We have had the chance to not only see the truck for an exclusive photo shoot, but also conducted an exclusive interview with the royal owner-driver. Driving out of the garage, the Mack truck doesn't seem to end. Based on a Super-Liner, the chassis has been extended to fit the intended purpose. With a stunning custom paint job and lots of technical features, such as Playstation and TVs on board, this truck surely is a show stopper. For a smoother appearance, the fifth wheel is covered when the truck isn't put to work by pulling the speedboats of His Majesty. There are fixtures that allow for umbrellas (parasols) to cover the area behind the cabin and there is plenty of space to put some deck chairs, making the vehicle also a viewing platform at regattas.

Inside we will find not only lush interior, but also practical items such as a kitchenette and even a tissue holder – something that cannot be missed in any vehicle on Malaysia's roads. A wardrobe ensures that clothing is stored wrinkle free and the leather upholstered and airsuspended seats for driver and co-driver offer a lot of comfort.

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During our interview with His Majesty, he revealed that he had been a fan of trucks since young. "My father owned a logging company. As we used to own a lot of timber trucks, every time I saw a truck in the workshop, I would pinch one and drive it." His Maiesty holds a valid licence for commercial vehicles and he was driving the "Tiger" Mack himself during the convoy across Johor. Going for a regatta, he will tow his own boat, saying that "Reversing is also no problem for me. I have always had a passion for trucks." Besides trucks, His Majesty also enjoys piloting heavy machinery. The only vehicle that he hasn't been moving was, according to him, a submarine.

When His Majesty was asked about the truck of choice being a Mack, the answer may come to some as a surprise. "I have a friend in Australia, whose name is Linfox. And he introduced me to Mack." This is how it all started. Meanwhile, Mack has taken the opportunity to use this order to generate a lot of publicity as well, which is understandable. Also, His Majesty said that he liked the shape of the Mack truck. The equipment found on board was recommended by the manufacturer, while the task given by the Sultan of Johor was seemingly simple: "Build me a royal truck". In order to get all the finer details agreed upon, there have been many meetings. However, His Majesty is

extremely well versed when it comes to engineering and is able to guide suppliers when it comes to the specification requirements. "The Mack people went to the extend to view some other vehicles that I own in order to match the colours. For example, some of my speed boats feature the same colour scheme as the truck and the same design patterns," he explained. This way, the boats and the trucks look like twins. Generators make the truck suitable for overnight stays, power the entertainment system and amenities, such as fridges and DVD players on board. While other media has bestowed a few different names onto the truck, His Majesty simply wants to call his



creation "The Royal Machine". A fitting name for a unique example of a truck like this.

What was the intended purpose of the truck? His Majesty originally wanted to pull his cigarette boats when going for races. He may have rethought that as he told us that "I don't think I want to pull boats with the truck. It has turned out too nice!" Cigarette boats, dating from the 1960s, owe much of their design to boats designed for offshore powerboat racing. The Volvo Group will be very happy to see three more of their trucks being ordered by His Majesty to be handling the towing of these boats in the future. In order to accommodate

the driving style of this royal owner, the suspension was detuned a bit to soften it while the transmission was adjusted. The shifting program was amended in order to match the driving style of the driver. This was done by having a Mack engineer riding along with the Sultan while being plugged into the on board computer, making adjustments. Also, torque was tuned to the liking of His Majesty's style. "Hopefully, I can take the truck up on long distance trips, maybe even up to Thailand?"

Seeing that Mack trucks are not sold as regular vehicles in Malaysia, we wanted to know what the service agreement is like in order to ensure the truck is always ready to roll. As the engine is a Volvo power plant, Volvo Trucks may be able to help in case needed, as the company has an existing service network. For anything else, Mack has a team of engineers on stand-by to fly into Malaysia should something go wrong. During the tour of Johor, three technicians went along to react to any issues arising.

Addressing issues around drivers and perceptions of the profession, His Majesty also commented on errant behaviour of operators. He urged the industry to adhere to the rules and regulations that are prevailing in the country and to ensure that everyone is safe. "However, we also need to do a lot more for our truckers.







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What is next? His Majesty has a clear

vision. He revealed to us that "I am now

looking for someone to build me a luxury

motorhome that I can tow. It needs to be

a house that I can drive around with "

Look at the European way. Here, we still need to provide proper places for the drivers to rest. Not just stop. There need to be places where they can eat, take a bath, sleep and have social interactions. Proper truck stops." In his view, such facilities also need to include water supply and access to electricity. His Majesty also

Present during the event in Segamat on 15th May was Mr. Dean Bestwick, Vice President – Mack Sales and we asked him about the truck:

"The Truck is based on a Superliner, MP10 161 685hp. This is the most powerful conventional production truck in the world. (Trucks with hoods are described as "Conventional" in the US), it is equipped with our mDrive transmission," he said.

The truck was built in Australia as Mack is able to deliver quality custom built units from their factory in Brisbane. commented on the use of trucks that are too old. In order to grow the industry and to make it attractive, his opinion is that there should be a trucking school, a place where not only driving is taught, but proper behaviour and the knowledge to handle cross border transport and documentation.

Mack Australia are the Right Hand Drive specialist for the Mack Brand and it is obviously easy to ship the vehicle to Malaysia. Mack in the USA do not build a truck of this nature, they are capped at 605hp in a day cab version.

The truck took three weeks to build down line in production and then another 12 months of customisation. All brands owned by AB Volvo have group engines, the base engines are the same however each engine has specific parameters that are needed for each country to ensure we can maximise torque and Hp settings.





COVER STORY ASIAN TRUCKER | 10

SUPER-LINER

ENGINE

-Mack MP10 16 litre, 600Hp – 685Hp (Ref Engine chart) -Selective Catalytic Reduction (SCR) -Emission Level Euro5 (ADR80-03)

ENGINE BRAKE

-Advanced PowerLeash engine brake -Engine retarding power up to 570Hp (425kW)

AIR INTAKE & FILTER

-Donaldson 279mm (11") single dry type element, dual canisters mounted under the cab -Painted steel dust extractors and external raised air intakes mounted in front of the cabin 'A' pillars

FILTERS

-2 full flow and 1 bypass engine mounted oil filters -2 step dual engine mounted fuel filters / water separator

AIR COMPRESSOR

-Twin cyl 900 litres/min WABCO compressor

AIR DRYER

-Bendix AD-IS air dryer

ALTERNATOR

-Leece Neville 12volt/160Amp Brushed -Leece Neville 12volt/160Amp Brushless (optional) -Leece Neville 12volt/185Amp Brushless (optional) -Leece Neville 12volt/200Amp Brushed (optional)

STARTER

-MELCO 12volt electric starter -Key type start and stop

FAN

-Behr Visco drive (electric over viscous fan clutch) -813mm (32") 11-blade nylon fan

RADIATOR

-NL1, Frontal area 1,757in²

EXHAUST

-Single RHS frame mounted catalyst with stainless steel heat shield -Outlet twin 152mm (6") vertical exhaust (Day Cab & Sleeper Cab) -Exhaust tip height above ground 3.5mtr -Exhaust tip height above ground 4.2mtr (optional)

TRANSMISSION

-Automated Manual and Manual Transmissions (Ref Transmission chart) -Transmission oil cooler (optional)

<u>CLUTCH</u>

-Eaton 394mm (15.5") Easy Pedal with VCT Plus -Eaton 'SOLO' with VCT Plus (optional) -Air assist clutch release -SACHS 430mm (17") Single Plate (mDRIVE only)

DRIVELINE

-Spicer 10 series -SPL Maintenance Free (option)

PTO OPTIONS

-mDRIVE transmission mounted – DIN or Flange (optional) -Rear of engine (PTO) – CA -Prep kit, switch, wiring and software (mDRIVE) (optional)

CAB SUPPORT

-Front: Two metalistic pivot mounts -Rear: Air isolation with dual shock absorbers -Fully suspended cab -Rear panard rod

BULLBAR/ BUMPER/ FUPS

-Light weight alloy bumper with front underrun protection -Heavy duty bullbar with front underrun protection (optional) -Temporary Transit FUP device (Option)

FUEL TANKS

-26" round polished alloy tanks (Refer Wheelbase Chart) -Large capacity polished D-shaped tanks (optional)

-Stainless Steel D tank straps (CA)

- -AdBlue Tank, kerbside (LHS) location
 - *125 litre stainless steel 26" round
 - *150 litre stainless steel 26" round or D-shaped (optional)

REMOTE BREATHERS

-Transmission, fuel and axle remote breather kit (optional)

REMOTE BREATHERS

-Transmission, fuel and axle remote breather kit (optional)

CHASSIS ACCESS STEP

-Staired and perforated 2 step design (optional)

BATTERIES

-Four 12volt Bulldog batteries, high capacity (620 CCA) -LH and RH frame mounted with black battery box cover -Polished aluminium battery box cover (optional) -Batteries mounted in sleeper if fitted Stacked battery box (CA)

-Stacked battery box (CA)

TRAILER CONNECTIONS

-Trailer - connections back of cab

-Trailer - connections back of cab and rear of frame (optional) -Air: Service and emergency with blanking plugs

-Electrical: 12volt 7-pin female base with HD 5mm² cabling

ELECTRICAL

-Chassis harness with protective conduit

-Electrical prep kit, Body Builder chassis connections (optional)

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China Joins UN Trucking Treaty (Gustavo Jeronimo Photo)

China has signed on to TIR (Transports Internationaux Routiers, International Road Transport) a UN trucking treaty. When China's membership is official in January 2017 it will become the 70th country using the procedure. The TIR procedure enables goods to move under customs control across international borders without the payment of duties and taxes that would normally be due. A condition of TIR is that the movement of goods must include transport by road.

Goods move from a customs office of departure in one country to a customs office of destination in another country under cover of an internationally accepted customs transit document, the TIR carnet, which also provides a financial guarantee for the payment of the suspended duties and taxes. The guarantee system is managed by an international organisation, which is currently the International Road Transport Union (IRU). AS a member of TIR, this will allow Chinese freight containers to travel through Asia to any destination in the Euro Zone without being opened for customs checks, which can be time consuming.

Presently less than 10% of Chinese exports to the EU go by road. Even while still subject to random checks by border guards, road transport with less red tape would offer faster transport than by sea for large shipments of time-sensitive goods. "By truck you can go from western China to Europe in 8-12 days," International Road Transport Union (IRU) secretary-



general Umberto de Pretto told Reuters. "It costs more than going by ship, but the time savings you have are enormous. Waiting times at the border will be one hour instead of three to four days."

"It's a key element ...for the Chinese government... If you had to stop a container at every border from China to Europe it would add substantial costs," Christian Friis Bach, Executive Secretary of the UN Economic Commission for Europe, which oversees the TIR convention, told Reuters.

Tata Motors Launches Mini-truck in Vietnam

ollowing Tata Motors' foray into Vietnam last year, the company, along with its domestic partner TMT Motors of Vietnam, has launched its first product in the country – the Tata SuperAce, a versatile mini-truck.

An innovative cargo transport solution, the Tata SuperAce mini-truck offers versatility, safety and comfort. Engineered to perform all the tasks of a small pick-up truck, the Tata SuperAce has a rated payload of 1 tonne, meeting requirements of both inter and intra-city transportation, for market loads like cement, construction items, food grains, vegetables, fruits, FMCG and white goods transportation. As the only diesel powered mini-truck in its segment, the Tata SuperAce is also offered with a petrol powered engine, for a superior fuel economy and a top speed of up to 130 kmph.

