

CAPITAL EQUIPMENT

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AUGUST 2023



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OFF-ROAD DUMP TRUCKS: Safety in tough operating conditions

NEW LOADER CONCEPTS: Machines for almost any environment

TOTAL COST OF OWNERSHIP: Investing in quality saves time and money

AFTERMARKET SUPPORT

Customer commitment is
not on the sales quote

PAGE 26

DON'T JUST SCRAPE BY.

Level up your game with a John Deere Motor Grader.

The Evolution of John Deere Motor Grader: Blazing Trails in Innovation

Motor graders play a vital role in shaping our modern infrastructure. John Deere has long been synonymous with quality, reliability, and cutting-edge technology. Over the years, the John Deere Motor Grader has become an indispensable tool for construction and road-building projects, consistently meeting the demands of a rapidly evolving world. Let's embark on a journey through its history and witness how this machine has transformed over time.

A Legacy of Excellence

John Deere's venture into the motor grader market began in the early 1920s. Leveraging their expertise in agricultural machinery, the company recognized the need for efficient grading equipment in construction and took on the challenge. The first motor grader introduced by John Deere was the M-1, a simple machine that laid the foundation for the company's future innovations.

From their inception in 1919, motor graders were strictly rigid framed, but this changed with John Deere's 570. Introduced in 1967, the 570 was the first motor grader with an articulated frame. While it worked perfectly well in wide-open, straight-ahead blading, the articulation gave it a major advantage in confined areas.

Technological Innovations

John Deere has consistently pushed the boundaries of technology to equip their motor graders with state-of-the-art features. Today, these machines integrate a range of advanced technologies to enhance productivity, efficiency, and operator comfort.

Automated Blade Control

John Deere's motor graders are at the forefront of this revolution. Automated blade control systems use sensors and advanced algorithms to automate blade movements, allowing for consistent and accurate grading results. This technology simplifies the operator's task while maintaining high-quality work.

Telematics and Connectivity:

Connectivity has transformed the way we manage and monitor machinery. John Deere's motor graders are equipped with telematics systems that provide real-time data on machine performance, fuel consumption, maintenance schedules, and more. This valuable information allows operators and fleet managers to optimize operations, reduce downtime, and improve overall productivity.

Comfort

John Deere's motor graders are designed with operator comfort in mind. Features like air conditioning, ergonomic seating, and adjustable controls ensure that operators can focus on their work without unnecessary fatigue.

Sustainability and Fuel Efficiency:

In an era of increasing environmental consciousness, John Deere has prioritized sustainability in their motor graders. These machines feature efficient engines that comply with stringent emission standards, reducing their environmental impact. Additionally, advanced fuel management systems optimize fuel

efficiency, lowering operating costs and reducing carbon emissions.

The Future Beckons

As technology continues to advance, John Deere remains committed to pushing the boundaries of innovation in the motor grader industry. With a rich history and a reputation for excellence, the company is well-positioned to meet the evolving needs of the construction industry.

Ergonomics:

The John Deere Motor Grader has come a long way from its rigid-frame origins. With the introduction of an articulated frame, hydrostatic front-wheel drive, advanced transmissions, and precision control systems, John Deere has continuously pushed the boundaries of innovation to meet the evolving needs of the construction industry.

With each technological leap, John Deere has solidified its reputation as a pioneer in motor grader technology, leading the charge in efficiency, performance, and operator comfort. The integration of automated blade control, telematics, and connectivity has revolutionized the industry, enabling precise grading, enhanced productivity, and optimized machine performance.

As we look to the future, one can only imagine the groundbreaking innovations that lie ahead for John Deere and the motor grader industry. The commitment to technological advancements ensures that John Deere will continue to be at the forefront of the construction industry, shaping the landscapes of tomorrow.

Book a Demo.

