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This is a Conference not to be missed for anyone connected with the public transport industry. 50% discount available (conditions apply*)

Australia invites you to be a part of the discussion on how we connect our neighbourhoods - how we move and meet mobility needs of people today and in the future to help create more liveable and sustainable cities and regions.

The Bus Industry Confederation (BIC) will be taking a large delegation of Australian based bus operators, manufacturing and supplier organisations and government officials to Singapore for the 2015 BIC National Conference, November 8 to 11.

Hear from some of the leading experts in their field from across the Asia Pacific region. Topics include:

- > The Big 5 public transport trends, issues and challenges in the next 5 years
- > Bus innovation and telematics
- > The electric future of buses in Asia and Australia and performance based standards
- Bus operations in Singapore, Asia and Australia and loads more

Visit the OzeBus website for information about the Conference, Speakers and to Register.

Speakers include:



Kate Carnell, CEO - Australian Chamber of Commerce and Industry



Michael Roschlau, Recently Retired President & CEO - Canadian Urban Transport Association



Paul Barter, Adjunct Associate Professor and Research Trainer Advisor, University of Singapore



Dr. Muhammad Zaly Shah, CMILT Associate Professor/Academic Manager (Research) - Faculty of Built Environment, Universiti Teknologi Malaysia



John Stanley, Adjunct Professor,Institute of Transport and Logistics Studies -University of Sydney



Philip Green, Australian High Commissioner to Singapore



* refer to registration form to check elegibility



stefan@asiantrucker.com

What follows is important

The name Asian Trucker suggests that we mainly deal with trucks. But the front end of business is usually only half of what is needed. Unless it is a rigid truck, one needs to add a semi trailer. Interestingly, the term "semi-trailer" isn't commonly used out here as people just refer to it as "trailer". Semi trailers are the ones that don't have front axles as they are supported by the truck onto which the front end of the trailer rests. Other than the second trailer on a B-Double, I haven't seen any trailers with front axles.

As there is a lot of technology and know-how that goes into a trailer, we decided to put together this special edition that you are holding in your hands. It was an interesting journey as we got to see the insides of the trucking industry from a different view. One of the main learnings was the fact that the trailer can actually make a huge difference in terms of capacity and efficiency for a company. Imagine the B-Double can increase the load you move by almost 100 percent! Also, clever systems allow for more palettes to be loaded into the trailer, reducing empty space that is moved while transporting goods. In view of the driver shortage, perhaps clever trailers are the way forward to address this issue.

One topic frequently touched upon is Malaysia's law that each truck can only have one trailer to be used. Having spoken to an industry veteran from Europe, he stated that limitations are always a hindrance to the industry. What he saw was that the industry really flourished once limitations were abolished. This doesn't mean that there won't be any laws of course.

In terms of technology, I think it is fair to say that there is as much excitement in the trailer as it is in the truck development. Naturally, operational excellence, cost reduction and performance of the trailer-truck combination are vital topics the industry is concerned about. It is amazing to see what thoughts go into the improvement of trailers. One palm oil transporter was saying that he is surprised that not more companies use the super-single tyres. I guess it is as the saying goes that there is always more than one way to dig for money. What surprises me is that there aren't more companies using their trailers as moving ads. It would be easy to dress up the trailer in the company's livery and to let everyone know who is behind the wheel. That said, it is then important to always make sure your truck is clean. Personally, I am a bit sceptical of dirty trailers proclaiming that they move chilled goods. That usually means foods. And if your truck is filthy from the outside, I don't want to take a look inside. I hope you find the content of this Asian Trucker Trailer Special useful and I look forward to your comments trailing us.

Sincerely yours, *Stefan Editor, Asian Trucker Malaysia*



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LAMILUX HIGH STRENGTH

LAMILUX EMBOSSED

LAMILUX LAMI GRAPH

LAMILUX HIGH GLOSS LAMILUX WOVEN ROVING LAMILUX HIGH IMPACT LAMILUX WOVEN ROVING LAMILUX HIGH STRENGTH LAMILUX ANTI SLIP

CREATING ENVIRONMENTALLY FRIENDLY TRANSPORT WITH FIBRE-REINFORCED COMPOSITES

Carbon- and glass-fibre-reinforced composites are smoothing the way for tomorrow's green, energy-efficient transport.

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The *Receive* Dryets.

EDITORIAL

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The world rides on Hendrickson



endrickson is a privately owned American business that has now expanded throughout the world," explained Mark Boon, Executive Manager, Business Development SEA. Hendrickson has sales and distribution facilities and/or state-of-the-art manufacturing centres in North and South America, United Kingdom, Germany, Austria, Romania, France, Turkey, India, China, Japan, Thailand, Australia and New Zealand.

Inventor and businessman Magnus Hendrickson founded The Hendrickson Motor Truck Company in 1913 in Chicago. Hendrickson grew from a small manufacturing company that built trucks that were often equipped with cranes or dump bodies. The present company has a long history of technological advancement and innovation which has made its many products highly regarded throughout the world.

Hendrickson Asia Pacific commenced operations in 1973 and continued to grow distribution and support through out the region. Hendrickson Asia Pacific now has responsibility for Japan, South East Asia, Australia and New Zealand.

The product range has greatly expanded to encompass axles for trailers and suspensions to suit trucks, trailers and buses, including very heavy duty suspensions for mining applications. The Engineering facility has developed into a highly skilled and equipped group with the disciplines tailored to the needs of the Asia Pacific region. It is able to take a concept, develop and prove it, then bring it to production. Mr. Boon explained that the "Cycle time for Hendrickson is quite high. They are very good products. The challenge is the price. Everyone is looking for the lowest possible price, but we are seeing a slow trend with vehicle owners that they understand the value of buying the highest quality product which will last longer."

There are other challenges, however. "Servicing and law enforcement," Mr Boon states. "Servicing is not always what it should be. Owners just do not pay the attention they should to keeping their vehicles in top condition."

On the law enforcement side the Executive Manager points out, "Overloading and speeding are rampant. This puts undue pressure on the suspension systems, further aggravated by the lack of service. It is not just an equipment concern, it is also a safety concern."

He does see owners being more vigilant and not overloading their vehicles, but they are not moving quickly, as it is with new products. "Air suspension, which is very good for businesses in dangerous goods and hauling fuel, has been very slow in uptake." Air suspension is a very small percentage of business in this region for Hendrickson. "It is only five to ten percent now, but it will come. It has to. Once owners understand the difference between the cost of purchase and the cost of life then they will move."

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HAMMAR strenghtens position in region with opening of workshop



HAMMAR called and the industry responded with an unexpected number of clients, suppliers and friends showing for the official opening of the HAMMAR workshop in Klang.

Thursday, 10 September in 41, Lebuh Sultan Mohamed 1/KU18, Taman Perindustrian Bandar Sultan Suleiman in Port Klang: HAMMAR Time! After extensive planning, negotiations and finally the construction of the workshop,



Chris Joon called for key industry players to witness the official opening of the new workshop. Being surprised himself by the turn-out, Chris Joon, Executive Director, said that he was delighted to see so many of his clients and business partners show up for the ceremony held in the morning.

Having acquired the land from Taipanco, which is also HAMMAR's biggest customer globally, the company set out to build the workshop in Klang. This places the workshop right in the heart of the densest sideloader population with HAMMAR estimating some 400 out of the 500 sideloaders sold in Malaysia operating in the Klang area. This also makes Malaysia the second largest market for the Swedish business after Australia. Given that the sideloaders from HAMMAR are sold in some 110 countries, this is no small achievement either. The building itself was designed by the daughter of the founder himself.

Welcoming guests, Chris Joon opened the event by elaborating quickly on the purpose of the workshop, the necessity of being close to customers and the fact that HAMMAR can be proud of a growth of up to 65% year on year. "Excellent customer service

is what makes us successful and this workshop is yet another milestone in our pursuit to offer the best service possible to our clients".