Ravindra Pisharody, Executive Director (Commercial Vehicles), Tata Motors said, "Having sold over 1.5 million mini-trucks on the Ace platform globally, the Tata SuperAce has been developed based on Tata Motors deep understanding of the CV customer, for a wide range of applications. Through our partnership with TMT Motors, we are committed to shaping the CV industry here and are determined to build long lasting relationships with the customers, with competitive business advantages and the trusted credentials of the Tata Motors brand."

"When we first decided to enter Vietnam, we at Tata Motors were encouraged by the positivity, enthusiasm and entrepreneurship of the Vietnamese people," added Rudrarup Maitra, Head, Commercial Vehicles, International Business, Tata Motors. "As one of the fastest growing economies in SE Asia, this presented us with a huge opportunity to not only serve the future of this market, but to partner the country on that journey. With the SuperAce, we are perfectly positioned to fuel the potential growth, encouraging first time commercial vehicles customers to enter and successfully compete in the transportation space."

"The Tata SuperAce," noted Mr. Bui Van Huu, Chairman, TMT Motors, "will be a true partner to Vietnamese entrepreneur in every sense and is an important milestone in TMT Motors' efforts of changing the commercial vehicle landscape in Vietnam. Tata SuperAce will help us to address a larger commercial vehicle base, providing a solution to customers for their transportation needs."



Scania Launches Driver Safety Apps for Apple Smartwatch

The Apple Watch Scania Edition introduces health and fitness tracking for drivers, while retaining the truck and fleet management data functions that were a feature of Scania's popular 'Black Griffin', the first smartwatch created for truck drivers. Although vehicle-integrated apps are becoming increasingly common in the industry, the Scania Edition's apps stand out due to their focus on driver activity, driver alerts and recovery. There are two new apps that are of particular value to truck drivers:

The watch's ability to track the driver's performance allows it to send a message to the wearer when they are becoming tired and may need to stand up or move around – giving the wearer the chance of a recovery time before they start driving again.

Fall detection function. This app allows the smartwatch to sense sudden extreme impacts, such as if an accident happens during the loading and unloading of cargo, a job that a truck driver often has to do alone and late at night. When a possible fall has been detected, the app can assist in contacting the watch wearer's designated emergency contact.



"When we launched the Black Griffin in 2014, we said it was just the start, and now the Scania Edition is taking this technology to the next level," says Jonas Svanholm, Scania's Director of Digital Business. "We've always had drivers' needs as the main focal point for our product and service development, and we want this watch to be a friend to the driver, something that can help them as they go about their work." **7**

MANN-FILTER Voted "Best Brand 2016"



(Ludwigsburg) Readers of German trade magazines "trans aktuell", "lastauto omnibus" and "FERNFAHRER" have voted: MANN-FILTER as the "Best Brand 2016" in the Filter category – for the fifth year in succession. From transmissions and tires, brakes to refrigeration units and not forgetting filters: in over 20 categories, almost 10,000 readers gave their opinion on the brands whose products impress them most. The results provide a clear insight into product policies and brand positioning in the industry. The overwhelming majority of respondents once again opted for MANN-FILTER in the "Filter" category. With this result, the quality brand was able to repeat its success of the last four years. The vote for the "Best Brand" and for the "Best Commercial Vehicle" is organized by ETM-Verlag Stuttgart, a specialist publisher which issues all three magazines.

Jörg Engels, Director Brand Management in the automotive aftermarket and responsible for the MANN-FILTER brand, accepted the award. "We are proud that the readers of three such important trade magazines for the transport industry have given a clear vote of confidence in MANN-FILTER as the No. 1 filter brand in the commercial vehicle segment. It further motivates us to continue impressing our customers with uncompromising OEM quality, market coverage of more than 90 percent in the European commercial vehicle market and a high-performance service offering."

JAC Trucks Sales Increase

n the first half of 2016, China's automobile industry has been recovering and maintaining a constantly increasing upward trend. From January to June, JAC has sold in its entire range of vehicles 333,639 units, up by 14.15% year-on-year. And JAC has manufactured 333,642 units accumulatively, up by 12.78% year-on-year.

In the field of commercial vehicles, JAC light-duty trucks and medium and heavyduty trucks have shown a strong increase. In the first half of 2016, the sales volume of light-duty trucks were 104,225 units up by 14.16%, medium duty sold 5625 units, a 3.08% increase while 21,427 units of heavy-duty trucks were sold, a 23.30% increase. **7**



Shell Launches Strategic Cooperation with Faw Jie Fang



(Zibo, Shandong) Shell has entered a strategic cooperation with FAW Jie Fang Truck Co. Ltd, China's largest manufacturer of heavy duty trucks. The new agreement deepens Shell's relationship with FAW, having been its premium lubricants supplier for first-fill and service-fill oils for many years. Shell and FAW also recently successfully trialled 100,000km long oil drain intervals for the entire powertrain system, including engine, transmission and axle via rigorous bench tests of over10,000 hours and 1.5 million km of road trials, a first in China.

The strategic cooperation between these two companies spans a broad range of areas, including sales, marketing, brand and technology. In the new programme titled 'Worry-free Miles', Shell and FAW will jointly develop of a new range of lubricants for engines, transmissions and axles, with the aim of achieving even longer oil drain intervals, increasing fuel efficiency and reducing emissions. These new products will be co-branded, bringing together Shell's reputation as a leading lubricants manufacturer and supplier and FAW's reputation as the leading producer of heavy duty vehicles in China.

"We are very pleased to enhance our technical and commercial cooperation with FAW. It brings together two industry-leading companies and brands, working together to provide new products and services to help give customers peace of mind on the quality and longevity of their equipment," said James Shen, General Manager of Shell Lubricants in Greater China. In addition, Shell and FAW will collaborate to strengthen after-sales services with Shell providing technical training to FAW service staff and by conducting joint market research on customer needs. This will help provide more value for customers, reducing maintenance costs and maximising operations, as well as improved after-sales customer service.

Mercedes-Benz Approves Alternative Fuels

(Stuttgart) Mercedes-Benz Trucks approves the use of alternative fuels according to norm prEN 15940 with immediate effect for the latest generations of the OM 470 (displacement 10.7 l) and of the OM 471 (displacement 12.8 l). These include the subgroups Hydrotreated Vegetable Oil (HVO), Biomass To Liquid (BTL), Gas To Liquid (GTL), Coal To Liquid (CTL) which are different resources converted to fuels through chemical processes.

The compatibility of fuels according to norm prEN 15940 has been proven by numerous tests. The engines are designed as standard for the new fuel type. As the characteristics of fuels according to norm prEN 15940 mean that it is absolutely comparable to conventionally produced petroleum-based diesel fuel, no modifications to the engines or their peripherals are necessary. The injection process, fuel lines and seals remain unchanged. The same is also true of the intervals for oil changes and for cleaning the particulate filter, while there is no restriction in terms of warranty and goodwill policy. Engine performance and torque data also remain the same if fuels according to norm prEN 15940 are used.

Since February 2016 Mercedes-Benz trucks with the first generation OM 470 and OM 471 Euro VI engines as well as the medium-duty engine series OM 936 and OM 934 have been operating with fuels according to norm prEN 15940 (this includes also HVO).



Alcoa Named Sustainability Leader on Dow Jones Indices for 15th Consecutive Year

or the 15th year in a row, lightweight metals leader Alcoa has been named as one of the world's leading companies for sustainability on the Dow Jones Sustainability Indices (DJSI) — a globally recognized and reputable benchmark for corporate responsibility and sustainability. Alcoa was again recognized as the Aluminium Industry Leader on the Index.

"As we prepare to launch two strong companies in the second half of 2016, we will continue using our innovation, creativity, and passion to deliver net-positive benefits to the environment, communities where we operate, our employees, and our shareholders," said Kevin McKnight, Chief Sustainability Officer and Vice President, Environment, Health & Safety.

Highlights of Alcoa's 2015 sustainability performance include:

- Achieving 2020 greenhouse gas intensity target five years ahead of plan by reducing absolute greenhouse gas emissions by 5.5 million metric tons and improving its greenhouse gas emission intensity by 31.3% from the 2005 baseline.
- Became one of the first companies to sign the American Business Act on Climate Pledge. As part of that pledge, committing to reduce absolute U.S. greenhouse gas emissions by 50% versus a 2005 baseline and also demonstrate a net reduction of greenhouse gas emissions from the use of products equal to three times the emissions created by their production—all by 2025.

- Alcoa Micromill material, which produces automotive parts that are twice as formable and 30 percent lighter than parts made from highstrength steel, debuted on the 2016 Ford F-150 truck.
- During 2015, improved bauxite residue storage efficiency and rehabilitation rate. In addition, finalized biodiversity action plans for three locations, and minimized global mining footprint.

The Dow Jones Sustainability Indices are the longest-running global sustainability benchmarks worldwide. Following a bestin-class approach, they measure the performance of the world's sustainability leaders based on a comprehensive assessment of long-term economic, environmental and social criteria that account for general as well as industry-specific sustainability trends.



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MCVE Gains Momentum

With the fringe program shaping up, South East Asia's largest commercial vehicle expo is gaining momentum with key players from the industry putting their support behind it.



elegates can look forward to an even more exciting event compared to the last instalment of the expo, which was held in 2015. "We realize that drivers of commercial vehicles, while typically underrepresented, play a huge role in the daily operation," Stefan Pertz, Organiser of MCVE 2017, said. "To this extend, we are going to make a bigger effort to bring in drivers to see the show. For our Asian Trucker Drivers Club members there will be a lunch on Saturday."

Further evolving the idea of the food trucks, MCVE will host a R & R area in which delegates can enjoy fresh coffees and finger food while having their discussions with business partners. This is also in the spirit of "Connected Mobility" as this is the area where the organizers hope to see people making new connections. Meanwhile, the seventh Asian Trucker Networking Night will be back and delegates and exhibitors alike are invited to join the sub-event on the Friday night, the traditional day for this happening.

The event is also seeing strong support from industry players other than manufacturers of trucks and buses. Meanwhile, the Association of Malaysian Hauliers has put their support behind the event, as have several media titles. Locally, Tyreman, Bus & Truck News, Asia Business Review and Newpages join international titles TruckMagz (Indonesia), Asia Auto Parts and TyreAsia (India) will be present during MCVE 2017. "We are also grateful for new exhibitors joining us, for instance Volvo Bus and Chevron, which are major players in their respective industries," Pertz stated further. "There will be some very interesting products on display," he promised.



Events & Exhibitio ns



INDONESIA TRANSPORT SUPPLY CHAIN & LOGISTICS (ITSCL)

Date	
Venue	
Contact	Infc
Details	

ORT SUPPLY CHAIN & LOGISTICS (ITSCL) 19 October 2016 – 21 October 2016 JIExpo Kemayoran, Jakarta +65 6780 4592 / theresa.len@reedexpo.com.sg ITSCL is the only dedicated transport and logistics event in Indonesia, with the aim of being a key partner of industry and the Indonesian government, showcasing the government's aspirations of efficient infrastructure and helping

LOGISWARE MALAYSIA 2016

O3 November 2016 – 05 November 2016
Kuala Lumpur Convention Centre
O3 – 8943 7488 (James)
The Malaysia International Logistics &
Warehousing Technology Exhibition aims to bring industry stakeholders under one roof for the purpose of business expansion, learning and networking for greater improvement in terms of efficiency and cost – saving for the logistics and warehousing industry. Venue Contact Info Details

CITY INFRASTRUCTURE PHILIPPINES 2016 (CIP) JRE PHILIPPINES 2016 (CIP) .22 November 2016 – 24 November 2016 Philippine Trade Training Center (PTTC), Metro Manila +65 9182 9748 / info@hqbizlinkintl.com / david.chow@hqbizlinkintl.com This event will showcase the latest technology, products and services for green & smart cities, highway, rails, underground, drainage and logistics infrastructure with a very special emphasis on the use of Trenchless technology with minimum impacts and inconvenience to the general public. Date Venue Contact Info

REIFEN CHINA 2016 01 December 2016 – 03 December 2016 Shanghai New International Expo Center +49 (0) 201 72 44 – 780 (Ayben Durumoglu) Originating from Germany, REIFEN China was launched in 2007 with the aim to establish an Venue Contact Info

for Chinese tire and related industries thus opening the doors of opportunity for a completely new line of innovative shows for the tire manufacturers and dealers.