Contact your local John Deere Dealer



JOHN DEERE

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Editor:

Adriaan Roets
capnews@crown.co.za

Advertising manager:

Lizelle Francis
lizellef@crown.co.za

Design:

Ano Shumba

Publisher:

Karen Grant

Deputy publisher:

Wilhelm du Plessis

Circulation:

Karen Smith

PO Box 140

Bedfordview 2008

Tel: (011) 622-4770

Fax: (011) 615-6108

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A CONVERGENCE OF INNOVATION, EXPERTISE, AND INDUSTRY LEADERSHIP

In the grand tapestry of industrial evolution, the union of cutting-edge technology and expertise takes centre stage. A recent event that epitomized this synergy unfolded at the KwaZulu-Natal Industrial Technology Exhibition (KITE), held at the Durban Exhibition Centre from August 18 to 20, 2023. Amidst the myriad offerings, one event emerged as a beacon of industry insight – the LEEASA Conference.

This convergence, orchestrated by the Lifting Equipment Engineering Association of South Africa (LEEASA), is testament to the pivotal role it plays in sculpting the ever-evolving landscape of industrial progress.

The KwaZulu-Natal Industrial Technology Exhibition, a bustling congregation of industrial aficionados, transcended being a mere event; it became a platform where innovation, solutions, and networking intertwined.

Amidst the array of exhibits ranging from electronic components to heavy machinery and safety gear, a resounding theme echoed – the undeniable importance of capital equipment. Serving as the linchpin across sectors, from construction to mining, the optimal performance of these industrial

stalwarts acts as a catalytic force propelling industry-wide growth.

In this dynamic landscape of technological marvels, the LEEASA Conference emerged as testament to the power of collective prowess. Beyond a traditional industry gathering, LEEASA redefined conventions. This conference surpassed the notion of mere knowledge dissemination; it ignited an evolution by cultivating collaboration, sparking discussions, and fostering exploration.

On August 19, the LEEASA Conference, an integral part of the KITE event, became a rendezvous for professionals, experts, and industry leaders in the realm of lifting equipment engineering. It was not merely a conference; it was a voyage, a symposium where intellects converged, ideas ignited, and a blueprint for the future unfolded. This convergence wasn't about the present; it was about charting a trajectory towards safer, more efficient, and technologically advanced lifting equipment practices.

The LEEASA Conference, akin to a multifaceted gem, unveiled a richly diverse agenda. From exploring technological strides to redefining safety norms through regulations, each facet of the lifting equipment industry underwent meticulous examination. Delegates, as well as speakers, plunged into discussions that ventured not only into the present but also delved into the myriad possibilities capital equipment offers.

Setting itself apart, the LEEASA Conference's hallmark lies in its commitment to catalyse innovation through dialogue.

This gathering was not a passive listening exercise; it was an active, invigorating exchange of ideas that fueled progress. Engaging in debates, challenging assumptions, and sharing perspectives

resulted in an alchemical fusion of concepts, propelling the entire industry forward.

Just as technology evolves, so does the realm of lifting equipment engineering. Acknowledging this inevitable truth, the conference centred its discussions around the transformative leaps revolutionising the industry. From sensor-driven insights to automation that elevates safety standards, every aspect of technological advancement was scrutinised through a pragmatic lens.

Beyond the realm of knowledge dissemination, the LEEASA Conference emerged as a nucleus of networking power. Industry professionals, hailing from diverse corners, ignited collaborations that possess the potential to reshape the industrial landscape. These interactions transcended handshakes; they sowed the seeds of partnerships that can foster unprecedented innovation.

At the heart of the lifting equipment industry beats the rhythm of safety. The LEEASA Conference reiterated this commitment by dedicating sessions to safety standards, regulations, and practices that safeguard worker well-being and operational integrity. This emphasis resonates with the industry's core ethos – to drive progress without compromising on safety.

The KITE exhibition and the LEEASA Conference – these are not just events; they are crucibles where industrial evolution takes form. They shine as platforms illuminating the trajectory of local industrial progress.

With the next KITE event set for 2025, as in-person exhibitions and conferences regain momentum, the prospect shines brightly for a future where innovation, collaboration, and industry leadership continue to propel the industrial landscape to new heights. 🌟

Adriaan Roets - EDITOR



capnews@crowns.co.za



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THERE'S A FOREST WITH YOUR NAME ON IT

We're planting a tree for every customer who partners with us to drive the shift to a sustainable transport system



As the first heavy commercial vehicle manufacturer to set science-based targets aligned to the Paris Agreement, we are, together with our sustainably minded customers, taking collective ownership of our role in climate change. Already our science-based targets aim to ensure our vehicles produced in 2025 will emit 20% less carbon emissions than those produced in 2015. To recognise those customers who have made the shift to our Scania Sustainable Transport Solutions*, we're planting a tree in their name, to honour their commitment to a sustainable future. Because on the road to a sustainable transport system every customer counts, every vehicle counts, everyone counts.