Peter Levison, Managing Director of HAMMAR Malaysia Sdn. Bhd., who is based in Australia, flew in for the occasion. Having being with the company for some 25 years, he was clearly proud to see this project completed. "Given the significance of this market for us, there could be no better time than now to set up this workshop. It will ensure that our clients will have less downtime, thus improving their businesses," he said.

The owner and Chairman of HAMMAR, Mr. Bengt-Olof Hammar, was present as well and he thanked everyone for their support before blessing the building and the people involved in the development.

In his speech he emphasised on the creativity and innovations found within the company. With a strong heritage, the workshop is to be an amalgamation of Swedish ideas and Asian craftsmanship.

Guest of honour, the Swedish Ambassador to Malaysia, H.E. Mr Bengt G Carlsson, finished the speeches by thanking HAMMAR for making his job easier. "It is my duty to foster relationships between Sweden and Malaysia. HAMMAR is a very good example of how this can work and I shall hope that more small and medium size companies see value in a partnership with Sweden and that more Swedish companies, like the large ones, see benefits in setting up operations here in Malaysia. Mr. Bengt-Olof Hammar and H.E. Mr Bengt G Carlsson then went on to cut the

ceremonial ribbon, inviting the gathered industry players to have a look around the workshop and office. Guests were clearly impressed by the clever use of the space as well as the living room atmosphere that will certainly make work a breeze for HAMMAR staff and visitors coming in for meetings alike.



Cathay Motor Group markets quality brands & service



athay Motor Group of Companies started in 1964 and just celebrated its 50th anniversary. The Company has 54,000sqft of warehousing space, strategically located in the heart of Bandar Sri Damansara. It is a leading distributor of genuine automotive parts, car maintenance products, garage equipment, diesel fuel pump parts, tractor parts, lubrication fluids and other automotive & industrial products.

"Over the years," says Managing Director Lim Wei Fook, "we have built a reputation marketing quality brands, which are leaders in their respective fields. We are in the service industry so we must deliver." Cathay Motor Group has delivered and so has become the preferred supplier for many in the industry.

"If the customer has no breakdowns, they have no requirement for us. If they do have a breakdown they want parts and service as quickly as possible. Our customers know they are assured of consistent and high quality products."

Cathay Motor Group carries many "good and respectable" brands such as Autosol, Kayaba, Ferodo Brake Pad, Champion Spark Plug, SK ZIC Lubricant, Baldwin Filter, Masada Jack and many more. "When we accept a new product we ensure that it is a quality product from a reputable brand," says Mr Lim. "In 2014 we approached Alcoa because we recognised a new trend in the industry - the move from tube to tubeless. Tubes use steel rims. Being the first to see this, we made a deal with Alcoa to sell their aluminium rims. Their rims are lighter, stronger and safer."

Mr. Lim continued: "We've also seen another trend in the industry. Our customers are moving from a short term view to a long term view. Before, cost was the most important factor in making a purchasing decision. How quickly could they make back their money. If they didn't like the price they would walk away.

"This is no longer the case. They are taking a long term view. They see the plus points beyond the initial price. They understand they will save on fuel, they understand they are more reliable. Alcoa rims are lighter and can carry more payload. Aluminium rims dissipate heat faster than steel, which is better for the tire.

"Once customers understand all the plus points they will make the investment in aluminium rims that will last them five, ten, twenty years. Customers are getting excited about it. They want to know more. They want to know why they should pay more. Now, when you mention price, they don't just walk away."

Why did Cathay Motor Group take part in MIBTC? "It has been very good for us. Almost everyone we have met here is a potential customer."

The Group has opened several new branches in Klang, Jalan Ipoh, Kuala Lumpur and Malacca. "Being a part of this industry, we ensure and maintain our competitiveness by providing effective service and quick-to-market products to ensure value added customer service."



The many lives of our Continental Truck Tyres

Continental Truck Tyres are designed for ultimate economy over the entyre life. The ContiLifeCycle begins with the new tyre and continues with premium retreading solutions and ContiCasingManagement.

When you purchase a retreaded tyre, you not only lighten your tyre budget but also help to protect the environment. Reusing the casing saves energy and raw materials. Multiple use of the casing also reduces the number of old tyres in circulation.

New Continental Tyres – Built for more than just one life

Not all roads are equal and the same goes for transport. Knowing this, Continental has developed truck tyres that suit the unique conditions of your transport activities. That means they unleash their full potential to increase the overall economy of your vehicles.

The Continental casing is what makes their tyres more economical. Built with optimized and perfectly matched reinforcements and mixture components and a contour that best suits the application, the Continental casing achieves outstanding structural durability. Durability that pays off.

ContiCasingManagement – An incredibly valuable service

ContiCasingManagement uses standardized methods to take care of the entyre casing management process. For instance, you can use Continental's online casing management system to keep a constant eye on your used casing stock and decide at any moment what you want to do with your used tyres: sell them, retread them or simply leave them with them – whatever you want, however and whenever you want it. That gives you and your fleet the greatest possible flexibility and transparency.

ContiTread

ContiTread is the Continental premium tread for cold retreading. This tread is produced exclusively with Continental mixtures and profiles. By choosing this method, you give your tyre a new profile, prolong its life and thereby reduce your total tyre costs. The best results are achieved when high-tech and high quality Continental casings are used in retreading. ContiTread can, however, be applied to other makes of casing.





Not just trailers -SAF - HOLLAND





Highly specialized parts, such as Axle suspension arms from SAF-HOLLAND for any terrain and weight are just one of the many offerings the company brings to the region. We take a closer look at the company and their products. Commercial vehicles of all kinds benefit from the many years of SAF HOLLAND's suspension know-how. But as we will see, they have more to offer nowadays. The axle and suspension manufacturer's extensive portfolio offers the right solution for any challenge and every type of vehicle. With two new components for the SAF MODUL and SAF INTRA series respectively, the suspension professionals prove their competence again.

Depending on location and weight, commercial vehicles make different demands on their built-in axle suspension arms. "An axle is only as good as each of its individual components. That's why it is important that the suspension arm, as a supporting element, perfectly meets the different requirements both on and off the road," says suspension expert Helmut Hock, a design veteran at SAF HOLLAND. All of their suspension arm models are developed to be especially lightweight and sturdy. Corrosion protection and easy replacement in case of damage are also assured. Now with two new application-based suspension arm series for SAF MODUL and SAF INTRA respectively, there are again new solutions for different vehicle types.

The right suspension arm for every requirement

The new single leaf trailing arm for 9 and 12 tonne vehicles are universally compatible with the MODUL U, O, M and EO series. Both arms are weight-optimised and manufactured according to the latest methods. While the 100 x 52 mm single leaf axle arms for 12 tonne axles became available in September 2014, the 9 tonne arm is still in development. This 100 x 48 mm single leaf curved trailing arm allows different air bellow centres but without additional adapter plates, which reduces weight and variants.

Both innovations score points for the INTRA series with their sophisticated, weight-saving design. They are especially versatile and designed for the 9-tonne range. The new SAF INTRA S is a greatly weight-reduced but extremely sturdy suspension arm for vehicles like curtainsiders and coolers. The SAF INTRA R has been developed for rigid frame vehicles like tankers and tippers. It was important to SAF-HOLLAND that the new springs fit perfectly in the existing dimensions and the vehicle manufacturers make no changes to their chassis.

SAF-HOLLAND is an innovative company, focused on providing specific solutions to improve individual fleet operations. And, it is the focus to deliver outstanding quality, reliable products with exemplary low cost of ownership to our customers. This is why SAF-HOLLAND invests substantial amounts of resources in research and development to continually increase the efficiency of their products and service programs.

At the regional level, SAF-HOLLAND has a proven track record of providing engineered solutions to customers around the world. From parts to fully integrated systems, their highly trained and experienced regional applications teams serve the technical needs of fleets in every corner of the world.