LOCISTICS ASIA EX

Date	: 02 December 2016 – 04 December 2016		
Venue	: The Gujarat University Convention and Exhibition Centre, Ahmedabad		
Contact Info	: +91 98251 85566 / mktg@logisticsasiaexpo.com (Mohit Bhatt) +91 75670 75522 / logistics@logisticsasiaexpo.com (Krunal Upadhyay)		
Details	: Comprising of a 3 day International Exhibition and 2 days of Conference & Networking, Logistics Asia is an ideal platform for B2B, B2G and Exim related enquiries with business delegates & visitors, Government authorities, industrial associations, and international trade consulates amongst others.		

INDONESIA INTERNATIONAL INFRASTRUCTURE CONFERENCE & EXHIBITION (IIICE 2016)

Date	
Contact Info	
Details	

2016) 09 November 2016 – 11 November 2016 Jakarta Convention Centre +62 21 391 3037 IIICE now in its 6th year, is the largest national forum for government and private sectors to come together with the aim of building partnerships, sharing knowledge and cultivating the transfer of technology among decision makers driving Indonesia's critical national infrastructure.

 SAUDI TRANSTEC 2016 EXHIBITION & CONFERENCE

 Date
 : 05 December 2016 – 07 December 2016

 Venue
 : Dhahran International Exhibitions Center, Dammam

 Contact Info
 : +966 13 887 8537 / exhibition@sauditranstec.com

 Details
 : SAUDI TRANSTEC attracts top industry

 professionals and targets qualified transportation
 and logistics specialists at all management levels

 in small and medium-sized companies as well as
 large enterprises.



Trucking Mega-Trends at IAA

Held for the 66th time, the IAA Commercial Vehicles in Hannover, Germany, had a lot of innovations and improvements to show, impressing with a coherent message from the participating companies. Asian Trucker went to scoop up the latest from the show.

The IAA in Hannover, Germany, is the leading international trade fair for mobility, transportation and logistics. The origins of the IAA can be traced back for more than 100 years. In 1897, eight motor vehicles were exhibited to the public at the Bristol Hotel in Berlin. From these humble beginnings, a regular exhibition was established that, due to its high visitor turnout, had to be separated into an alternating exhibition of passenger cars and commercial vehicles in 1991. In odd-numbered years the IAA Commercial Vehicles in Hannover.

If there was ever a show where so many exhibitors were singing the same song from the same book, then it would have been this year's IAA in Hannover Germany. Opening its doors on 22 September, all major exhibitors preached the reduction of cost for truck operators by using high-tech with alternative fuels, new materials and disruptive new ways of doing business.

Standing amidst a sea of journalists on press day, one could almost feel the excitement when Scania unveiled yet again their next generation truck. Although officially launched in August

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and with special press events taking place in parallel in Sweden, this must have been the most attended press conference at IAA. With a development cost matching a small country's GPD of two Billion Euros, this vehicle was surely a show-stopper.

Moving on, Iveco, in partnership with Petronas, made heads turn with their Zero-Impact Concept Truck. But this concept was more than just a pretty face as it explores items like waste heat recovery via an on-board Rankine Cycle system to exploit exhaust gas as a heat source to recover energy. Besides that, Iveco had some other high-octane vehicles on display to wow the crowds.

Lamilux yet again came clad in innovations that would reduce weight for trailers while adding smart features. This time the company packs an innovative anti-bacterial Gelcoat and antislip surfaces. Here at the IAA we also had the chance to speak to the newly appointed representative of Lamilux handling the South-East Asia Region.

Meanwhile, being one of the leading companies in the sector of production of insulation materials for construction for over 50 years, Brianza Plastica just opened their second production site in Rovigo.

Besides the innovations to be seen, IAA 2016 was one big family gathering for everyone in the commercial vehicle industry. Naturally, there is tough competition between suppliers, customers, and manufacturers but you can see everyone is trying to make the world a better place to live in. When the demand is high, that is when you know you are doing something right for the industry.





One of Many News – Scania's Next Generation Truck

While groups of visitors crane their necks to see the new Scania truck, Christian Levin, Executive Vice President Sales and Marketing shares with us insight into other developments.

Clearly happy about the response and feedback for the new truck, of which there were four parked in the Scania booth, Levin takes the time to talk about other milestones that the company has achieved and in their sights. "For one, we are back in the Top 3 of truck makers here in Europe. This, I would say is a job done although we will not rest on these laurels. However, it is a clear indication that we are on track with our offerings," he told us.

Briefly touching on the possibilities offered with the new Scania truck, Levin highlights that the truck is highly customisable with some one million variations and an incredible one billion variations with the new truck. A true Lego system, a modular one, there might never be a case where two trucks are absolutely identical.

While the orders for Europe are to hold the position among the Top 3, the growth will come from outside of Europe. "There we still have a few markets we have to go in and make our presence felt." However, Levin said that "Of course, Asia is where will see significant growth." According to him, this will be an interesting scenario as the total number of trucks sold in many markets is shrinking, while Scania is managing to increase sales (As reported in Asian Trucker Malaysia Issue 30). "If your market share is less than one percent, then there is technically only one way: up". While being confident, Levin however cautioned that it also



takes service and dedicated people to make this happen. In many markets, such as Thailand, Scania typically enters with their buses, which pave the way for the entry of trucks later on.

"One of the most interesting markets we have is China. While we only sell some 1000 to 1500 trucks, there are now clients that run them some 300 000 Km per year. We even have a club for trucks that have surpassed the three million kilometre (!!) mark," Levin proudly reports. At the moment, Scania appeals to such premium clients and the company will continue to grow this market segment.

Customers in Asia can look forward to Scania investing in markets outside the home market in order to serve them better. A concept that has proved to be a hit with the owners is to have parts supplies and factories locally. In Bangalore for instance, Scania has set up a Bus factory. This means that lead times are drastically reduced and parts availability is significantly improved.

Currently, the next generation Scania truck is being rolled out in Europe and it will not be available in South East Asia for a while. Not standing still after the launch of the next generation Scania truck, the company will launch more application over the coming months and years. While only long haul applications were shown at the IAA, construction and distribution application are already in the pipeline. It is important to note that Scania understand the new truck to be a complete package with services build around it, especially digital ones that can help any operator gain more profitability in the long run. Besides this near future outlook, Levin identified some very clear mega trends for the industry. He named electrification, autonomous driving including truck clusters and connectivity as the key drivers for coming developments. With the latter, services can be better timed and executed. "Before we see autonomous driving to be fully developed, there will still be a lot of work, especially when it comes to legislation." Levin cites the decisions of cities rather than entire countries as the driving force of change, whereby cities like Paris have already banned Diesel. "This gives way to the development of alternative fuels, something that Scania has strong capabilities." To round off the firework of innovation shown at the IAA, Scania also has a couple of buses with their latest innovations on display.

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Presence is What Matters Most for Brianza Plastica

The demand for laminates with better characteristics have triggered an evolution that has made the Italian made Elycold and Elyplan fiberglass laminates, an optimal solution for recreational and temperature-controlled vehicles.



The IAA 2016 once again brings the massive crowd from all over the world to either source new and innovative components or to seek new ideas while being a part of this international commercial vehicle expo. We visited the booth of one of the leading companies in the field of fiberglass laminates for industrial and commercial sectors, the Italy based Brianza Plastica. At their booth we met Andrea Bollani, area manager, who has been working with the Company for four years. He is in charge of Eastern Europe, Australia and South East Asian Countries.

"For our business, we see stronger demand in the European and Australian markets. As we go further, we are aiming for China as a possible new market for the next growth phase of our business and we're looking with great interest to Asian market".

Brianza Plastica has three factories that produce handmade laminates, while a fourth site is relying on a higher degree of automation, as a consequence of the different product lines that are created in order to meet the requirements of clients around the world.

At the IAA 2016

According to Bollani, their booth is bigger than two years ago and it is a better opportunity for them to showcase all their various ranges of products. IAA is in fact a perfect opportunity to present and boost their brand names, Elycold and Elyplan and to present the new Elyplan embossed finishing, suitable for commercial vehicle sector. "We do have different products ready and we would like to launch them, for example our flexible materials, but we need that customers know that the Company is ready to give an immediate feedback to all requests. We will introduce the new PVC for flooring, a fantastic application for the recreational vehicle (RV) sector, rather than trucks. Apart from that, we are also working on a few new projects for the development of our business," he explained, keeping us in suspense as to what the Company has in store.

Challenges

Bollani has been handling various overseas markets and with that come insights that are highly valuable. For instance, he acknowledged that "Language is one of the challenges for us when introducing the product into countries outside Europe, such as China or Japan. It is almost impossible to meet and present to small companies that are not export oriented in such Countries." Communicating the benefits of Brianza Plastica's products become a hurdle if one does not have a local agent there. "Naturally, we are always on the lookout for qualified local agents for better communication between all parties."

"We are also looking forward to be part of MCVE next year in Kuala Lumpur. It is definitely a good opportunity for our business to grow," he ended. **7**

Iveco presents its Z TRUCK concept at IAA 2016

Presenting a revolutionary Zero Impact study at this year's IAA, Iveco also looked back at a highly successful year. Confidence boosts came from orders for the new Stralis and Trakker from high profile customers that have been testing the vehicles over the past month.



t the booth we met with Koray Kursunoglu, Truck & Bus Business Director (Head of IVECO) South East Asia & Japan Region,. ", being one of the full-line manufacturer we have wide range of products from light commercial vehicles to heavy commercial vehicles For IAA 2016. Here at our booth, we have our latest Z Truck concept which was unveiled yesterday; we also have a number of our prime movers, buses and transport solutions displayed inside and outside in the open air areas. These types of vehicles are the solutions our customers seek," he told us in an exclusive interview at the IAA.

"For South East Asia, we started to restructure our organization and presence in the region, therefore at the moment we are growing year on year because demand is increasing. For example, in terms of retail sales to compare 2015 and 2016, we have increased in sales more than 80%," Kursunoglu stated.

"IAA is an international exhibition; hence this is the right platform for us to connect with our customers and public, especially to showcase our new truck for the future that aims at zero emission, zero consumption, and zero accidents. We also brought our customers and distributors from Korea and Singapore. Korea is using Euro 6 and Singapore is going to Euro 6 in 2018. Hence, this is a good opportunity for them to come and see what we can offer to complete the product range offered in either country."

Following the launch of the gas powered Stralis, The Iveco Z-Truck is a logical evolution of this approach. Using optimized Liquefied Natural Gas (LNG), the truck is also designed to

eliminate stress and wastes of time for the driver. The cab, although very futuristic looking, can be completely reconfigured depending on the activities during the day. The cab will either be an office or a resting area. The pioneering design has resulted in some 29 patents that have been filed. Again, as with the Stralis, Petronas has been a key partner in the development as is apparent in the livery of the vehicle on display.

Another new truck on display was the Astra as an off-road application. Offering a 50 ton GVW, the truck can handle more payload thanks to a lowered centre of gravity. The truck will have now body subframe while still having the same robustness as its predecessors.

Also exhibited was the "The Truck the city likes": the Eurocargo range was crowned "International Truck of the Year 2016". On the stand, lveco will introduce the new Euro VI C compliant ML160 (16t) in the new full air suspended version and display the eco-sustainable Natural Power version that runs on Compressed Natural Gas (CNG).