*Sustainable transport solutions include Scania Euro5, Scania Gas vehicles, Scania Super Euro 6 and Scania BEV. To explore our Sustainable transport Solutions visit scania.com/za

Meet our Scania Sustainability Pioneers at www.scaniaforest.co.za

SCANIA

Babcock takes used DAF trucks to a brand-new level

Babcock is taking used DAF trucks to a brand new level with the recent launch of DAF Premium Select.

Incorporated in Babcock's used trucks division, DAF trucks are fully refurbished, certified and given the DAF seal of approval before getting a second lease on life in the pre-owned trucks market.

Only A-grade used DAF trucks make the cut. These trucks undergo thorough mechanical and cosmetic inspections, full-service history verification and roadworthiness tests. To qualify as a DAF Premium Select vehicle, trucks have to be less than five years old and have no more than 650 000 km on the clock.

Babcock has made it easier for customers to sell well-maintained trucks back to Babcock through competitive buy-backs and trade-in deals on all makes of trucks. This enables owners to consistently upgrade and rotate their fleet whilst expanding their operations. Second economic line owners get peace of mind, knowing they are purchasing a superior quality DAF truck with an affordable price tag. New customers, including start-up businesses, can buy a reliable, superior-quality DAF truck at a price that suits their pockets.

DAF Premium Select customers have access to the same comprehensive aftermarket support from Babcock that comes standard with new DAF trucks. This includes tailor-made maintenance plans, 24-hour breakdown services and nationwide availability of workshops.

As part of the DAF Premium Select offering, Babcock also provides optional extras, such as financing solutions, 12-month warranties and tracker systems. Any vehicle defects not related to operator error or lack of maintenance are covered by Babcock for up to six months.

Sales manager – Used Trucks, Elliot Twani, heads up the DAF Premium Select portfolio. He says Babcock always has its customers' best interests at heart, which is why the company's used truck offering is all-inclusive. "For example, our finance solutions take away the stress of seeking out external funding, while our maintenance contracts, warranties and aftermarket service mean we're able to give customers fully inclusive support."

Twani says that all the trucks sold meet international standards governing used vehicle sales, and all trucks are sold with full service and maintenance histories. Every used vehicle also undergoes rigorous one-on-one checking by Babcock technicians before being given a clean bill of health. 🌟

FUCHS announces a name change

FUCHS PETROLUB SE will operate under the name of FUCHS SE in future. The resolution to change the name was passed at the Annual General Meeting on 3 May 2023.

"The term PETROLUB refers to the origin of the raw materials and is of no relevance today either in brand communication or in the company names of the Group companies, and it can lead to a misconception of our business model," explains Chief Technology Officer Sebastian Heiner. FUCHS has been focusing for a long time on the development, manufacture, and distribution of highly efficient lubrication solutions for the operation of equipment and machinery. In light of increasing technical requirements and sustainability efforts, the focus is on high-performance raw materials from sustainable sources, which is why the name component PETROLUB is no longer

appropriate. In addition, the word PETROLUB is not part of the company name of the 56 FUCHS subsidiaries worldwide and is therefore not an issue from the customer's point of view.

"As a hi-tech company, we want to expand our technology leadership in strategically important application areas, be it in the fields of digitalisation, future mobility, or sustainability. With the current renaming, we are underlining our focus on advanced, process-orientated, and holistic solutions for lubricants and functional fluids," says CEO Stefan Fuchs.

Today, the FUCHS product portfolio comprises more than 10 000 products in almost all industry segments, including novel functional fluids such as thermofluids that regulate the temperature in the drive of electric cars or are also used in large data centres. 🌟



FUCHS announces a name change.

Heavy anti-dumping duties imposed for sub-par imported tyres

The South African tyre industry has welcomed a final decision to introduce anti-dumping duties on tyres from importers like China.