The Kompensator

When torsionally rigid trailers encounter uneven terrain, tight turns or curbs they do not flex to relieve the twisting force experienced between truck and trailer. This puts great strain on truck and trailer frames, tank and tyres. The results are frame cracks, tank leakages and premature drive tyre wear.

A compensating fifth wheel to provide torsional stress relief. The Kompensators' unique cradle design provides side-to-side compensation. It allows more flexibility between truck and trailer by reducing torque and twist transfer through the fifth wheel.



FEATURES:

- · Patented construction for applications where torsional relief between truck/trailer is desired, eg. tank trailers.
- \cdot Stress reductions up to 130% in the trailer plate, 40% in the cargo tank and 25% in the trailer frame.
- · Improves stability, axle-weight distribution, and tyre tread life.
- Incorporates the rugged cast steel top plates from the Holland prohitch 351, FW342 LowLubeTM or FW70 fifth wheels for long life and high strength capabilities.

• Recommended for use where trailer centre of gravity is at or below 1 metre above the top of the fifth wheel. Mounting must be carried out in accordance with their instructions.

 \cdot Standard fifth wheel height = 240mm



From Truck to Trailer

Promising to offer a complete range, there are a number of areas that the company focuses on when it comes to developing parts and high-tech solutions.

Trucks

SAF-HOLLAND supply original equipment (OEM) for prime movers, buses and heavy-duty trucks and to retrofit fleets.



Fifth wheel

Conventional, low-maintenance and grease-free couplings with weight-optimized fifth wheel plates made of sheet steel, spheroidal graphite iron or forged aluminum. A solution for fifth wheel loads from 6 to 75 t for almost every transport task.

Suspension systems

Extremely robust suspension systems for tractors and buses, as well as for heavy-duty trucks operating on tough terrain.

Man on a mission Heading SAF-HOLLAND Malaysia with more than 25years of experience in Malaysia and for the Malaysian commercial vehicle Industry is Lee Chong Chew.



Name Position	: Lee Chong Chew : Managing Director SAF-HOLLAND Malavsia			
Hobby	: Swimming. Football			
Marital Status: Married				
Children	: Three			
Age	: 47			

Before starting his new career with SAF-HOLLAND (Malaysia) Sdn Bhd beginning 2015, he was working for more than 10 years as a Senior Manager - Commercial Vehicle Business in ZF Sales & Service (Malaysia) Sdn. Bhd. From this world's leading Germany based manufacturer of transmissions for the Automotive / Special Drivelines he moved to SAF-HOLLAND with the aim to rapidly grow the brand in the region.

"One reason for me to join the SAF-HOLLAND family was their company values and their daily promise to their customers" Lee said in our interview with him.



Trailer couplings

Rigid and mobile trailer couplings and tow bar eyes in weldable and bolted designs with manual or automatic fastening for trailer tasks of any kind.

Trailers

Solutions for almost every trailer and semi-trailer task. We supply the following as original equipment (OEM) for trailers and semi-trailers and to retrofit fleets:

- · Axles and suspension systems
- · Brakes
- · Landing gears
- Kingpins

Axles and suspension systems

Available with drum or disc brakes, installed as air suspension units or mechanical leaf spring suspension systems for the toughest operating conditions, or as swinging axles and special units with switchable auxiliary drive for abnormal loads.



Landing gear

Whether drop legs or landing gear systems with changeable feet, our saddle supports are easy to use and work safely and reliably under all operating conditions from 15,000 to 72,000 kg.



Kingpins

These are safety-relevant trailer components that have to meet high demands in terms of functional reliability. Our kingpins therefore comply with or exceed the requirements of all common global standards for products of this kind.



Why choose SAF-Holland?

SAF-HOLLAND is an innovative and one of the world's leading suppliers to the global commercial vehicle industry; it is a listed and highly productive company.

Focused on providing specific solutions to improve individual fleet operations and delivering outstanding quality, reliable products with exemplary low cost of ownership to customers. SAF-HOLLAND has a proven track record of providing engineered solutions to customers.

From parts to fully integrated systems, their highly trained and experienced teams serve the technical needs of fleet customers. Their mantra is that success much depends on their customers' success. As a company, they are proud of their work and commitment to be the ultimate supplier for this region.





With the SAUER GERMANY brand they can fulfill the needs of fleet customers with spare parts for their buses, trucks and trailers. With this brand, SAF-Holland provides a full range of air bellows, shock absorbers, wheel bearings, brake pads/ linings, brake discs, brake drums, wheel rims, wheel bolts/nuts, grease, slack adjuster and brake chambers at a fair price.

• Fair

The right price for the right part - everywhere and at any time!

Proven

After all these years on the road your vehicle still deserves tested components for a long life time - your truck and trailer will thank you by performing every day!

Reliable

It is not only that we offer reliable quality parts in one of the most demanding markets and that our parts keep your business moving - a partner you can depend on!





About SAF-HOLLAND Malaysia:

With the opening of their Parts Distribution Center (PDC) in 2014, they can conveniently distribute the entire range of SAF-HOLLAND products available from SAF-HOLLAND Original-Spare Parts as well as from their second brand, SAUER Quality Parts in S.E.A.

Being responsible for the regional distribution of parts in South-East Asia, there will be significant reduction of lead times for customers, which means more convenience and lesser downtime.

The warehouse of 1,237 square meter (13,319sqft) storage space was upgraded and capacity increased to fulfill steeply rising customer requirements and extended operating distance.

"We are proud to possess the world's most complete spare parts and service in the commercial vehicle industry" pledges Lee.

Their current team out of 15 people including field service manager, junior and senior sales manager, serve the customer needs day by day. The office is located in Block A, 16 Jalan TP6 UEP Subang Jaya Industrial Park, 47620 Subang Jaya, Selangor Darul Ehsan, Malaysia.

To ensure fast service, three delivery trucks make sure you will get your parts in time and perfect condition.



Commitment towards customers

SAF-Holland genuinely offers clients what they call "The Complete Package" of truck and trailer components.

According to Lee, they strive best to serve customers with the alignment of their operation according to target groups, customers and application requirements. With this approach, they want to be closer to their customers. They strive for excellence through continuous improvement and aim ensure to be an industry leader through dedicated, hard work and commitment from every employee.



Some containers give



When you have a combination of land and sea transport, your average container may not be the best option. Sold under the Aloz brand, NITTSU Shoji Co from Japan offers a box that gives you more than wings. ccording to "Mike" Masunaga, Container Group General Manager, the "Super Wing 40" has been developed over the past three years. What makes this container special is not only the durability and the versatility, but also a clever mechanism that allows for easy opening and closing of the container.

A spring loaded mechanism inside the container requires only a battery powered power drill to open and close the wings. This means that there is less oil used, reducing the risks of leakage and reducing cost. The container is manufactured according to ISO standards and is one tough box that can be loaded onto ships, trains and trucks. Meanwhile, some 100 units have already been sold ahead of the launch at the Thailand International Truck Show in September 2015.

your cargo wings



While the large wings are spring loaded and operated with the power drill, the smaller lower panels can be opened and closed manually by just one operator as they, too, are spring loaded. To protect the cargo inside, the inside is lined with wooden panels and offer lashing rails for lashing bars to secure the cargo.

Access is easy as the container can be loaded from both sides, thus the loading and unloading sequences for individual palettes does not matter. One should not be fooled into thinking that the process of opening or closing the panels will take long as the power drill is a relatively small tool. However, the process is fast and easy.

At the show, a second system was also shown for medium goods vehicles, called the "Magic Wing". Following the sample of the Super Wing, here too the opening and closing is done with smarts rather than force or complicated mechanisms.



Firama gives transporters innovations

Offering a smart transport solution, the Firama double deck trailer improves efficiency and improves the space utilisation of trailers. We wanted to find out how.