James Koh, Assistant General Manager, Sales, Goldbell Corporation was present during the IAA. Goldbell is a market leader in industrial vehicles leasing: commercial vehicles, passenger vehicles and industrial equipment. They have been an authorized distributor for IVECO since 2009.

Continous Innovations and Intense Drive from Lamilux

By now one should be used to Lamilux being a powerhouse of innovations. Again, at the IAA 2016, the company comes through with the presentation of new solutions, coupled with staff driven to go the extra mile.



Taking us through the innovations is Mr. Christoph Meiler, Sales Manager for innovative fibreglass solutions. The first product Lamilux is featuring at the IAA is their antibacterial solution, which works with all their Gelcoats. Through this, 99.9 % of bacteria are killed upon contact with the surface. Lamilux's AntiBac is tested and certified and can last decades. What is interesting is that the product was initially developed for applications in the medical industry. "AntiBac was conceptualised for mobile hospitals. I point out that the bacteria are permanentely killed upon contact," said Meiler. For the commercial vehicle industry, Anti-Bac is suitable for reefer trucks and any transport solution that is dealing with food. "We have already gathered some good feedback from companies active in food transportation," he added.

Next he shows us the Lamilux High Strength X-treme Gelcoat. Through special ingredients, this laminate offers an extreme flexural strength, tensile strength and modules of elasticity. Meiler said that "You can apply this directly on a frame, without the need for a plywood frame. That obviously saves weight." Adding to that, Lamilux is showing their solution for anti-slip. "Here we can immediately make use of the laminate, unlike in the traditional production method, which required the material





to dry for two to three days. The time savings in the production are tremendous when using our product." One key trend Lamilux has identified is the departure from steel and other metals when building commercial vehicle bodies. The industry is looking for lighter weights, which offer higher payloads, while making better use of resources.

Here at the IAA we are also meeting with Mr Louis Mary, Southeast Asia Sales Manager. He joined Lamilux in the beginning of the year to handle the South East Asian market. Previously he was already in the composite industry, however his scope of work was not specifically on the materials side.

Focus South East Asia Market

"For me, it was an interesting market to start with in the sense of diversity and dynamics. There are quite a few countries in Asia, obviously with different languages, different rules and different habits, especially when it comes to commercial vehicles," is a short summary he has about his initial experience.

"From our perspective, we see a lot of potential for our business growth in the market. We slowly shift the mentality to accept innovative changes and as we expected, some countries are going slower than others, but nevertheless, we will get there eventually."

"As for my short experience, I could say, Thailand is very receptive, as is Vietnam and Singapore towards our products. He continued to say that "Our aim is to add value to the market with our high quality products and backing them with support because we are based in South East Asia. Apart from that, we strive to deliver a better support to our customers than our competitiors,"

"My job here at the IAA is help expanding our network plus meeting existing and new customers. I do my best in presenting our new products to convince our customers to give us a chance to prove their value."

ZF Enables your Truck to See, Think and Act

What may sound to some like far away science fiction is already reality at the ZF where the German company offered a view of things to come in the very near future at their Global Press Days. Stefan Pertz takes his hands off the wheel to report from the event.



edium duty trucks, heavy duty trucks, buses of various types, a crane and the "ZF Innovation Truck" were all lined up at the ZF-owned test track near Aachen, Germany. Also joining the group was the lveco Stralis, complete with "TraXon" gearbox, which had recently been launched in Madrid. Except for the crane, all vehicles were available for test drives to demonstrate how ZF products improve safety, comfort and fuel economy. The one topic that dominated the event was autonomous driving and there was plenty of it.

Globally, ZF identified key megatrends and is working towards fulfilling the needs arising from them: Efficiency, Safety and Automated Driving. With the latter, there certainly exists ambiguity, but ZF's management believes automated driving will happen over time.

Trucks Start to See Think & Act

At a number of stations ZF demonstrated various aspects of their innovations. First off was the evasive manoeuvre demonstration, whereby a truck came barrelling down a track with a car parked in its way. The truck would then break and execute an evasive manoeuvre to avoid a rear end collision.

The steering system interprets a sudden "pulling" of the steering wheel (response to driver warning) at Level 1, as a command to start the EMA. During automated control, the software constantly calculates the optimal evasion route and adjusts the steering angle accordingly. The software algorithm continuously monitors and compares the calculated and actual steering trajectory. The integrated roll-over protection function in the EMA is adapted for such extreme driving situations.

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This function is integrated into the ESC system and the lateral acceleration sensor through networking and is a feature in the ZF Innovation Truck 2016. Incidentally, the driver can override the EMA at any time during the autonomous evasive manoeuvre by simply taking control of the steering wheel, brakes or throttle.

Sensors are Key

Key to this solution is the combination of sensors – a camera sensor mounted on the front windshield accurately monitors road markings (S-Cam), and a radar sensor (AC1000) measures distance. Later on, everyone was asked to ride along in the truck and to experience the same scenario from inside the truck.

It is here where the critical questions came up and ZF explained that fully autonomous driving would still take some work on the algorithms. For instance, driving on a highway is a relatively un-complex scenario. There are no intersections, no pedestrians nor tight corners for example. However, there are many more sub-events to consider in urban settings. Simply take the erratic behaviour of pedestrians that needs to be factored into the system. However, ZF is gathering insight into all of these and is adding them to their programmes.

Self-Drive Sessions

Next up was the station whereby attendees could drive a range of vehicles themselves. ZF demonstrated how gearboxes make a difference when it comes to driving comfort and also how they reduce energy consumption by using start-stop functions for commercial vehicles.

One of the highlights to drive must have been the Kamaz. Not only because it is a rare occasion to be driving this brand, but also because of the contrast between the silky smooth ZF drivetrain and the labour intensive original steering. Keeping the (unladen) truck pointed in the direction the driver wants to go takes a lot of biceps.

Finally, those who attended the Stralis launch, but didn't have a valid driving license or a tacho-disk, here they could give the lveco a go. On the test track, the gearbox delivered on the promise made during the launch. Feeling the acceleration with the gears being changed swiftly and smoothly surely makes for a good sales argument.



Reverse Thinking

Reversing a truck with a trailer is the master discipline for truckers. Docking stations in warehouse traditionally feature rubber buffers which the trailer is backed up to. A small jolt tells the driver that he has indeed closed the distance and that the trailer is now flush against the wall.

Here, ZF offers a solution that will not only render the rubber buffers obsolete, but also makes the life of the trucker easier in addition to avoiding dangerous situations when moving backwards. Stepping out of the cab, a driver will use a tablet computer to drive the truck via remote control. This allows the driver to check for any obstacles s/he wouldn't see from inside the cab. Getting closer to the loading bay, the truck starts to see, think and act by measuring the distance between the wall and the trailer. Once the trailer is close enough to the wall, the trailer and truck combination brakes automatically, avoiding the collision between the vehicle and the loading platform. This is all done while the driver monitors the progress walking next to the truck.

Hands off the Wheel

The next demonstration was probably not for the faint hearted as ZF lined up a tiny electric powered vehicle in front of the massive Innovation Truck. Bolting off is the car with the truck in tow. Turning out of a roundabout and onto a long straight, the truck driver takes his hands off the steering wheel and the feet





off the pedals, engages the truck in self drive mode. And it selfdrives! When the car slows, the truck will keep its distance and upon taking up speed, the truck also accelerates.

As you learn in driving school that your hands have to be in the five past eleven position whenever possible, this can certainly spook you. Full stop! And the truck stops and takes up speed again as the car floors it. Not only does the truck mimic the speed of the car, but it also follows the road with its bends and curves. Meanwhile, the highly developed gearbox makes accelerating the mass of some 40 tonnes look like child's play.

Naturally, it is somewhat simpler to make autonomous driving work on highways as there are fewer exceptional events. ZF acknowledges the complexities of urban settings as there are many more things to consider, for instance pedestrians, oncoming traffic and playing children with balls bouncing onto the street. These situations need to be fully understood first and integrated into the system before one can really take the autonomous vehicle into these settings.

New orientation

Originally named "Zahnradfabrik Friedrichshafen" (Gear manufacture Friedrichshafen) ZF has long since evolved into more than a company providing mathematically designed hitech gears. This is apparent in the logo we know today as it only states "ZF". While the brand of the company may have lost a few letters, the business has added a wide range of units. On display at the press event were gearboxes alongside brake systems, suspensions, steering systems and electric drive trains.

Speaking to management representatives, they explained that there are good reasons for the diversification. Firstly, ZF has always seen itself as a company driven by innovation. Secondly, in many vehicles, and not only commercial vehicles, the components need to be working together harmoniously. If one is to provide both, drive train, suspension and brakes for example, this is ensured. "We have evolved, and today the name ZF stands for top quality in everything we do and our global clients realise that," said Peter Lake, Member of the ZF Board of Management.

Asian Perspective

ZF has a presence in many countries across Asia Pacific, i.e. Australia, China, India, Indonesia, Japan, Malaysia, Philippines, Singapore, Taiwan, Thailand and Vietnam.

Does one need to adjust products according to needs in different parts of the world? After all, topography, missions, climate and uses of the trucks are different. ZF answers these issues by working with the truck OEMs and in consideration of the environment.

From the beginning, in the development phase, parts or components such as gearboxes and axle systems are already designed with a myriad of calibration and adjustment options built into them. This means that parts can be adjusted without having to alter the fundamental structure of the part to meet the needs of specific markets. It also means that there is a great amount of flexibility available for the OEMs.

Adopting to Needs

When developing parts, the severity of climates and uses will also be considered. For example, in the subtropics, humidity will require special attention. When it comes to further improving efficiency, ZF cautions against being overly confident that there is still room for improvement as this is also governed by the law of diminishing returns. At some point, it may not be worth the effort anymore as there is too much added complexity and cost in order to achieve further improvements in one area. However, ZF is committed to a Kaizen approach of continuous improvement.

Five steps of autonomous driving

To classify the various stages of being fully autonomous, ZF has categorised "Driving into five categories:

ASSISTANCE

- 1) Non-Automated: Driver only and/or assisted Driver acts him-/herself
- 2) Partially Automated: Driver monitors the automated functions

CHAUFFEUR

 Highly Automated: System monitors its functional limits and passes responsibility back to the driver when it reaches its limits

PILOT

- 4) Fully Automated: System can master all tasks itself within a specified use case
- Driverless / Autonomous: System can master all tasks in all situations itself. No driver required.

Peter Lake has some additional input as he is responsible for ZF Corporate Market, ZF TRW Sales and Business Development, Region Asia Pacific. "We are working mainly with the European, US-American, Korean, Japanese and some of the Chinese truck OEMs. However, it is up to them to take up the options we offer. Adoption is driven by the vehicle manufacturer."

Hybrid or Electric

Adoption depends on the OEMs as they would know the markets best, however, Lake sees that Japan is highly advanced, with the goal to use the 2020 Olympics to really drive autonomous driving for public transport.

ZF Asia Pacific

ZF Asia Pacific Pte Ltd was established in Singapore in 1987. It has served as the hub for ZF Services in the Asia Pacific region for more than 25 years, and has set-ups in 12 countries across the region, i.e. Australia, China, India, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, Thailand and Vietnam. The Singapore office is renowned for its' competency in supporting customers in the OE, parts sales and workshop service business; serving both the automotive and marine industries. It is also responsible for the aftermarket product brands of ZF and provides a complete range of aftersales services, supported by its own comprehensive service network and extensive web of dealers and distribution networks across the region.