Anti-dumping duties of between 7.18% to 43.6% were imposed on dumped imports of passenger, truck and bus tyres.

The South African Tyre Manufacturers Conference (SATMC), representing the four tyre manufacturers with plants in South Africa, welcomed the final determination by the International Trade Administration Commission (ITAC) and the decision by Minister of Trade, Industry and Competition, Ebrahim Patel to impose

these duties.

Duties on the respective tariff classifications will remain in place for five years until August 2028. Fairly traded imports from other countries will continue unaffected by the Southern African Customs Union (SACU).

Nduduzo Chala, SATMC Managing Executive, said: "As the SATMC, we applaud this decisive measure by ITAC and the Minister, which comes as a significant victory for the domestic tyre industry. The implementation of these final Anti-Dumping duties will serve to uphold fair trade practices and protect the economy against opportunistic pricing in the tyre sector, which has posed a threat to the future of the South African tyre industry."

The SATMC and its members, Bridgestone Southern Africa, Continental Tyre South

Contaminant-free fuel ensures fewer equipment failures

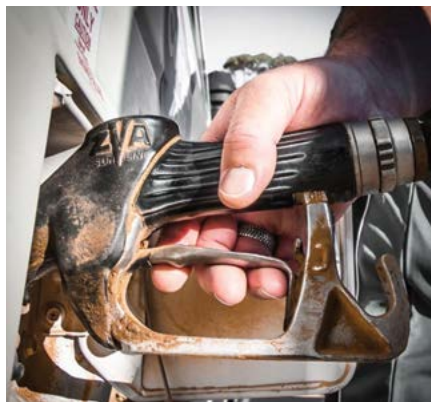
The path to contamination-free fuels relies on a combined effort from refiners to transporters, storage depots, handlers, and end users all playing a role in minimising contamination. Before use, fuels can be polished with multi-pass microfine filtration systems such as those exclusively manufactured by Johannesburg-based ISO-Reliability Partners. Its microfine filtration systems include a stainless steel desiccant air breather that provides moisture absorption, as well as radial and depth filtration, with around 6 000 times the filtration media when compared to market competitors. The breather is filled with thousands of desiccant silica gel beads designed to absorb moisture from the air and tank headspace. These change colour when filters need to be serviced. The breathers are fitted on diesel and oil bulk holding tanks, gearboxes, and lube and hydraulic systems to capture large volumes of moisture and particulate contamination at a low cost.

"This makes the technology not only feasible but also highly recommended in comparison to common options on the market," says Craig FitzGerald from ISO-Reliability Partners. Its microfine filtration solutions and wear particulate analysis offerings were the result of FitzGerald identifying fluid contamination as the initial driver behind the vast majority of equipment failures. FitzGerald's career and knowledge around fluid cleanliness span 25 years, leading to the development of highly effective methods of exclusion and removal of all forms of hydrocarbon contaminants plaguing today's high-power, high-precision industrial equipment. After studying fuel

and oil samples and the subsequent impact on equipment performance worldwide, FitzGerald discovered that ISO cleanliness of fuels and oils not only played a considerable role in equipment uptime and reliability but that standards differed around the world.

According to the South African Bureau of Standards SANS 342:2016, the maximum water content allowed in automotive diesel fuel is 350 mg/kg, with total contamination of particulate matter being 24 mg/kg. The US government has a stricter specification of 10 mg/l (about 12 ppm) for particulate matter. However, neither specification addresses the critical issue of particle size.

While most fuel filters recommended by engine manufacturers have a nominal pore size of 10 μ , studies reveal that the critical particle size for initiating significant abrasive wear in rotary injection fuel pumps and in high-pressure fuel injection systems ranges between one to seven microns.



Contamination-free fuel is critical for optimal performance and efficiency.

Africa, Goodyear South Africa and Sumitomo Rubber South Africa, played a pivotal role in advocating for the imposition of the anti-dumping duties and actively participated in the investigation process conducted by ITAC. The tyre manufacturing body provided extensive data, analysis, and expertise to demonstrate the adverse effects of the dumped tyres from China on the domestic industry.