Firama

When the with CC Yap to find out how his latest innovation, the double deck trailer, is going to help transporters with their business. Pulling open the curtain sider, the hidden secret is revealed and we can have a look at why this trailer may become a bestseller in the Malaysian market. "This is one project that we have been wanting to do for a long time. But you need to have the right customer for it and you need to pick them carefully as it is a new approach" he says.

ruckmate



Smarter trailer technology A completed trailer is waiting

A completed trailer is waiting outside and we have a closer look at the engineering that went into it. The first thing that one will notice is that the trailer is longer than normal. With some 46 feet in length it is giving transporters more room to move goods. "This means that the trailer is longer, the weight wasn't so much of an issue for the approval by JPJ" Yap says. Having found the desired customers, Firama used this trailer to demonstrate their design and engineering capabilities. The double-deck sections use special high tensile steel to ensure sufficient strength to carry the load. The floor boards are adjustable to allow various heights of palettes to be loaded into the trailer. As one cannot use a palett jack to move the goods across the entire length of the trailer, it has to be a curtain sider to enable the loading and unloading. The weight limit per section of the second floor is three tons - plenty to hold the extra cargo.

The floor panels are made from perforated steel. These sheets are lighter, but also offer the operator the possibility to look through them to see what is going on inside the trailer. The frame for the floor panels is made using a CNC machine. According to Yap, precision is crucial as the floor panels have to be level and cannot twist when locked into place as that may result in unstable palettes riding in the trailer. So far, Firama has produced eight such trailers which require special approval and are classified "limited". Adding to the smart engineering are lift axles to reduce operating cost. Following extensive simulations, the trailer has been tested on the ground and has been further improved. The result is a trailer that is easy to load / unload with extra space that reduces empty spaces and accommodates palettes of varying heights.

the state

The axle secret

When it comes to the axles, Firama is a big believer in TMC axles. Having used their products for some 30 years, Yap praises the supplier for their way of doing business as well. He is happy to state that "We have a strong relationship. One that isn't built on a cheaper price, but on mutual understanding." For example, Firama reports that there have been very few warranty issues. And as the demand changes, TMC is able to respond to the fluctuations quickly and without complication. Yap asks "What is the point of having cheaper axles if you have to buy a whole container load, but only need a few axles immediately? You will end up with stock that binds your capital."

TMC has understood user requirements and is offering headache free service. At the same time, the quality has been consistently good. Since axles are major components of trailers, Firama appreciates that TMC axles are of high quality, using linings from Canada for instance. "It is not easy to match components. With the axles from TMC, you don't need to worry about tolerances" said Yap as he explained the double-deck trailer. And it is a relationship like this that will help to overcome an economic downturn. While the cheaper axle makers will usually have to close shop, a strong supplier will be able to weather the storm together with the body builder.

That said, Firama is now also using axles from BPW, as and if the client requires that. Again, this is to also demonstrate the capabilities of the company. The German-made axles are used on a B-Double for PCI Gas Trading Sdn. Bhd. and features self steering axles with all the latest technology.

Aiming for a double

A proud display of Firama's achievement is the trophy they took home from the 2014 Truck of the Year award. "We were most surprised when Datuk Ir. Foong Choy Chye called to tell us that we actually won!" However, having won the prize the first time is one thing. Winning it again for a consecutive time is another. However, Yap is confident that he will stand a good chance now that he has demonstrated more of the company's engineering capabilities with both, the double-deck and B-Double.



Double up the tanker, **maximize** the prime mover

With the vision of guiding the company to be the finest special vehicle body builder, ITG keeps striving for more and showcases their B-Double tanker.



sian Trucker meets once again with the Managing Director of ITG, Mr. IR. Goh Thiam Kan, a busy man as his products are in demand. Looking as energetic as usual, Mr. Goh was more than ready to share about the high capacity of B-double Petroleum tankers his company is producing.

With his solution, one prime mover can easily move two tanker trailers. Yes, you read that right! In 2014, Petronas decided to support the efforts of the Ministry of Transport's aspiration for safer Malaysian roads by reducing the number of smaller capacity tankers plying between destinations. Hence, ITG Oil & Gas Service (S.E.A) has supplied four units of B-double tankers branded with Petronas livery, making it the first company in Malaysia to supply this type of high capacity tankers.

What is a B-double?

At the heart of the development of the B-double is the notion that a modern prime mover can pull more than just one trailer. The result is a much better utilization of the prime mover, reduced emissions and more effecient transportation solutions. Our pictures here show a high performance prime mover from Scania, hauling two trailers, one behind each other. The total length is 19 meters and the gross train weight is 61,000 kg. With this



configuration, the "train" is able to carry a maximum of 54,600 liters of fuel. The B-double is equipped with technologically advanced safety features including electronic braking system and roll stability support system. The lightweight aluminium barrel is supplied and designed by ITG according to the stringent international UN/ADR regulations applicable for road transportation of hazardous goods such as the JET-A1 fuel.

"At this moment we are focusing on the collaboration with Petronas and Shaziman Transport Sdn. Bhd. only. Currently, there are four units of our B-double and we are very confident that Petronas will soon require another ten units," said Goh.

It can be noted that the B-double tanker is widely used in Australia, whereas this concept is fairly new in Malaysia. According to Goh, it is not an easy task producing this tanker as it carries dangerous goods. Therefore, one needs to emphasize on the main requirements, such as the selection of the truck. This is important as the primer mover not only needs to have the power to pull the train, but also needs to support the added safety features that have to be built into the trailers. Training of the driver and the design of the tanker need to be synchronized with the truck.

Technical Aspects

As the safety requirements are high, ITG is using an international brand for axles while the tyres are an anti-static type which is supplied by Michelin. The rims are from ALCOA which ITG believes to offer significant weight reductions and more strength, resulting in longer usage.

ITG Oil & Gas Services (S.E.A) Sdn Bhd is widley known simply as ITG and was incorporated in Malaysia on 31 December 1999 by Mr Goh Thiam Kan. ITG is actively involved in design, engineering, fabrication and the commissioning of special transportation vehicles. Some of the products they manufactured include aluminium petroleum tankers, cryogenic tankers, various multi-purpose trailers and semi-trailers.

ITG's employees continue to focus their efforts on developing innovative products and services, building relationships and providing the best "after-the-sale" service for the transportation industry: the same principal that Mr.Goh Thiam Kan embraced in 1999 when he founded the company.

Five things effective driver safety programmes do — And do well

The first step to eliminating workplace hazards is recognising them. For environmental health and safety (EHS) professionals, safety interventions are more straightforward in production facilities, where hazards can be managed in relative isolation. Unguarded machinery, vapours and fumes, dust, and frayed wiring are just some of the severe and isolated—dangers companies can identify, mitigate and monitor directly with strict engineering controls.

But what if the road is an employee's workplace?

In many countries, particularly emerging markets, EHS professionals have few, if any, reasonable safeguards to protect employees on the road. People who drive for business are up to 50% more likely to be killed on the job than construction or agriculture workers. Facing such dire odds, global fleets can't wait for governments to "pave the way" for safety. How do managers contain—much less recognise—occupational risks at intersections, highways or anywhere else drivers conduct company business?

Making the "Global," "Local"

Encouraging one driver to "get the message" is difficult enough. Global EHS professionals must motivate thousands of drivers in multiple languages. Caught in the headwinds of local laws and customs, however, many global programmes run aground before getting off the ground for one simple reason: fleets lack a culturally sensitive approach to coordinate their message. Rather than being hurdles to strategic planning, culture and language can be leveraged to apply global content in a local context. Onboarding users from other countries to a single-source learning ecosystem can seed new markets with consistent risk reporting, but only if companies possess the right tools.

1. They Link Employees from the Top-Down in a Safety Structure.

Global programmes require consistent communication so every driver appreciates how much their safety means to a company. Coordinated communication, such as a message from seniorlevel executive, can drastically improve compliance if employees



GLOBAL DRIVER RISK MANAGEMENT

FLEETSAFE ASIA DRIVER & FLEET RISK, EVALUATION & ROAD SAFETY

understand what is expected of them. Senior-level support may include marketing or other materials to incentivize participation from local fleet administrators, particularly if the new programme is optional. In addition, programmes should reinforce a common message throughout their duration, including updates about collision reductions or other key performance indicators, to drive compliance further.