Some adaptation of new technology is also limited by what is available. While buses nowadays could be fully electric, long distance truck applications are currently not possible to realise with electro mobility. However, Lake sees hybrid vehicles in trucking first. The direction is clear, with the future being electric and autonomous driving though.





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The Iron Knight Sets Two World Speed Records



Volvo Truck's Iron Knight, with its I-Shift Dual Clutch, has set two new world speed records for trucks.

Volvo Trucks' The Iron Knight is the world's fastest truck – twice over. It has beaten the speed record in the standingstart 500- and 1000-metre categories. The recordbreaker is custom-built in every respect apart from the engine and the series-manufactured I-Shift Dual Clutch transmission. Volvo Trucks' The Iron Knight, driven by Boije Ovebrink, now holds the official speed records for the 500- and-1000 metre distances.

Innovative Design

During their work on the truck, an expert team from Volvo Trucks found innovative ways of uniting technology with design. "This shows that our I-Shift Dual Clutch transmission has enormous potential and that it does not let you down under extreme conditions. The fact that the world record-breaker uses the very same gearbox that is found in our series-built FH trucks is something that we're really proud of," says Claes Nilsson, President and CEO of Volvo Trucks. With an average speed of 169 km/h and a time of 21.29 seconds, The Iron Knight beat the international speed record for 1000 metres from a standing start. It also beat the corresponding record for the 500-metre distance, at 131.29 km/h and 13.71 seconds. The record run was carried out at a closed-off test track in northern Sweden. At the time of publication, the records are being reviewed by the FIA, the international motor sport association.

Experienced Driver

"Specialists from several different Volvo Trucks departments worked closely together to develop a truck with unsurpassed performance. Apart from Volvo Trucks' powertrain, which is the heart and soul of The Iron Knight, we've hand-built the truck from the ground up. The fact that we succeeded in securing not just one record but two is absolutely amazing," says Olof Johansson, a technician at Volvo Trucks. Behind the wheel of The Iron Knight was Boije Ovebrink, who has more than 30

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years' experience of both car and truck racing. He has previously beaten five speed records and in 1994 was European Truck Racing Champion.

"Volvo Trucks' The Iron Knight can be summarised in one single word: perfection. It's beautiful to look at and is an unparalleled powerhouse when you floor the accelerator. This is the third record-breaking truck I've driven, and I can't think of a better follow-up to Wild Viking and Mean Green," says Boije Ovebrink.

How it was Done

Here's how the record runs were carried out: The runs were carried out at "Skelleftel Drive Center" a former airfield outside Skelleftel in northern Sweden. The speed record was monitored and approved by the international motor sport association, the FIA. The truck covered the distance in both directions. Based on these two runs, the average time and speed were calculated. The record result that the FIA presents is the average speed of the two runs.

Volvo Trucks' previous record-breaking trucks – 2007: 'The Wild Viking' (1600 hp) beat the world record for the standing-start 0-1000 m distance, with an average speed of 158.8 km/h. – 2010: The record for the same distance was beaten by 'NH D16' (1800 hp) which reached an

average speed of 166.7 km/h. – 2011: The hybrid truck 'Mean Green' (1800 hp diesel engine plus a 300 hp electric motor), set new records for 0-500 and 0-1000 metres from a standing start, at an average speed of 115.3 km/h and 152.2 km/h respectively. – 2012: 'Mean Green' took on the 1000 metre flying-start category and set a new record with an average speed of 236.6 km/h.

The Technicals

The Iron Knight, with 2400 hp, 6000 Nm of torque and weighing 4.5 tonnes, has a power-to-weight ratio above 0.5 hp/kg. The mid-mounted engine is a significantly modified D13 unit with water-cooled intercooler and four turbochargers. The I-Shift Dual Clutch transmission maintains torque delivery during gear changes. Apart from a reinforced clutch (the discs and pressure plates are made of a sintered material), The Iron Knight uses the same gearbox that is fitted to series-manufactured Volvo FH trucks. The electronics were kept to a minimum to lower the vehicle's weight. The software has been re-programmed to permit the high performance.

The cab is aerodynamically optimised, made of fibreglass. The side-skirts have large air intakes to supply the engine with cooling air. During the record runs The Iron Knight reached a top speed of 276 km/h.

Bosch Brings Intelligence to Tomorrow's Cab



In the driver's cab of the future all data a driver needs will be available on the central tablet display at the swipe of a finger. The future is now.

Nowhere is it truer that time is money than on construction sites. Manoeuvring around the site, unexpected delays caused by excavator and wheel-loader accidents or breakdowns – all this costs time and hence money. "We take a machine that weighs several tons and manoeuvre it with millimetre accuracy, eight hours a day. Even the tiniest detail has to be right," says the wheel-loader operator Roland Ehrensberger.

That is why, at this year's bauma trade show, attracted around 580,000 visitors from 200 countries, Bosch presented a driver's cab developed especially for construction machinery. At this driver workplace of the future, vehicle operating data can be analysed to the nearest second on a tablet display.

Sensors Make it Safer

And that is not all: ultrasonic and video sensors monitor the vehicle's surroundings more thoroughly than any rear-view



mirror, which prevents downtimes due to accidents. These surround sensors are an important step in the process of giving construction vehicles more intelligence, and so making them even safer.

"Bosch is turning construction machinery into technology showpieces," says Johannes-Jörg Rüger, president of Bosch's newly founded Commercial Vehicle & Off-Road unit. "The megatrends of automation, electrification, and connectivity don't stop at the gates of construction sites or mines." In the



future, construction machinery will automatically carry out certain tasks, with drivers scheduling tasks at the connected interface in their cab.

A New Bosch Unit

For the first time at bauma 2016, Bosch presented systems solutions for construction machinery. At the start of this year the supplier of technology and services set up a unit specifically for this field. "As a systems supplier, we want to offer everyone the solution they need," Rüger says.

The unit's portfolio comprises all the Bosch products and services that are relevant for construction machinery: "Modern sensor systems, cameras, and display technology improve the driver's workplace, as well as increasing safety and hence also productivity," explains Andrew Allen, head of the unit's Construction business.

Bosch Joins Joint Genius CAB project

Bosch has worked with partners to integrate its products into a futuristic driver's cab. The newly founded Cab Concept Cluster project brings together a network of renowned suppliers, the Technische Universität Dresden, and VDBUM, the German association for construction, environmental, and machine technology. The project's aim is to demonstrate to manufacturers of construction machinery, agricultural machinery, and industrial forklifts how much potential there is for efficient system integration.

This concept has already notched up its first success: the Genius CAB driver's cab won the bauma innovation award in the Design category.

Which Components go into the Driver's Cab?

The body computer is the central element in the electronic concept. It reduces the number of electrical connections, relays, and fuses. This not only saves on material, but also makes circuits less complex, which in turn greatly reduces error rates.

The body computer's programming can be customized to suit each customer's applications. In the Genius CAB, the body computer performs central control of the sensor and actuator systems via CAN (J1939), LIN, or directly.

The Bosch direct wiper drive adjusts effortlessly to the prevailing weather conditions – whether showers or hard rain. What is more, the wiper drive can be flexibly adjusted to fit different cabs.

Eliminating the Side Mirror

Bosch side-view mirror replacement displays give drivers a digital look over their shoulder. Integrating the displays into the vehicle interior means there is no need for side-view mirrors. Particularly in the working environment of a construction site, reducing blind spots significantly increases workplace safety.

An ultrasonic sensor system can monitor the environment when human eyesight is not enough – when visibility is poor, for example, or even at night. These sensors give drivers unobstructed all-round vision, which further heightens operating safety. The display shows drivers any obstacles, so they can react accordingly. Measurement ranges can be defined individually for each sensor.

The Interface is a Genius

The central user interface in the Genius CAB is the DI4-mid display and terminal, which can be operated using buttons or via the touchscreen. With a 7-inch display, the DI4 is a universally applicable control system that is freely programmable using the Codesys V3.5 development environment.

Another interface is the 4THE5 joystick. In excavators, this controls functions such as shovel movements. At the same time, the joystick is an important interface to the DI4-mid terminal, since its push buttons can be used to activate terminal functions including the windshield wipers, side-view mirror replacement system, and cab lighting.



Shell Singapore Unveils its Latest Diesel Formulation

Shell has launched a new diesel formulation with Active Efficiency Ingredients, designed to improve engine efficiency, which can help your vehicle use fuel less quickly.

Shell Singapore has launched Shell FuelSave Diesel, marking the introduction of its latest diesel formulation to the market. The new fuel replaces its predecessor, Shell Diesel, at no added cost. With Active Efficiency Ingredients, Shell FuelSave Diesel is formulated to help improve engine efficiency which in turn can help improve fuel economy. Shell FuelSave Diesel contains special detergents designed to maintain engine condition by helping to prevent the build-up of injector deposits.

We Understand Fuel

Aarti Nagarajan, General Manager, Retail Sales and Operations for Shell Singapore, said, "Having been in Singapore for 125 years, Shell understands that fuel is one of the biggest cost factors for fleet businesses here. We are committed to providing quality fuels, such as the Shell FuelSave Diesel, to help customers improve their fuel efficiency. It is our hope that the new Shell FuelSave Diesel will help our partners make the most of their



fuel, regardless of whether they're a large, established fleet, a newly established SME business or an everyday road warrior like our taxi drivers.

"Shell FuelSave Diesel," Ms Nagarajan continued, will provide fuel economy for both light and heavy duty commercial vehicles."

The launch of Shell FuelSave Diesel follows closely after the opening of Shell Tuas – the first service station in Singapore to be opened in the Tuas South industrial area. Shell Tuas features four high speed diesel pump, which are specially catered to the growing industrial community and fleet customers in the neighbourhood.

Shell FuelSave Diesel is designed to:

1.Ignite and burn more effectively than regular diesel, helping produce more efficient combustion in the diesel engine

2.Keep diesel injectors clean by preventing the build-up of deposits

Fuelling their Passion

Shell Fuel Scientist, Mae Ascan, added, "At Shell we are passionate about helping the world's motorists get more out of their fuel. This is why we are committed to making better fuels for the changing needs of our customers and their vehicles. From Shell Dynamin, introduced back in the early 1900s, Shell has continuously evolved its fuels that has led to the development of Shell FuelSave Diesel – our most advanced diesel formulation in Singapore yet." Since 1977, Ms Ascan stated, Shell has spent \$1 billion dollars on fuel innovation."

Aside from quality fuels, Shell is constantly looking out for ways to maximise convenience for fleet customers. The Shell Fleet Card is one such example. It offers cashless payment for drivers, a clear and simple invoicing system for the entire fleet, tailored and reliable security features as well as a convenient online account management system.

To find out more about Shell FuelSave Diesel, visit www.shell. com.sg/fuelsave-diesel.

Digital Service Booklet Available Online

As the first truck manufacturer to do so, Mercedes-Benz is introducing the Digital Service Maintenance work undertaken on a truck will henceforth be digitally documented and always accessible.

The world of connectivity is now also extending to the service booklet as evidence of maintenance work undertaken: from October 2016, Mercedes-Benz Trucks introduces a Digital Service Booklet (DSB) in 30 countries. This replaces the conventional paper-based service book entries and ensures seamless online documentation of all maintenance work undertaken. The booklet will be available for Mercedes-Benz Actros, Antos, Arocs, Atego and Econic, and its use brings benefits for the customer and the workshop in equal measure.