"We commend ITAC's expert members for their diligent efforts in conducting a thorough investigation into this complex matter and arriving at a well-justified conclusion, which acknowledges the challenges faced by the domestic tyre manufacturing sector. We are also satisfied that the Minister found that the evidence of material injury to the industry, was properly substantiated," said Chala. 🌍



Nduduzo Chala, SATMC Managing Executive.

Zero-emission heavy transport is now possible



A new zero-emission heavy transport vehicle has been created, which can remove the carbon impact of installing large infrastructure such as bridges, wind turbines and power station components. Mammot – the world's largest heavy lifting and transport company – is responsible. It works by converting existing Self-propelled Modular Transporters - or SPMTs - from diesel to electric power. SPMTs are the workhorse of heavy industry, used in almost every large energy and construction project worldwide.

Mammot developed a retrofit kit to replace diesel engines in vehicles with electric motors. Once converted, each SPMT works in the same way as before: transporting objects up to thousands of tonnes at a walking pace, using a remote control. The new vehicle shows Mammot's strong commitment to the energy transition, and its sustainability. Fitting new engines in existing SPMT fleets cuts down on both waste and additional construction, compared to purchasing new zero-emission equipment.

Wacker Neuson expands customer reach to West Africa

Wacker Neuson South Africa announced the appointment of *Batisseurs Machines Et Matériaux* (BMM) as their non-exclusive dealer in the Ivory Coast. This aligns with Wacker Neuson's integrated strategy to roll out premium products and after-sales support to African customers to meet the continent's growing mining, construction and agricultural market sectors. "It is important for us to have a 'local heartbeat' so that we can adapt our strategy to suit the different requirements demanded by these markets," notes Dennis Vietze, Managing Director of Wacker Neuson Sub-Saharan Africa. Before appointing a dealership, Wacker Neuson does its due diligence. Stefan Le Roux, Wacker Neuson Sales Manager Sub-Saharan Africa, explains that as the majority of their products are used in the construction sector, their analysis is focused more on a country's construction outlook data rather than on the specific region.

"We are also careful to appoint dealers who share our business principles because we firmly believe that the customer must experience the same excellent product and after-sales support, no matter where they are."

The Ivory Coast was one of Wacker Neuson's strategic target markets that showed immense potential and activity in the construction sector, which prompted the appointment of BMM as their dealer for this territory.

SA's construction sector needs to identify and mitigate key risks

In the realm of South Africa's construction sector, expectations ran high for the Economic Reconstruction and Recovery Plan. However, the sluggish implementation of these initiatives has cast a shadow on the growth prospects of the local construction industry. Paired with the tangible impact of an economic slowdown and the exodus of skilled labour, these challenges loom large, presenting some of the most formidable risks to the sector's stability.

Koketso Shabalala, the Underwriting Head of Construction and Single Projects at SHA Risk Specialists, a division of Santam, sheds light on the cautious sentiment prevalent in 2023. Despite surpassing previous turnovers, many clients' forecasts remain relatively conservative this year. Shabalala attributes this approach to a decline in project pipelines, likely stemming from the dearth of new infrastructure projects.

Such findings harmonize with the latest insights from the Afrimat Construction Index (ACI), which indicated a dip in the sector during the initial quarter of 2023 compared to the same period in 2022. The forecast for a positive trajectory and year-on-year growth in 2023 was eroded by the holiday-induced lull experienced across the industry.

The construction realm, much like other sectors, has borne the brunt of economic downturns compounded by various factors. As Shabalala illuminates, the shortage of new infrastructure projects has intensified competition among contractors, driving prices down to nearly unsustainable levels. Added to this, escalating construction material costs have suppressed employment opportunities, resulting in a price war for jobs.

In the face of this tumultuous landscape, construction enterprises must refine their focus on robust risk management and mitigation strategies. A pivotal component of such a strategy is obtaining comprehensive insurance coverage to shield companies from potential litigation and liability exposures, which could potentially be financially crippling in case of incidents.

Public liability insurance emerges as a vital tool in these uncertain times. It acts as a safeguard against damages incurred by third parties or their property during construction projects. Shabalala underscores its significance, highlighting how legal costs and repercussions related to third-party incidents could overwhelm companies, especially during periods of financial strain.