2.They Train, Test and Track Individual Driver Performance Fleet-Wide

Frequently testing drivers on occupational or vehicle safety not only improves retention, it also unlocks volumes of data. Falling test scores can highlight new areas of risk before the trend translates to accidents. Since traffic laws and culture vary from market to market, testing provides much-needed standardisation to assess compliance regardless of culture or language. To adapt to new risks, programmes should include mid-year and annual "safety checks" measuring crash rates against training data. Where scores dip, remedial training can be assigned, ensuring the programme only targets risk, rather than blanketing all drivers with unnecessary courses.

3. They Encourage Positive Behavioural Change

Even when drivers demonstrate improved skills, there is no absolute guarantee they will remember them in a year. According to the American Society for Training and Development, adults subjected to "cram sessions" lose 90% of what they learn after absorbing too much, too quickly. Hours spent studying have virtually no effect on retention—unlike repeated testing, which more than doubles retention levels among learners. In time, behaviour-based training helps to "pattern" out mistakes by reinforcing core concepts through task repetition, or a process known as repeated retrieval. Testing drivers early, often and with shorter gaps between lessons forces them to call core concepts to mind not just once, but multiple times.

4. They Leverage Cultural Diversity to Implement Standardised Data Reporting

Programmes gain credibility and impact if they appeal to drivers in their own language or with visuals that resonate.

5. Their Flexibility and Broad Scope Can Help Structure Drivers Under a Single Policy

Fewer than 1 in 4 reimbursement drivers are ever adequately assessed for high-risk behaviour, even though fleets use them three times more often than drivers using company assets. The reason is that many businesses lack tools to assess the "grey" elements of their fleet, so these drivers face fewer controls for vehicle safety compared to hire or lease drivers. With real, penetrative reporting supported by fully translated global content, driver risk management programmes can hold drivers to a single occupational health and safety policy.

About:

AlertDriving is a Toronto-based software company specialising in driver risk management. Established in 1998, AlertDriving works with multinationals corporations as diverse and far ranging as Coca-Cola Hellenic, Philip Morris International, Novartis, W.R Grace, and more.

FleetSafe is fleet vehicle solution provider, offering driver and fleet risk evaluation, education and road safety programmes. Pioneered in New Zealand, now with international regional expansion in Australia and Asia, working with companies who operate both light and heavy vehicle fleets, to improve driver safety, reduce costs, increase fuel efficiency and improve health and safety compliance.

Asian Trucker Drivers Club is a partner of AlertDriving and FleetSafe. Interested parties may request presentation meetings for the online training system by writing in to: info@ asiantruckerclub.com.my **7**

Belton Axle Components Sdn Bhd



Getting the wheels under your truck and trainer, Belton Axles manufactures and trades automotive components for passenger cars, undercarriage components for 4-wheel drives, light and heavy commercial vehicles.

Il the way to Sungai Siput, Perak, Asian Trucker went for a factory visit of the manufacturing of automotive brake drums and hubs. Belton Axle Components Sdn Bhd (BAC) is a joint venture between Mohd Nizam Bin Mohd Hassan, Mohd Fadzil Bin Mohd Hassan, Farha Aziz Fawzy and First Growth Steel Holdings Sdn Bhd. The company is principally involved in the manufacture and sale of automotive axle components, brake drums, axle hubs and the assembly of the two.

The manufacturing runs on three production lines, with machinery and equipment worth at current market value of a several million Ringgit Malaysia. Two lines are designated for the manufacturing of big brake drums, whilst the third line is designed for the manufacture of small brake drums. Castings are purchased principally from Zibo Benito Metal Work Co Ltd of China and Bakrie Tosanjaya of Indonesia. Products manufactured by the company are distributed to more than 48 countries worldwide and include direct and indirect supplies to reputable Original Equipment Manufacturer (OEM) customers from overseas. In the local Malaysian market, the company supplies the brake drums and hubs to major OEM customer, Isuzu Hicom Malaysia Sdn Bhd – IHM (formerly known as Malaysia Truck and Bus Sdn Bhd).

"The challenge that we face in our company is that we are not a multinational company, therefore we find it difficult to find a stable position in the market. I am glad to say that customers that have been with us since the first day, remain to have the faith in our product up until now," said Mohd Nizam, Executive Director of Belton Axle Components Sdn Bhd.

"Our products are superior in terms of quality compared to certain imports. For B-Axles the technology has advanced and we boast complete machining facilities which include a honing



process. This improves the brake drum lining surface to a very high level of finishing that others do not have," he added.

We found that it has been an educational tour to the factory and obtaining a clear explanation of the brake drum making process. The factory is filled up with integrated machines from Japan to maintain the premium standard of the product.

Quality Assurance

The manufacture of reliable and durable Brake Drums that are safe for use is BAC's utmost concern and BAC's management believes that the most appropriate testing equipment is required in governing the consistency of the product quality. Its well equipped QA laboratory is fitted with advance testing equipment such as Computerized Coordinate Measuring Machine (CMM) to ensure precise profile for best performance. The excellent service has led to the Quality Certification ISO



9001:2008 by Standards and Industrial Research Institute of Malaysia (SIRIM) since year 2001.

Belton Axle Components Sdn Bhd is planning to increase exports and are working closely with local automotive franchise holders to initially export our products to their counterparts in the ASEAN region and subsequently globally.

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Cornering costs with BPW self-steering axles

Innovative axles radically improve tyre wear even when turning the vehicles only make up a tiny percentage of the entire journey as proven by Pengangkutan Aliran Teraju Sdn. Bhd.







The LL self-steering axle is the economic miracle of all BPW axles currently available It shows off its strengths particularly when tight manoeuvring is required in delivery and distribution haulage. Thanks to its greater manoeuvrability on corners and when making turns, users benefit from more straightforward vehicle handling, less tyre wear and lower fuel consumption - over a mileage of 100,000 kilometres that adds up to the impressive amount of approx. 1,000 litres of fuel and more than four tyres per vehicle.

How the axles work

The initials LL stand for "load-dependant steering stabilisation" and describe the unique functional principle of the BPW selfsteering axle. Conventional steering axle designs require steering stabilisers powered by an external source. This is not the case with the BPW self-steering axle. The axle beam and axle stub are connected to undulating thrust washers via steering pivots. When driving straight ahead (zero position), the undulations in the thrust washers keep the wheels on track. The weight of the vehicle presses the undulating contours of the upper and lower thrust washers together. The wheels remain stable in the correct forwards position. When the semitrailer follows the tractor unit through a bend, the wheel castor ensures the wheels turn in accordance with the curve radius (the thrust washers slide over one another).

The frictional resistance changes according to the load on the axle. As a result, a steering angle of 8° to 27°, depending on the vehicle type is established according to the load. This happens solely by mechanical control. The drag link connecting the wheels uses a steering lock to prevent the wheels from steering when the vehicle reverses. The lateral tyre forces arising are optimally distributed between all the axles, for example in a 3-axle vehicle. As every axle experiences significantly lower lateral tyre forces, the mileage of the front axle increases by up to 50% - whereas the rear axle mileage could increase by up to 70%.

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Feedback from the market

We met with Gurmit, Director of Pengangkutan Aliran Teraju Sdn. Bhd., which is using the BPW self-steering axle on their truck. He reports that "The investment starts paying out immediately. For the vast majority of the trip the truck will run straight with little steering. However, for the loading and unloading processes, the vehicle needs to make some very sharp turns in extremely tight spots. This results in very harsh scratching of the tyres across the ground. The BPW axle reduces this and the results are amazing".

According to him, previously, tyres only lasted 60,000km even after rotating every 20,000km but with the self steering axles without any rotation the tires could clock 100,000km and still have a tread depth of 6mm left. Not only does the self-steering axle reduce tyre wear on the axle itself, but also the other axles see less wear.