Fully Documented

For truck customers, a visit to the workshop normally involves the loss of valuable time that could be spent carrying goods. At this point the Digital Service Booklet becomes relevant. Of particular note here is that all maintenance and servicing work on the truck is now fully documented in digital form, while a print-out can be provided to the customer at any time upon request. This immediate and comprehensive data transparency makes it easier for the workshop to log the job as well as to plan repair and maintenance work or emissions and safety inspections, and thus shorten the stay in the workshop. For trucks travelling on transnational routes, far away from the home workshop, the Digital Service Booklet also provides valuable assistance. Even in another country, it is a straightforward step for workshops to access the Digital Service Booklet in their own language in order to be able to see relevant data and information. The system can be used by all authorised Mercedes-Benz service outlets, but also by independent workshops who have previously registered to do so. This brings clear benefits above all to authorised fleet operators, who are able to access the complete service history of a vehicle online. This is stored for the full operating life of the vehicle.

NOVATION

Adds Value

The Digital Service Booklet also proves its worth when a vehicle is sold: the transparency it gives over completed maintenance work, and its seamless tracking of the vehicle's mileage, provide protection against attempts to manipulate data – the maintenance history remains verifiable, thus adding to the resale value of the Mercedes-Benz truck. Even in the event of a service report being lost, any authorised Mercedes-Benz workshop is still able to access the information at any time and provide information as necessary.



Taking Trucking into a Brave New World

Swedish truck manufacturer Scania is exploring numerous options for making trucking more sustainable and safer.

Utside Gävle Sweden, the last preparations are being made at the test strip for an electrically powered truck from Scania operating under real traffic conditions. "It's amazingly quiet," says test driver Therése Persson.

Just days before the official inauguration of the world's first test strip for electrically-powered trucks under real traffic conditions, the test site is bustling with activity. Power has just been switched on in the overhead lines above the twokilometre stretch on the E16 motorway outside Gävle, where an electrically powered truck from Scania is running silently back and forth. "It feels fantastic that the electric truck is now up and running, operating under real traffic conditions," says Christer Thorén, Technical Project Manager at Scania's Hybrid Systems Development unit.

Connect & Disconnect

During the two-year test period, the electric truck will perform normal transportation assignments for Ernsts Express, a midsized Swedish logistics company.

The truck can connect to and disconnect from the overhead wires while in motion. When the truck goes outside the electrically-powered lane, the pantograph (the mechanism which connects the truck to the overhead wires) is disconnected and the truck is then powered by the biodiesel fuelled engine or a battery-charged electric motor.

Without Greenhouse Emissions

"The first time I drove the electric truck I didn't feel much difference when it comes to the actual driving. But in electric mode it gets totally quiet in the cab, that's amazing," says Persson, one of Ernsts Express' drivers.

Ernsts Express CEO Roger Blom: "For us at Ernsts Express this is a fantastic project to be part of, to drive a truck without any emissions of greenhouse gases. So far the technology works really well. It's amazing to glide along in this truck in complete silence."

By Scania and Siemens

The electric truck has a pantograph power collector that is mounted on the frame behind the cab. This conductive technology has been developed by Siemens in collaboration with Scania.

Pia Nilsson, Project Manager at Siemens Sweden, says: "Our proven technology from railways, together with Scania's innovative solutions for the transport sector, means that together we can find new exciting solutions such as this electric road and our own eHighway concept. One of the major benefits of the technology is that it can be implemented on roads that already exist."

Scania's Christer Thorén is pleased with Siemens cooperation on the project: "Short term, our expectation is that during the twoyear test period we will be able to show that this is a good and reliable technology, and that it works under real-life conditions, 24-7, summer and winter."


Autonomous Driving

While Scania researches ways of making trucking greener it is also making efforts to develop autonomous vehicles. The Swedish truck manufacture has joined new international research into human user's interaction with autonomous vehicles and will play a key role in new research dedicated to finding a holistic approach to autonomous driving by 2020.

The project, known as ADAS&ME, is a Euro 9 million EU-funded research programme, involving 30 partners from 11 countries. The focus of the research is how human users interact with autonomous vehicles.

Work began in September, and will be led by Sweden's National Road and Transport Research Institute (VTI). Scania is to play a leading role alongside car manufacturer Ford and car safety systems company Autoliv.

Monitoring Driver Behaviour

Unlike previous research, including Scania's own impressive work on autonomous driving solutions, the focus of this particular research is the driver, and in particular how the user interacts with the autonomous vehicle. Researchers are to develop systems that can detect when the driver is tired, ill or under the influence of strong emotions – such as anger – that can affect the ability to drive.

Among the technologies that will be trialled are sensors that can detect how dilated the user's pupils are, changes to their body temperature and changes to the direction of the driver's gaze.

The Human Component

Scania's role is to showcase the results of the project in one of the five key demonstrations. Within their Long-Haul Trucking demonstrations, Scania will present new solutions for establishing a safe, efficient, and trustful relationship between drivers and their trucks.

It's this 'human touch' to the technology which excites Stas Krupenia, the Cognitive Engineer who has played a leading role in Scania's two years of preparations for the programme.

"We now have systems that help us conserve fuel, protect the environment, and avoid obstacles on the road, but until now, the human component of autonomous driving has not been given sufficient



consideration. This research will help us to find out the capability and constraints that people have as they relate to the technical system."

Trusting the Technology

Some might ask whether the whole point of autonomous driving is to take away the need for human intervention, but Stas turns the question on its head. "Scania considers the human to be a key player in proficient autonomous driving solutions. There's still a person in there, and this is about giving the user better support when it is needed," he explains.

"You have to be able to trust the technology to which you are delegating responsibilities. People have to be able to intervene if necessary, but if the system is not communicating properly with the human driver, then the driver might not trust the decision the vehicle is making and choose to intervene at what is potentially a wrong or unsafe moment."

Horizon 2020

For Anna Anund, head of research at VTI, the capabilities of autonomous driving solutions are not in doubt – it's about how we understand and interact with them. "It's not the technology that is the concern. The big thing is to find out how technology affects humans," says Anund.

The final demonstration of the technology will come in 2020 at the Idiada test track near Barcelona, Spain, which will mark the fulfilment of the Horizon 2020 project.



Safety is a Prime Concern of the Trucking Industry

Technology is improving the safety conditions of the trucking industry, but the focus still must be on the driver.

The Singapore Workplace Safety and Health (WSH) Conference 2016, with the theme "Total WSH: The Future of Our Workplace", was held in August at Suntec Convention and Exhibition Centre. The conference highlighted the importance of adopting a holistic approach towards managing both safety and health risks in the workplace. For the trucking industry the workplace is in a truck, and on a road or worksite. Safety is an important issue to the industry as it not only affects its workers, but the public in general.

It's the Driver

One of the conference's speakers, Dr Walter Eichendorf, President of German Road Safety Council (DVR) and Deputy Director General of German Social Accident Insurance (DGUV) says that many accidents could be avoided because the driver is the cause of most of them. "The reason for 90% of traffic accidents in most countries around the world, caused by trucks as well as passenger cars, simply is the driver," he states.

If this is the case, what more can be done to make drivers better/safer drivers, and therefore lower the accident rate? Dr Eichendorf suggests: "To make better/safer drivers sound



education is needed. A continuous training and further education helps to ensure the driver's skills are kept up to date. Drivers should be in possession of modern driver assistance systems. A smart infrastructure supports drivers."

The Safe Driver

Dr Eichendorf points out some of the things drivers can do to become safer drivers. "First of all," he notes. "Never drive under the influence of alcohol or drugs and never drive when you are tired."



What is a 'safe driver?' According to Dr Eichendorf, "Safe drivers practice anticipatory driving and are always aware of possible mistakes of other drivers. Safe drivers continuously keep their attention focused on surrounding traffic and are not distracted by devices such as mobile phones while driving. Safe drivers are familiar with the latest rules and regulations."

More on the Roads

It is not only the trucking industry that can help reducing trucking related accidents, but the public has a role to play too. "All road users should show consideration towards each other. They should pay particular attention to trucks as they need more space on the road, more time to decelerate and lots of space when turning into a road. The social status of truck drivers needs to be increased. Truck drivers are equal partners on the road.

Dr Eichendorf continues, "In Germany the number of truck accidents in comparison to the distance travelled has decreased, even though the public awareness is a different one. But this picture differs from country to country. We do see increasing accidents particularly in cities in which trucks, and at the same time motorbikes, are becoming more frequent. Truck / motorbike accidents very often are severe accidents.

A Volvo Value

From its inception safety has been very important to Volvo. Asian Trucker asked Mr Olivier Metzger, General Manager of Volvo Trucks Singapore why this is so. From its inception safety has been very import to Volvo. Asian Trucker asked Mr Metzger why this is so.

"Safety is Volvo Group's core value and one of Volvo Trucks' key brand attributes," the General Manager replied. "Our vision is that no Volvo Trucks will be involved in a traffic accident and safety is the guiding principle for all our design work.

Safety Savings

"Everyone wins when people and safety comes first. Safe vehicles and drivers mean high uptime levels, increased productivity and a good reputation for our customers. A high level of road safety reduces the risk of injury for the driver and other road users, but also the costs of repairs, high insurance premiums, lost income and lost businesses. Above all, better road safety is a moral obligation. Solutions do exist and it is our aim to apply them and constantly improve on them.

"We are a pioneer in safety innovations," he says of Volvo Trucks. "'Safety' is deeply rooted in each and every Volvo product. It is part of our heritage and is melted in our corporate culture."

Significant Technology

There are many technological advancements that have been made by Volvo, which one does Mr Metzger think is the most is the most significant? "The most significant advancement that we have made to the world would be the three-point seat belt which was invented in 1959. Volvo Trucks gave the patent to the world and we have saved millions of lives because of the seat belt."

Volvo has also made other contributions to safety: "We were also the first to introduce other safety features in the recent years such as the FUPS - Front Underrun Protection System," Mr Metzger points out. "It significantly reduces the risk of a car becoming wedged under the front of a truck in a head-on collision. Volvo Trucks has been utilising cutting-edge technology to help reduce accidents and injuries, and improve safety."

Mr Metzger believes there are more developments to come. "We are in an age that many call the technology revolution. Technology has not only improved our lives, but it has also changed how we think, and also affects our relationship with the technology. At Volvo Trucks, we create technology solutions to achieve our goal of "zero accidents." The number of safety technologies in fleets in the future will increase as fleets recognise drivers as their most important asset.

More Developments to Come

"An intensive development drive is underway to identify technical solutions within various areas of safety associated with

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accidents involving heavy trucks. These solutions include systems for measuring the driver's alertness and systems that brake automatically when obstacles appear ahead or that warn the driver when vehicles or people appear in the truck's blind spots. One of these systems is the Driver Alert Support, an alarm that uses cameras directed at the driver's eyes to constantly measure the driver's level of alertness.

"The Driver Alert Support can be combined with the existing system, Adaptive Cruise Control (ACC), Mr Metzger states. "ACC uses radar to measure the distance to the vehicle in front and applies the truck's brakes if it gets too close. Further development of ACC aims to design an emergency braking device that assists the driver to brake in the shortest distance possible in the event of an obstacle suddenly appearing in front of the truck.

Reducing Risks

Volvo Trucks has also started the "Non-Hit Car and Truck" project to develop new technology which can dramatically reduce the risk of accidents caused by limited field of vision. Mr Metzger elaborates: "It enables a vehicle to do a 360-degree scan of everything in its surroundings. The vehicle evaluates information from multiple sources simultaneously, functioning very much like the human mind and suggests actions to avoid any accidents such as collisions with pedestrians, cyclists or other vehicles. If the driver does not respond to the suggested actions, the steering or braking system can be activated autonomously. The technology which is now in the test phase and may become reality five to ten years from now. Our goal of zero collisions will continue to drive the advancement of future safety systems."