Moreover, professional indemnity cover



Koketso Shabalala, Underwriting Head of Construction and Single Projects at SHA Risk Specialists.

emerges as a critical bulwark, particularly in sectors demanding formal qualifications. This type of insurance safeguards against alleged breaches of professional duty, spanning from design phases to implementation. Errors or oversights can cut into profits and jeopardize business continuity, making this coverage invaluable. 🌟

ERWIC Awards redefining the construction landscape

In the realm of the construction industry, the cidb ERWIC Awards have transcended their initial purpose of celebrating women's accomplishments to become a driving force in recognizing and uplifting women as leaders and agents of change. What began as a platform to honour women's contributions has blossomed into a movement that empowers women to take centre stage in the construction sector.

The Empowerment and Recognition of Women in Construction (ERWIC) Awards, organized by the Construction Industry Development Board (cidb), encompass a diverse array of categories. These categories spotlight women mentors, projects led by women, and youth ownership under women's leadership. A celebration of women's proficiency across various disciplines within construction, the awards spotlight those who fervently dedicate themselves to building the nation.

Yet, entering the construction industry is no simple feat, as attested by Mafani Nelly Dasheka, a previous cidb ERWIC Awards winner who established her construction enterprise in the Free State back in 2002. Reflecting on her journey,

Dasheka reveals, "It's a transformative process that commences with realizing that one can transcend one's circumstances. It requires commitment and determination to turn aspirations into reality – the desire and unwavering ambition to contribute to nation-building by seizing opportunities and defying stereotypes."

The distinction of being an ERWIC Awards recipient extends beyond personal gratification. As Dasheka shares, "This award has boosted our business confidence to undertake more intricate projects, igniting a ripple effect that empowers colleagues who share the same vision. It's a contagious momentum towards improvement!"

Bongani Dladla, CEO of the cidb, passionately supports the ERWIC Awards, stating, "Our objective is to leverage these awards to foster women's empowerment and business transformation within the construction sphere." The inaugural awards ceremony in August 2020 spotlighted gender empowerment and excellence among women in construction. With pride in their progress and excitement for the future, Dladla looks forward to this year's winners, who will be unveiled this month.

Esteemed leaders within the construction domain will serve as judges, lending their expertise to these esteemed accolades. With its mission to catalyse economic growth and job creation in South Africa, the cidb envisions an inclusive and reputable construction industry that champions gender equality.

The ERWIC Awards epitomize this vision, fostering an environment where women play an equal and impactful role in driving the construction sector forward. 🌟



Mafani Nelly Dasheka, the 2022 ERWIC Awards Winner.

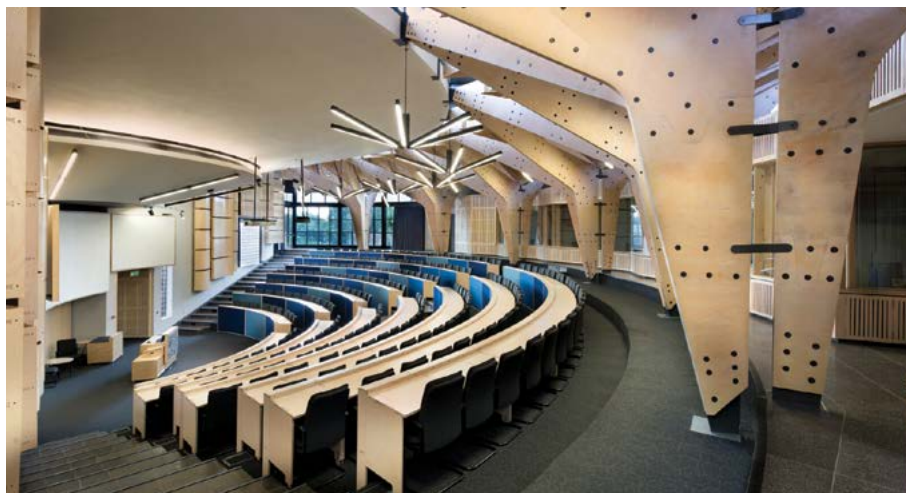
Get ready for the Timber Construction Conference at UP

The University of Pretoria (UP) will host the Timber Construction Conference this year on the University's Hillcrest Campus.