"We are impressed. Just imagine the savings you achieve over the long life of a trailer if we are already seeing such improvements in performance after some 18 months" Gurmit states. The present driver supported this claim by saying that the truck also handles much better in tight corners, which is also thanks to the air suspension that the BPW axle uses.

Mr. Arthur Van Welzen , Managing Director of Hyva Malaysia Sdn Bhd, who are also the distributor of BPW axles in Malaysia has the following comments: "The simplicity and functionality of the BPW self-steering LL axles has proven to be a tremendous success in Europe particularly in the area of increased tyre life. We are confident that the product would prove to be popular with Malaysian transport operators in the very near future . This is particularly true when one considers that fuel charges are going to further increase and transport operators would need to consider various methods of cost reduction. The installation of self steering axles would certainly fit this bill. **7**







Structurflex curtain siders offer a flexible solution for trailers



riginally developed for the use in architecture to allow for flexible roofing solutions, Structurflex has found a way to diversify and to add a dimension to the trucking industry. Produced in licence here in Malaysia, this concept from New Zealand is not only a practical option for many truck body applications, but it is also saving cost and allows for creative use to advertise the products transported. Asian Trucker meets with Mr. Ho, Senior Manager of Structurflex Sdn Bhd. to learn more about the wide range of applications and benefits of using this approach.

Innovation fit for Malaysia

"It started with a joint venture between TCIE and Structurflex New Zealand in 1997. At that time, a TCIE delegation visited New Zealand and saw potential in the product. Initially, complete sets of the curtainsiders were imported. Eventually, knowledge was transferred and today we are manufacturing the curtainsiders here in Malaysia now" Ho explains the history of the brand in Malaysia. Initially, only four or five units were sold per month. Now that the product has found a wide acceptance, the number of curtainsiders made has shot up to 40 - 60 units per month, depending on the configuration. Certain adjustments had to be made to match the local conditions in the Malaysian market although the product is more or less identical to the original design from New Zealand. The product material has gained wide recognition ans was even awarded for its design in Germany.

Structurally safe and sound

The key component is the fabric, which is imported from Germany. Once cut to size, the fabric will be reinforced and the tensioners attached. These premium tensioners come in different sizes to match the requirements of the truck body. They can be locked to prevent any unwanted access. One may be thinking that the fabric may have disadvantages over metal, however, we are assured that the fabric can stand falling loads of up to 1 ton. There is even a variant that has Titanium mesh webbing to prevent cutting by thieves. Insulated fabric can be used for cold chain logistics where the goods need to stay cool during transportation.

Besides various colours that are available, transporters may use the curtainsiders as moving billboards by printing brand livery on the sides. Some of the unusual designs include three-deckers and B-Doubles. All these are possible thanks to the flexibility the curtainsider system offers. . Bodybuilders can rely on technical support to be available at all times. In case of damages, repairs can be even carried out in the field. Major repairs are possible
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When you draw these curtains, you certainly let the sunshine in as they allow quick access within seconds.



too, but may require the trailer to be taken back to the factory in Kuala Lumpur.

Fast development and ease of use

To fabricate the curtainsider does not take long. A 40 foot trailer is ready to leave the workshop within a week. The curtainsiders are maintenance free, besides the usual wash one would give a truck and trailer and should cuts occur, repairs are easy. The key advantage is the light-weight of this option which naturally saves fuel. When loading or unloading, the true potential shines as some of the curtainsiders only need a few seconds to be opened, allowing access to the full length of the trailer. This means that the goods can be loaded quicker compared to access through rear doors of a metal container.

Trusted by top names

"The idea of having the corporate image on the curtainsider appeals to many of our customers. Just look at our customer portfolio and you will find major logisitc fleet owners. This is a clear indication of the quality and user-friendliness of the curtainsider as all of these customers are very sophisticated" Ho elaborates as he is showing us around the production. Structurflex products come with a one year warranty. Mr. Ho ensures us that the materials will last a lot longer though and that there haven't been any cases where the product had to be taken back for repairs. He says "This just shows how good the product really is as the trucking industry is a tough one and the curtainsiders are put to a tough test every day."

Better through the bends

The LL self-steering axle is the economic miracle of all the BPW axles. It shows off its strengths particularly when tight manoeuvring is required in delivery and distribution haulage. Thanks to its greater manoeuvrability on corners and when making turns, you benefit from more straightforward vehicle handling, less tyre wear and lower fuel consumption - over a mileage of 100,000 kilometres that adds up to the impressive amount of approx. 1,000 litres of fuel and more than 4 tyres per vehicle. Just work that out for your entire fleet!

Function of the self-steering axles: LL stands for "load-dependant steering stabilisation" and it describes the unique functional principle of the BPW self-steering axle. Conventional steering axle designs require steering stabilisers powered from an external source - this is not the case with the BPW self-steering axle. The axle beam and axle stub are connected to undulating thrust washers via steering pivots. When driving straight ahead (zero position), the undulations in the thrust washers keep the wheels on track. The weight of the vehicle presses the undulating contours of the upper and lower thrust washers together. The wheels remain stable in the correct forwards position. When the semitrailer follows the tractor unit through a bend, the wheel castor ensures the wheels turn in accordance with the curve radius (the thrust washers slide over one another).

The frictional resistance changes according to the load on the axle. As a result, a steering angle (of 8° to 27°, depending on the vehicle type) is established according to the load, and solely by mechanical control. The drag link connecting the wheels uses a steering lock to prevent the wheels from steering when the vehicle reverses. The steering axle means that the unit corners better and follows the same track as the tractor unit almost identically. The lateral tyre forces arising are optimally distributed between all the axles, for example in a 3-axle vehicle. As every axle experiences significantly lower lateral tyre forces, the mileage of the front axle increases by up to 50% - whereas the rear axle mileage increases by up to 70%.

BPW LL self-steering axles - Features and benefits

- For axle loads from 6.4 t to 14 t
- Versions with disc or drum brake
- Lightest self-steering axle
- Steering stabilisation solely load-dependent
- Significantly lower and more even tyre wear: save more than
- 4 tyres over 100,000 kilometres
- Significantly lower fuel consumption: up to 1,000 litres over 100,000 kilometres
- Greater manoeuvrability, reduced transport space requirement, fewer expensive incidents of tyre damage
- Less strain on the body, frame and road
- Exact tracking when changing lanes

- Particularly recommendable with the 44 tonnes regulation*
 Simplified installation thanks to optional 3-D trailing arms, no retracted frame required
- Permitted ratio of rigid axles to steering axles 1:1 (also applies with a lifted first axle of a tri-axle suspension)
- Higher resale value
- Cataphoretic dip-coating with zinc-phosphating

*44 tonnes regulation according to § 34 (6) of the German Road Traffic Regulations (StVZO): "When an articulated vehicle (...) is transporting (...) a 40 foot ISO container, the gross weight rating is not allowed to exceed 44tonnes subject to the regulations for axle loads and single vehicles." Small setting - strong relief for wheels and driver: Track and Camber. Positive Camber - vehicle unloaded Camber is defined as the ang[e between the wheel centre plane and a line drawn perpendicular to ihe plane of the carriageway. The camber is positive if the top of the wheel is angled outwards when the axle is unladen.

Positive camber - laden vehicle



Back view

The bending load on the axle beam when the vehicle is laden causes the wheel to straighten. This means the tyre rol[s with optimum road contact when the vehicle is laden (the most critical condition in terms of wear). This avoids unerlen, premature tyre wear.

Toe-in

Toe is the angle between the tongtitudinal axis of the vehicle and the wheel centre plane. Toe-in means the front part of the wheel is turned inwards towards the tongtitudinalaxis of the vehicle - ie the distance between the front of the tyres is less than the distance at the rear. Durrng driving, the ro[[ing resistance of the tyres causes the angle to be forced back to zero, thereby ensuring stable straight-ahead driving. Without toe-in, the wheels would attempt to run outwards.