Recently there have been steps taken to have a self-driving truck. Will they be safer than driver driven trucks? "We believe selfdriving trucks can pave the future for transport solutions. Volvo Trucks has been conducting research into autonomous vehicles with the core purpose of increasing customers' productivity while improving fuel efficiency and safety." The GM continues, "We see how our customers have benefitted from our active safety systems today and we are confident that the self-driving trucks can create sustainable transport solutions and improve traffic safety, benefiting both customer and society as a whole."

The Road to Improvement

Mr Metzger agrees with Dr Eichendorf about the source of most accidents. "According to Volvo Trucks research and safety reports, about 30% of cases could be attributed to the environment, slippery roads, bad visibility among other factors. Only 10% of accidents are attributed to technical issues related to the vehicles involved; tyre explosions or poor maintenance for example. However, in 90% of cases the major contributing factor is human error. A significant proportion of accidents are caused by a combination of the three categories. For example, slow driver reactions during adverse weather conditions (speeding when visibility is low).

Volvo has a two-pronged approach to improving safety on the roads: "Since drivers are the most vital part of the trucking industry, we will continue to develop safety features and technologies to help protect them as well as other motorists and pedestrians," says Mr Metzger. "We can never stress enough the importance of having a competent driver. Drivers need to be skilled and well-trained to handle the challenges of driving big trucks. We need to educate drivers and train them to learn how to embrace these new technology tools for safe driving.

"We have driver development training courses, led by qualified driver instructors, to teach our drivers how to be a safe and smart driver. This includes fuel saving skills, improving the driver's ability to drive safely and increasing the driver's awareness of risks at work and how to avoid them."

Safety Campaigns

Volvo also conducts safety campaigns for its driver customers. "We conduct driver training refresher classes and also share





driving safety tips at various driver events within the year. In addition, Volvo Trucks Singapore hosts the annual Fuelwatch Challenge which aims to discover the best fuel-efficient truck drivers who can drive safely and smartly."

Blind spots are a major safety concern for truckers. "Accidents involving trucks occur as a result of the driver not seeing vehicles or people in the blind spot of the rear-view mirrors. Less protected road users, such as pedestrians, cyclists and motorcyclists, are especially affected. We have developed features in the trucks to improve the driver's view."

Greater Visibility

Mr Metzger continues: "Our upright A-pillars with a slim crosssection and newly-designed mirrors enhance visibility from inside the cab. These allow the driver to spot other road users, such as pedestrians and cyclists. Slimmer housing helps to see better backwards and also reveal more when looking ahead.

"The other feature, which is known as Lane Change Support, uses radar sensors to warn the driver of other vehicles in blind spots, for example when changing lanes. Raising awareness on trucks' blind spots is equally important and we have conducted many initiatives such as "Stop, Look Wave" and "Know your Blind Spots" campaigns for pedestrians and drivers. These educational programmes are supported by the authorities in Malaysia and Singapore.

According to our Accident Research Report conducted in Europe, the most frequent situation in which accidents involving trucks causing serious to fatal injuries is when the truck goes off-road, with or without rolling over. "To help prevent such situations," explains the GM, "we devised technology solutions such as the Lane Keeping Support to ensure that our drivers remain alert and stay on the lane. The system senses if the vehicle unintentionally alters its course – a sign that the driver has lost concentration or fallen asleep at the wheel – and warns the driver. The alarm system has to be designed so that it ensures that the driver remains alert, but for that sake not put him under undue stress."

Stop Look Wave

Volvo Trucks launched "Stop, Look, Wave" campaign worldwide to help children understand how to act safely in traffic. The idea is to let children experience what drivers can see from where they sit, and help them understand how best to behave around trucks, buses and cars to stay safe. "Our trainers conduct 30-minute sessions at primary schools in each zone (North, South, East, West) to teach school children safety tips and traffic rules alongside hands-on knowledge of the blind-spots of a heavy duty truck.

"The programme educates children to 'Stop' before stepping onto the road, 'Look' both ways to keep an eye on any oncoming vehicles, and when all the vehicles have come to a standstill, 'Wave' at the truck driver before they cross. Over 100,000 children all over the world have learnt road safety with the help of Volvo Group staff. In Singapore, we expect to reach at least 5,000 children through our road safety workshops that we have been conducting since 2014."

Aside from Singapore, the campaign is also present in China, India, South Korea, Brazil, Russia, Sweden, Belgium and South Africa, Malaysia, among other places.

Campaign for Families

Volvo has recently held a new safety programme. "This year," Mr Metzger notes, "we have launched "Families for Road Safety" campaign to encourage more parents and family members to be involved in the road safety education drive amongst their young ones at home. We believe in contributing to the community where we operate as we have the expertise and know-how to lessen the number of road accidents involving trucks.

"Volvo Trucks' work on traffic safety focuses on three areas: safer vehicles, safer drivers and safer roads. A successful safety campaign must include measures in all three areas and this is a requirement for achieving zero accidents. It is therefore everyone's responsibility to make the roads safer and we would encourage everyone to view the safety video which is on Volvo Trucks YouTube page," the General Manager concluded.



Scania Driver Competition Europe_Knock the Cone Head 2 Head Test_Credit Scania

Gearing Up to Face the Challenge of Scania's Driver Competition

The Scania Driver Competition is becoming more challenging with new participants, and it will be more rewarding.

The biannual Scania Driver Competition (SDC) is now officially on and as with each edition, it is now even more challenging than before with tougher rules and scenarios that are designed to make Scania truck and bus drivers better equipped with skills to match the demands of the commercial vehicle industry.

First Time Participants

The latest edition is known as the SDC Southeast Asia 2016-2017 (SDC-SEA) edition as it will, for the first time, welcome participants from Myanmar and the Philippines in addition to Malaysia and Singapore.

The theme for the inaugural SDC-SEA is 'Face the Challenge', where the focus will be the driver as the single most important asset of any truck and bus owner and even more so for fleet operators. "As a leading provider of sustainable transport solutions for our customers' profitability, Scania continues to elevate the skills and status of drivers in the area of safety, fuel



economy and environmentally-friendly driving through SDC," stated Marie Sjödin Enström, Managing Director of Scania Southeast Asia.

How to apply

There will be 2 stages – Application Stage (objective and subjective theory questions) and the National Finals Stage to determine the champion of the truck and bus categories. The Application stage will commence on 1 August 2016 and the closing date to submit applications is 31 May 2017.

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Participants will be required to answer questions on road transport laws and regulations, alternative fuels, fuel-efficient and safe driving, load securing, occupational risks and health, and emergency procedures.

The Prizes

The Practical Finals will have all 10 shortlisted finalists vying for the total prize worth up to S\$25,000 which includes a S\$4,000 cash prize and a trophy for the champion, plus S\$2,000 service vouchers for the company owners.

Applicants can download a form from think link on the Scania Singapore website and either drop their submission form at the branches (SDC box) or submit it to ssgenquiries@scania.com or online submission. Each applicant will also get a Free SDC t-shirt.

What started off as a local initiative to improve truck and bus drivers' skills in Sweden is now a global movement that has attracted more than 200,000 contestants in over 50 countries.

Ashok Leyland Launches its Next Generation of School Buses



ndia's largest bus manufacturer, Ashok Leyland, has launched the much-awaited SUNSHINE school bus in Vijayawada. SUNSHINE is an ideal combination of safety and comfort, powered with revolutionary design and features that makes the bus unique in the school bus segment. It is the only school bus in India which has a rollover compliant design and frontal crash protection.

Built for Safety

First showcased at the Auto Expo 2016, SUNSHINE is the next generation school bus, purpose built for children's safety and superior comfort. The bus is equipped with segment first features such as anti – bacterial interiors, anti-skid flooring, fire retardant interiors, i- ALERT system for real time tracking and a front collision avoidance system called 6th sense.

Speaking at the launch of SUNSHINE Vinod K. Dasari, Managing Director, Ashok Leyland said, "With the brand promise of Aapki Jeet, Hamari Jeet, we at Ashok Leyland have always believed in setting new benchmarks in everything we do. SUNSHINE is a very special to us and it will set new benchmarks in the school transport sector. Children are our nation's future and to protect them and ensure that their travel to and from school is stress-free, it becomes imperative that we rehaul their mode of transport. Sunshine reflects the world of children and is a combination of artistically designed interiors along with state-of-the-art safety features. It is shaped by technology, know-how and expertise of global standards, durability, design and safety features that will transform the daily commute of children into an experience."

Two Sizes

The SUNSHINE bus comes in two variants, a 40-seater and a 50-seater, both accompanied with features such as vibrant interiors and large worldview windows for good air ventilation.

In addition, SUNSHINE boasts the industry's first semi-integral chassis construction giving it the lowest fixed entry and a lower centre of gravity for a stable journey, state of the art parabolic suspension guaranteeing smooth and bump free rides, emergency exit doors and door alarms.

"SUNSHINE is a result of extensive feedback from both parents and children and an immersive study into the lives of all its stakeholders," stated T Venkataraman, Senior Vice President, Global Buses, Ashok Leyland. "The bus has been crafted to ensure safety and comfort for all its occupants by providing artistically designed happy seats for the children and ensuring the most comfortable driving conditions for the drivers. At Ashok Leyland, our core philosophy behind each product is to launch every new vehicle with an endeavour to modernise the industry and taking this thought forward we are launching the SUNSHINE today."

With best-in-class turning radius, SUNSHINE offers superior product design features such as easy to repair metal bumper, anti-drain battery system and free flow fuel system. Good quality and reliable aggregates guarantee low maintenance cost and longer service intervals.



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Golden Dragon Electric Bus Sets Records

Golden Dragon's award winning electric bus, with many new features is setting the standards for buses of the future

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eveloping new energy vehicle technology has become a major focus of the global automobile industry. Coupled with worldwide government's regulatory push on new-energy vehicle adoption, sales across all electric vehicle segments have recently seen record breaking numbers. Hence, in such a situation, XML6125CLE, an electric whole-aluminium bus, jointly developed by Golden Dragon and a Netherlandbased bus maker EBUSCO, has been launched and put into trial operation in Germany, Norway, France, Denmark, and Finland in the past year.

Ecology Winner

Earlier, the XML6125CLE electric bus, produced in Golden Dragon new energy bus production base, won the Ecology Label 2015 at European Coach & Bus Week 2015. The bus receiving this award represents the highest level of advanced technology and environmental concepts partly due to the high evaluation standard and tough conditions set up by the commission. The 15 corporations involved in the competition are all strong competitors such as MAN, BENZ, IVECO and VAN etc. What makes XML6125CLE an excellent performer when compared to other buses in this segment?

The XML6125CLE is 11.98m long, 2.54m wide, and has a height of 3.28 meters. It has a robust and extremely reliable design, a status that was achieved with the help of the people who use it and this is a product with excellent cost/benefit ratio, an attribute appreciated by the customers in urban passenger transport. The XML6125CLE electric bus, which it claims guarantees a driving range of up to 300km, has been designed

to achieve the greatest energy efficiency and the lowest energy consumption. The bus has a low floor and meets the Euro 6 emissions standards. The bus is equipped with LFP 576 VDC / 540 Ah (311KWh) battery and a 75kW fast off-board charger, which can operate under a charging mode of 630V/120A.

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Lighter Weight

The whole aluminium body adopted by XML 6125CLE is much lighter than its steel predecessor, reducing the kerb weight/ gross vehicle weight to 12275/19000 kg. Its total capacity of 40 passengers includes 39 seated and one driver seat. Wheelbase is up to 6010mm, motor power jumps to 150/1000 Kw/rpm and rated/peak torque of motor is up to 2500/200 N.m/rpm. The vehicle has an air-conditioning system and sliding windows with tempered glasses. Furthermore, the model has an air suspension system, providing greater comfort, as well as ACTIA CAN. Other important characteristics are the Front/Middle double inward door, monitors and system in order to monitor and record images.