Themed "Growing Timber Connections", the conference will take place on 12 September at Future Africa in Pretoria. It will be tailored specifically for engineers and architects who play pivotal roles in shaping the future of construction.

The event, which will feature a knowledge-sharing conference, an exhibition by industry and students, a Timber Design Competition and networking, is organised by the University of Pretoria, Enterprises University of Pretoria (EUP), Pretoria Institute for Architects (PIA), the Department of Trade Industry and Competition (dtic) and sponsored by York Timbers.

Dr Schalk Grobbelaar, senior lecturer in the Department of Engineering and Technology Management and chairperson of the York Timbers Chair in Wood Structural Engineering, says: "We aim to uncover the remarkable benefits of timber as a construction material, from its sustainability and versatility to its aesthetic appeal and energy efficiency. Together, let us shape the future of sustainable building practices



in South Africa."

The conference also seeks to promote the widespread adoption of timber construction throughout South Africa, showcasing its numerous benefits and exploring its vast potential. The conference will bring together industry experts, government officials, and thought leaders to share their knowledge, insights, and experiences.

This event promises to be an enlightening and collaborative gathering. The conference

will feature engaging presentations, panel discussions, and an exciting exhibition, providing a platform for networking, knowledge exchange, and exploring the latest innovations in timber construction.

Furthermore, the conference will culminate in announcing the Timber Construction Design Competition winners sponsored by York Timbers, recognising excellence and innovation in timber construction. 🌳



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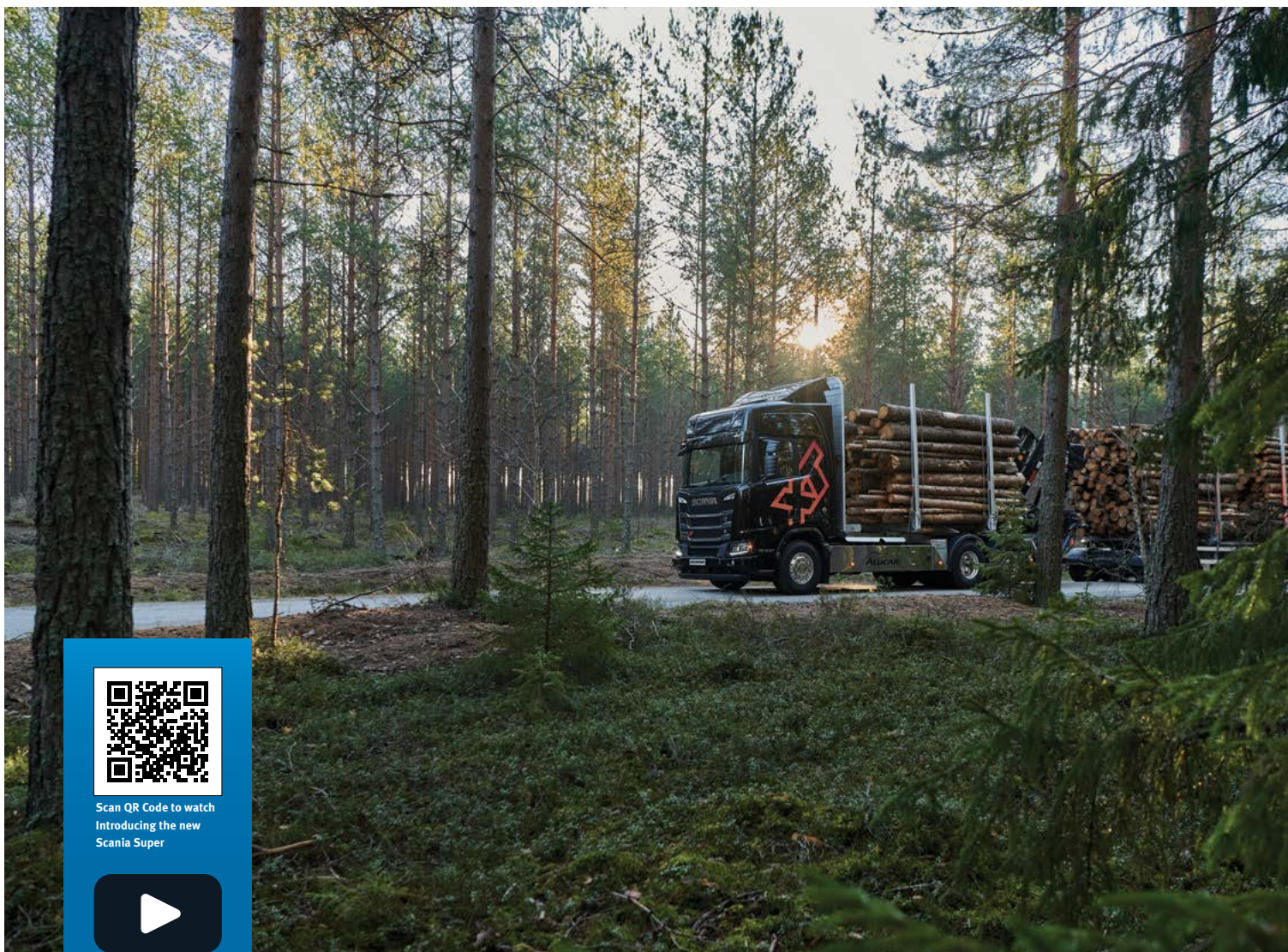