Top view

- positive camber adjustment provides maximum road contact of the tyres of the taden vehicte, optimum tyre use and avoidance of uneven premature tyre wear
- precise toe-in offers stable straight-ahead driving
- low running costs and more driving safety *T*



LAMILUX carbon-fibre composite in sandwich elements

German innovator introduces the world's lightest refrigerated vehicle body



The world's lightest refrigerated vehicle body

A lightweight design based on carbon-fibre-reinforced composites is making waves in the commercial vehicle sector. The structure of 'the world's lightest refrigerated van' is currently attracting great interest. A VW van with a refrigerated body, this vehicle features wall face sheets which are made of carbonfibre-reinforced material manufactured by composite producer LAMILUX.

The Team Composite AG – TTT, a company based in Stade, near Hamburg, initiated the project to design and build an extremely light refrigerated semi-trailer made of carbon-fibre-reinforced polymer (CRP). A breakthrough in lightweight design has been achieved with a very light, yet stable structure. TTT has already been awarded the Logistics Initiative Hamburg's Logistics Future Prize 2014 for the development of this prototype.

Innovative lightweight construction increases haulage capacity

Although the design is still being developed as part of a study to produce special and conversion solutions for VW vans, its technical implementation and significant advantages have already been demonstrated: the 3.5-ton vehicle can carry 1.5 tons, the first time such a high payload has ever been achieved. This is due in no small part to the lightweight body structure made of LAMILUX carbon-fibre-reinforced composite. 'The haulage capacity has increased by about a third compared to conventional refrigerated vans,' affirms Ria Kaiser, CEO at TTT.

Besides its enormous weight reduction, the new carbon structure also impresses thanks to its insulation qualities. As it features vacuum heat insulation, up to 60 percent less energy is required to keep the temperature low inside the van body. TTT now aims to finalise the innovative vehicle design concept ready for market launch.



The new refrigerated van is currently being tested by the Swiss wholesale company Coop. The trial produced impressive results in the first few weeks: the innovative lightweight structure allows the new vehicle to visit 54 percent more clients per delivery round, thereby producing 'an even more sustainable, more reliable approach to work practices.'

Light, food-safe, hygienic

LAMILUX materials are already used in refrigerated transport the world over. An integrated, temperature-controlled system is required when transporting foodstuffs. Refrigerated truck bodies with fibre-reinforced polymer panelling create optimum conditions for such systems. The ultra-light, extremely sturdy composite materials serve as interior and exterior face sheeting in sandwich elements for roofs and side walls. Produced by German manufacturer LAMILUX, the fibre-reinforced polymers excel, above all, thanks to their low thermal conductivity and their food-safe qualities verified in tests. These materials thus offer great advantages when it comes to certifying refrigerated truck bodies as per the HACCP (hazard analysis and critical control points) standard.

Placed in extended contact with foodstuffs, LAMILUX's Woven Roving 48% Plus SH, for example, passed all the tests based on the HACCP principals. GRP interior facing sheets in refrigerated vehicles are thus harmless when in contact with foodstuffs over a long period of time. Also food-safe certified, LAMILUX composite plastics are also suitable for short-term, indirect contact.

About LAMILUX Composites GmbH

LAMILUX Composites GmbH has been producing fibrereinforced composites for almost 60 years. This medium-sized company is the market leader in Europe, thanks to its large production capacity, wide product range and technologically outstanding continuous manufacturing process. **LAMILUX** supplies customers around the globe in a wide range of sectors, such as the construction trade, the automotive and recreational vehicle industries, refrigerated store room and cell construction, and many other industrial sectors. Based in Rehau, Bavaria, the family firm currently employs 720 staff and, in 2014, achieved a turnover of 190.5 million Euros.



Thanks to the innovative lightweight structure with carbon-fibre composites in the sandwich elements in its body, the 3.5 ton van is able to carry a payload of 1.5 tons, a weight never achieved before for a vehicle of this size.

FERCAM orders more than 90 Kögel Cargo Rails



ERCAM AG from Bozen in South Tyrol, Itlay is capitalising on 93 new Kögel Cargo Rails in its vehicle fleet. As a 360° logistics service provider, FERCAM offers its customers the complete spectrum of logistic services worldwide and is one of the top family-managed transportation and logistics companies in Europe. With the new rail-loading Kögel trailers, FERCAM AG is not only replenishing its vehicle fleet but also making a significant contribution to environmental protection. The road-rail combination makes it possible to optimally utilise both the system-specific benefit of the railway on the main route and that of the truck's flexibility for pre-carriage and onward carriage, resulting in a considerable reduction in CO2 emissions.

Kögel Cargo Rail

The trailers designed for multimodal transport are equipped with a reinforced chassis frame. The gripper edges integrated into the frame and a gripper jaw tarpaulin protection made from aramid fabric allow the Cargo Rails to be loaded onto rails. The Kögel Cargo Rail has thus been designed for flexible loading on the most prevalent rail pocket wagons. For optimal load-securing, the VarioFix perforated steel external frame is equipped with 13 pairs of lashing rings, each ring affording 2,000 kg of tensile force. The trailers are, of course, certified in accordance with DIN EN 12642 Code XL. As with all Kögel vehicles, the entire vehicle frame on the Kögel Cargo Rail has long-term corrosion protection thanks to its nano cathodic dip-paint coating and final coat of paint.

FERCAM individual equipment

At the customer's request, 100 new trailers are equipped in accordance with Daimler Directive 9.5. This includes pallet stops and end wall doubling amongst other things. In addition, the rail-loading trailers were optionally equipped with an upward folding and lockable steel underride guard as well as aluminium air tanks. A fire extinguisher with a pressure indicator and corresponding bracket is installed as another optional accessory on the side member. Along with the large FERCAM lettering on the tarpaulins, familiar and eye-catching drawings are pasted to the trailers.

New 8-axle trailer went on its maiden voyage



Company Bauer (Schrobenhausen, Germany) inaugurated their new 8-axle panther semi low-loader on the route from Berlin to Munich.

In 2011, Bauer Spezialtiefbau GmbH ordered a 6-axle trailer with the newly launched panther technology. Now the choice for their new trailer fell again on the proven single wheel suspension developed by DOLL. The first drive of the 8-axle semi low-loader from Berlin to Munich was the transportation of a drilling unit weighing 80 t. By purchasing this trailer the company wants to carry especially heavy and bulky loads such as construction equipment. The vehicle of type S8E-S2 can be extended from the first axle and is equipped with a 25 t compensating gooseneck, double ramps and 12 t axles like all panther trailers.

Driver Steve was overwhelmed by the very low loading height and the newly developed control system DOLLtronic which is based on CAN-bus. The possibility to control all functions from one central station makes handling much easier.

DOLL wishes company Bauer many more pleasant drives.

Water-proof your electrical connections

Phillips Industries is well known for their product innovations that are developed to solve operational, cost, maintenance or safety problems and to enhance overall vehicle performance.

Phillips Industries' history of success has inspired them to develop and manufacture a line of ISO 24 volt and multi-volt products to meet international standards for global compatibility.

Recently introduced products that are available in the Asia/Pacific region are:

• WEATHER-TITE™ Seal

Phillips Industries 7N and 7S PERMACOIL[™] electrical cables and plugs are now fully protected from corrosion-related failures with the addition of their patented WEATHER-TITE[™] seal. This revolutionary tri-seal blocks all contaminants from entering the electrical system at the plug and socket connection, increasing the life of both the electrical cables and the trailer socket.

Corrosion is the enemy of electrical connections and the three blue rings of the WEATHER-TITE™ seal create a barrier to block all moisture, road salts, magnesium chloride and water from entering the plug and socket connection. Phillips' PERMACOIL™ cables with WEATHER-TITE™ plugs significantly reduce maintenance costs associated with vehicle electrical system failures

by eliminating damage caused by the buildup of corrosion. The WEATHER-TITE™ seal also greatly increases the service life of trailer sockets and electrical cables, saving fleets money and reducing downtime, since moisture is not allowed to enter the electrical system.