In terms of the chassis, XML6125CLE is equipped with ZF RL82EC front axles, ZF AV 132 rear axles, ZF8098, hydraulic assisted steering system, as well as a double-circuit air brake front/rear disk type KNNOR disk braking system, EBS/ABS/ASR (WABCO), ECAS (WABCO) and Kumho 275/70R22.5 tire.

According to the report, we'll reach a tipping point in around 2020, when new energy vehicles actually become cheaper than running traditional diesel buses in much of the world. This will cause acceleration in the application of clean energy buses.



Photos Courtesy Land Transport Authority

Buses With USB Charging Ports Hit Singapore Roads

Singapore's Land Transport Authority has responded to Singaporeans input and are making changes to the public bus services offered in the city.

Commuters are now able to charge their mobile devices while they ride bus in Singapore. Ten new MAN A95 double-decker buses, featuring USB charging ports hit Singapore streets on September 1, 2016. The ten buses are run by Public Transport Operator, SMRT, and will be deployed to five SMRT bus services – Service 61 from Bukit Batok Bus Interchange, Services 67 and 985 from Choa Chu Kang Bus Interchange and Services 963 and 969 from Woodlands Temporary Bus Interchange.

More to Come

LTA will progressively roll out an additional 137 buses with USB charging ports from October 2016 onwards. Each bus will have 41 USB charging ports which are located near the inner seats to encourage commuters to move in and ensure all seats are well utilised. Ports will also be made available at the wheelchair bay on board the wheelchair accessible buses. The addition of USB charging ports to buses will not affect the overall operations of the buses and commuters will not incur any additional cost for the use of the ports.

Buses featuring USB charging ports were showcased to the public at the Bus Carnival that was organised by LTA earlier this year. Two concept buses with various features were displayed

to garner public feedback on features commuters would like to see in public buses. A total of 22,000 responses were received on the features, with 72% of respondents keen on having USB charging ports in buses. Other notable suggestions included passenger information systems and allowing open prams and strollers on buses. LTA will incorporate more features, as chosen by the public, in future bus buys.

New Features Under Consideration

LTA Group Director Public Transport, Mr Yeo Teck Guan said: "The introduction of the USB charging ports to new public buses is part of the review and upgrade in the design of public buses in Singapore. Other interior features that could feature in future public buses include information display panels, better seat comfort, lightings, and foldable seats. These features aim to provide more comfort and more flexibility in the utilisation of space within the buses and will enhance commuter experience. This is a crucial part of making public transport in Singapore the choice mode of transport as we move to a car-lite society."

"SMRT is delighted to be the first operator in Singapore to put into service buses that feature USB charging ports," SMRT Buses Managing Director, Mr Tan Kian Heong stated. "Commuters will find it very convenient being able to charge their phones and other mobile devices on their journeys. This new feature complements the efforts that SMRT has put in place to enhance commuters' travel experience and to integrate mobile technology and enhance connectivity in public buses in Singapore following the trial of Wi-Fi on buses that began in April 2016."

More Responsive

In the second half of 2016, the public bus industry began its transition to the new bus contracting model. Under this model, the Government will own all bus infrastructure such as depots, as well as operating assets such as buses and the fleet management system. This new industry model will enable the Government to make public bus services more responsive to changes in ridership and commuter needs, as well as inject more competition into the industry, thereby raising service levels for commuters over time.

With this transition the Government intends to raise bus service levels to beyond those of the expanded BSEP. All bus services will have scheduled headways of no more than 15 minutes during both the morning and evening peak periods, with at least half of the bus services having even shorter scheduled headways of no more than 10 minutes, and of these, the feeder services will run at even shorter intervals of 6-8 minutes. As a result, an estimated 45% of bus services will have shorter intervals during peak periods when compared to the expanded BSEP service levels.

New Players

For a start, three packages of bus services, comprising about 20% of existing buses, have been tendered out through competitive tendering. Tower Transit started operating the Bulim bus package in May 2016, and operation of the Loyang bus package by Go-Ahead started in September 2016. The Seletar bus package, which was put out for tender in June 2016, will continue to be operated by SBS Transit and SMRT Buses under the bus contracting model, until it is taken over by the successful tenderer in the first half of 2018.

Excluding the three tendered bus packages, Singapore's remaining public bus services have been reorganised into 11 packages, from the originally announced nine packages, for greater operational efficiency and greater contestability in the longer term. From 1 September 2016, SBS Transit and SMRT Buses will operate these 11 packages under the bus contracting model, with contract durations ranging from two to 10 years. When these negotiated contracts expire, they will also be put out for competitive tendering.





Tata Motors Bags Orders for Over 5,000 Buses

With a history of manufacturing quality, state-of-the-art buses Tata Motors limited has received extensive orders from municipal and state governments across India.

Tata Motors, India's largest commercial vehicles manufacturer, announced in early September that it has received orders for over 5,000 buses from 25 State / City Transport Undertakings across the country. This represents a healthy growth of over 80% compared to 2015. The big surge in STU (State Transport Undertakings) buying is being witnessed after a gap of nearly four years, indicating renewed focus of various State Governments / City Transport providers on public transport.

New Technology

The orders from various STU / City Transport providers represents a noticeable shift towards adopting new technology, safety, comfort features and connected IT enabled buses. Tata Motors will also support these STU's to make certain the technology benefits are rapidly realized.

Mr. Ravi Pisharody, Executive Director, Commercial Vehicle Business Unit, Tata Motors Ltd, said, "With these orders, we at Tata Motors take great pride in partnering with various STU's, in delivering world-class solutions and to create and maintain a sustainable mass public transportation system. We are encouraged by the adoption of latest technologies by these STU's, for fleet modernization, lower total operating costs and expanding user base and ridership. We welcome the collaborative approach employed by these STU's in bettering end user needs, which will further help boost our efforts towards innovations in the public transport space."

Fully Enabled IT

To better commuter safety and connectivity, some of the orders require a fully IT enabled bus, to ensure trackability and traceability. GPS enabled On-Board ITS (Intelligent Transport



System) public information systems, via electronic destination boards CCTV cameras, On Board WiFi Smart multi-mode ticketing and On Board Diagnostics systems.

"Early investments in passenger transportation capabilities and technologies," said Mr. Sandeep Kumar, Business Head (Commercial Vehicles – Passenger) "enables us at Tata Motors to play a leading role in providing fully integrated transport solutions, in one of the world's largest bus markets. With an extensive portfolio, we are geared up to provide a 'Win-Win' for both the operators and commuters of today and tomorrow. Having said that, we have nearly doubled our order book in FY16-17 already and are adequately prepared to cater to the current and future demand coming in for our buses."

Improved Features

The buses also have quality and improved features throughout such as air-conditioning / Heating (HVAC), Air-suspension systems, Lower NVH Systems (Noise, Vibration, Harshness), automatic transmission set-ups, adoption of Bus Body code practices during body fabrication, wider passage-ways for free movement, wider window panes for better visibility, wider and lower entry/exit doors. Over 1500 of the ordered buses will be fully built and integrated with these features, at Tata Motors JV manufacturing facility at Tata Marcopolo (Dharwad & Lucknow) and ACGL Goa.

Mr. Pisharody further went on to add "Tata Motors plans to execute all these orders in the financial year 2016-17. The orders will definitely enable us to further strengthen our leadership position in the CV Passenger space.

Tata Motors Delivers 241 New Buses

Even before receiving these new orders Tata was delivering buses to cities and states throughout the country. In August Honorable Chief Minister of Karnataka, Shri. Siddaramaiah and Honorable Transport Minister of Karnataka Ramalinga Reddy, along with officials from Tata Motors, flagged off 241 Tata Motors buses, under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) for operation in Karnataka by KSRTC (Karnataka State Road Transport Corporation).

The elegant looking buses are equipped with well proven new-generation Tata Cummins ISBe engines, air suspension, multiplex wiring meeting Urban Bus specification II given by Government of India. Buses have higher acceleration of 0.8 m/ sec2 which would reduce travel time thus making bus travel faster for daily office commuters. The body is designed with a well-spaced out gangway of 700mm, greater passenger leg room to ensure passenger comfort.



Completely Connected

On-Bus ITS (Intelligent Transport System) has the public information system, automatic vehicle location system, security network system, vehicle health monitoring and diagnostics. GPRS enabled connectivity permits the bus to be connected with the Control Room for Live monitoring. The new bus is also enabled for smart ticketing options.

While endeavouring to ensure passenger comfort Tata has not forgotten the driver. To maintain good health, the driver's seat is ergonomically designed with a 4-ways adjustable mechanism. A wide-angle windshield will ensure maximum driver visibility.

Driver Training

Tata Motors has designed special training programmes to train drivers and staff of Karnataka State Transport Corporation so that the buses are operated efficiently. There are more than 13,000 Tata Motors buses operating in STU's of Karnataka.

Tata Motors has also developed Electric Hybrid buses and Articulated buses to meet the future transport needs for 'Envisaged Smart Cities', both of which will soon be seen on Indian roads.

Tata Motors is one the country's largest bus manufacturers, with the most comprehensive range of public transport vehicles that meets every needs – from last mile to intra city / intercity, school, tourist application etc. It has continued to be a leader in this segment not just by setting technological benchmarks, but by adapting innovations effectively to suit Indian travel conditions.





The Beautification of Trucks

or commercial vehicle drivers, the workplace is the driver's seat. It is where they spend most of the day, moving goods or people. Seated up front, this is where they perform their duty, day in and day out. Just like someone working in an office would sit in a cubicle. However, it appears that drivers of commercial vehicles in South East Asia don't seem to take to decorating their work-space as much as their peers in office buildings do.

Job Trophies

Just look at the space our writers Fajar and Floyd occupy in the office. Both spaces are decorated with the trophies one collects in our industry: photos of events, postcards, media passes, truck and bus models, motivational signs and mugs with motifs. Certainly, the office is the space where we spend a lot of time and we want it to be as comfortable as possible. Some of us may even remember overflowing ashtrays when smoking in the office wasn't banned.

But why is it that our commercial vehicle drivers don't dress up their offices like that? Many times, all one sees is the dashboard littered with papers, empty bottles, cigarette packs and other discarded items. I doubt that this is an environment that drivers would create for themselves at home. We have to remember that for many, the truck is actually home when they are on the road for several days, whereby the sleeper cab is the living and bedroom. As I take along my French press to any hotel to make my own coffee, I wonder why truckers don't dress up their vehicles a bit more.

Amazing Collections

Are companies really that restrictive when it comes to adding a few personal touches?

I would doubt it as they should then apply the same for office workers. And I have seen some amazing soft toy collections in offices.

Perhaps it is money that is missing? Our cover of this issue shows how customisation can be taken to an extreme level. I am sure that it doesn't take that much to make a truck looking good. And if you are a proud business owner, why not make a statement with a colour scheme that stands out and let's your customers know that your truck has arrived. Life is too bland to drive white trucks, right?

Safety First

What I sometimes see are stickers on the windscreen. Which I think is dangerous, given that a truck already has enough blind spots. But there could be nice chrome plated horns, a gorgeous paint job or some nice items inside the cabin. If we look at Europe, there are many completely tricked out trucks and these are not just put together for shows, but for actual transportation jobs. Shouldn't drivers be proud and in a competition with their buddies over which truck looks best? At least one could make sure the truck is clean and doesn't look like a landfill site.

In countries such as Nepal, the beautification of trucks even goes so far that the added items increase the weight and moves the centre of gravity so much that some vehicles become unstable. Now, that isn't what I would like to see driving in front of me either, but I think we can all do with a bit more colour in our fleets. Maybe our next activity at Asian Trucker should be a competition to find the most beautifully painted and customised truck?

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Volvo Trucks. Driving Progress