In addition, all Phillips electrical cables include a 360° compression ring at the rear of the plug, strongly securing the plug to the cable. This creates not only a weather tight plug but also greatly increases the durability and service life of the cables. All Phillips coiled electrical cables have outstanding recoil memory and are abrasion, chemical and corrosion resistant in addition to their trademarked COLOR BY FUNCTION[™] color-coded jacketing.

COLOR BY FUNCTION[™] System

In an industry filled with black coiled electrical cables, plugs and sockets, Phillips Phillips' sees innovation. trademarked COLOR BY FUNCTION™ system eliminates confusion by offering fleets an easy way to identify truck & trailer electrical functions, make guicker, safer repairs and better manage their inventory. Socket lids, plug ends and cable jacketing are molded in the same color to identify 7N, 7S, ABS, EBS, and 15P systems. This saves drivers time during trailer hook-ups by identifying truck or trailer electrical functions with a quick look. It also provides a greater level of safety for the driver, since they no longer have to climb on the catwalk to identify the trailer or truck functions. The COLOR BY FUNCTION[™] system also helps fleets and distributors better manage inventory by stocking the correct product with the correct inventory levels.

The COLOR BY FUNCTION[™] system is standard on all Phillips 7N, 7S, ABS, EBS and 15P plugs, sockets and cables.

Phillips Industries is a manufacturer of advanced electrical and air brake interface equipment for the commercial vehicle industry. Phillips is a major international supplier and development partner to global truck and trailer OEMS's as well as major fleet operators on four continents.

MICHELIN TAPS CHANDAN THAKUR TO HEAD MICHELIN MALAYSIA

Chandan Thakur has been appointed Managing Director of Michelin Malaysia Sdn Bhd succeeding Beltran Yturriaga who moved to MICHELIN's regional office in Bangkok as Distribution Development Manager, East Asia and Oceania.

Chandan, 41, a mechanical engineering graduate from the University of Bangalore India, has had a long enriching career evolution with the Michelin Group since 1999 and was Country Sales Manager, Passenger Cars and Light Trucks in Malaysia from June 2007 to April 2011. He also had stints as Country Sales Manager, Passenger Cars and Light Trucks in India from May 2011 to April 2013 and was Distribution Development Manager, East Asia and Oceania in Bangkok prior to his recent move here.

As Managing Director of Michelin Malaysia, Chandan aims to continue building on MICHELIN's double digit sales growth achieved since recent years and enhance the brand's footprint and long term customer loyalty, leveraging on the brand's technology and innovation to build equity and deliver solutions that are increasingly effective and competitive, and perfectly suited to the challenges of mobility.

Can you drive sales?



Asian Trucker Media provides a full range of communication channels for the commercial vehicle industry in South East Asia. Our print magazine, Asian Trucker, is a premier trade magazine published in Malaysia, Singapore and Thailand. We host seminars, publish e-newsletters, provide adversiting possibilities via several websites and organise South East Asia's largest commercial vehicle exhibition.

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Slack adjusters



Slack adjusters are used to adjust the braking-induced wear of brake drums and ensure a constant clearance between these components.

Slack adjusters are employed in S-camshaft drum brakes and take over the transfer of force from the wheel brake

cylinder to the S-camshaft Thus, a manual or automatic adjustment of the S-camshaft is possible, so that the brake cylinder operates in virtually the same stroke range.

A distinction is made between manual and automatic slack adjusters. Self-adjusting automatic slack adjusters are quick and easy to install and are optimally constructed. No special adjustment is now required for the correct installation of the brake lever. This provides a larger area of application and a reduction in part numbers can be achieved.

A constant readjustment of the slack adjuster prevents the piston stroke of the brake cylinder from becoming too large, resulting in increased air consumption. Consistent brake response time is thereby guaranteed.

Brake camshafts for trucks, trailers



Brake camshafts are used in Simplex drum brakes. They serve to transfer the power generated by the pneumatic brake cylinder, via a slack adjuster, to both brake shoes.

For this purpose, a tooth system is installed on the drive side of the brake

camshaft (to hold the slack adjuster) and a Z-cam on the output side (to spread the brake shoes).

Upon actuation of the brake camshaft, both cantilevered brake shoes are pressed against the brake drum. The wheel is slowed down or brought to a standstill.



About DT

The DT[®] Spare Parts brand offers a complete range with more than 30 000 different spare parts for trucks, trailers, buses and transporters, including all standard slack adjusters with the corresponding component parts.

The DT[®] brand products, made of high quality materials, meet your highest quality requirements and guarantee a long period of use.

Under the brand DT[®] Spare Parts own products of Diesel Technic are offered and not original spare parts of the vehicle manufacturers. The complete range is continually being developed and provides the trade with the opportunity to meet market demands at all times.

Distribution partners in more than 150 countries value the experience and expertise of Diesel Technic as a reliable full-service partner for the trade.

Axle shock absorbers



Axle shock absorbers are of great importance for driving safety. They serve to suppress the vibration of the unsprung mass of the vehicle. The impact of shocks which are transmitted to the vehicle by uneven road surfaces is dampened by the shock absorbers. When deciding on

the parameters for the level of damping, the best possible compromise is looked for between comfort (low damping force) and driving safety (high damping force).

The operating piston with the piston rod moves within an oil-filled tube. During the axial movement of the piston rod, the oil is forced through narrow channels and valves through the pistons. With the speed of the piston motion, the flow resistance and thus the damping effect increases.

DT[®] Spare Parts shock absorbers are designed for a service life of 10 million cycles. Corrosion resistance is tested in a salt spray test for 500 hours.

The function of the shock absorber is guaranteed even at extreme temperatures of between -40 °C and + 70 °C.

Relays for trucks and trailers



Relays are used to separate electrical circuits and to switch electrical consumers up to a current of 70 amperes. The advantages of relays are the compact design and the possibility of switching large electrical consumers with low currents. Furthermore, relays provide the possibility of

switching higher voltages with low control voltages.

In a robust plastic housing, is an electric solenoid coil, which is supplied with electricity via a standard flat plug when switched on. When electricity flows, the coil produces a magnetic field in the core of the coil which, via an armature, opens or closes one or more contacts, depending on the design.

To obtain a low tendency to "sweating" and low contact resistance, the plug contacts are made of brass with a nickel-plated surface and the switching contacts are coated with resistant silver-tin oxide. To prevent the occurrence of contact-braking sparking, relays with double contacts are available, depending on the application.



Spring brake cylinders



In the case of pneumatic brakes, spring brake cylinders convert the energy of compressed air into mechanical force and motion. They are a combination of diaphragm brake cylinders and a springbrake chamber and are primarily installed on the rear axle.

During braking, the compressed air presses against the diaphragm in the brake cylinder, so that the push rod is moved forward by the piston. Hereby, the diaphragm brake cylinder acts as a service brake. When the pressure in the diaphragm brake cylinder is reduced, the diaphragm and the push rod are pushed back by a spring into the initial position.

Due to the spring-brake chamber, spring brake cylinders also serve as parking or auxiliary brakes. In the case of

a pressure drop in the pressure reservoir the parking brake is mechanically actuated by means of a strong spring. The release of the parking brake takes place by re-application of compressed air, whereby the spring is pushed back into the driving mode. If a spring brake cylinder is gradually vented using the hand-brake valve, it can also fulfil the function of an auxiliary brake.

Spring brake cylinders of the DT[®] Spare Parts brand undergo extensive quality controls to ensure perfect functionig. These include visual inspection, inspection of the surfaces, performance tests, as well as dimension and leakage tests. Furthermore, corrosion tests are carried out on the salt-water test stand, as well as vibration and climate chamber tests. In long-term tests, the durability of the spring-brake chamber is tested for at least 300 000 cycles and the durability of the diaphragm brake cylinder for at least 1 000 000 cycles.



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