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SCANIA SOUTHERN AFRICA IS PLANTING A FOREST

There's a forest with your name on it. Scania is planting a tree for every customer who partners with them to drive the shift to a sustainable transport system.

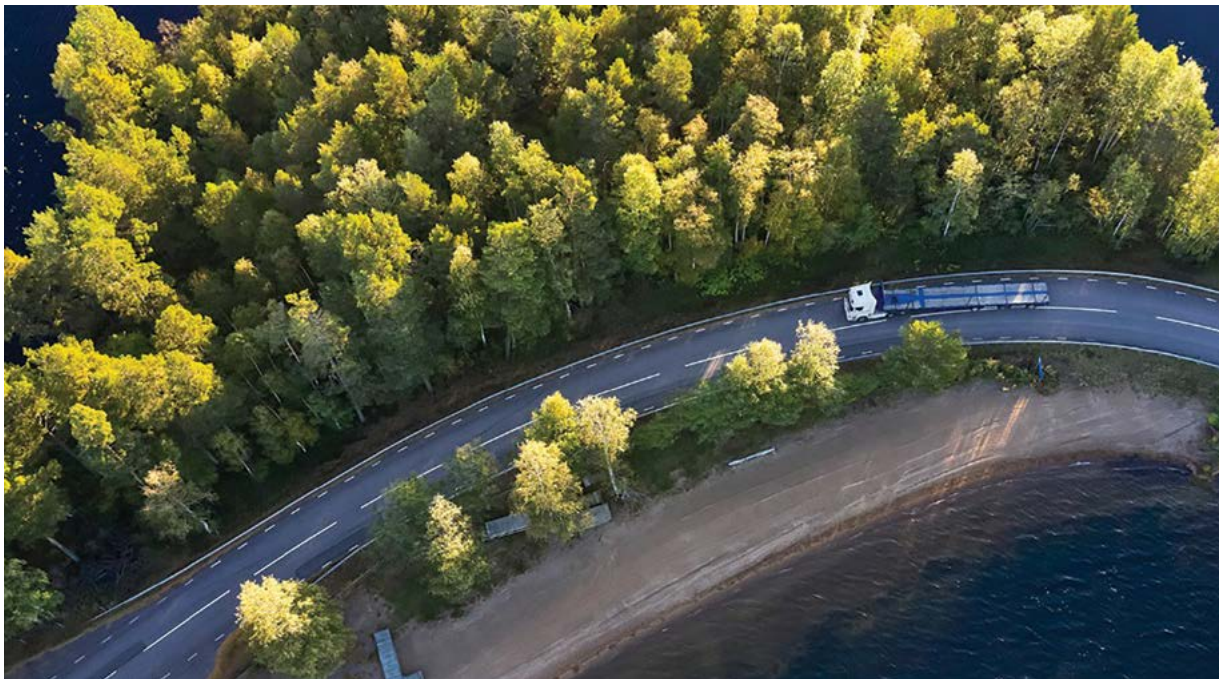
QUICK TAKE



Scania is the first heavy commercial vehicle manufacturer to set science-based targets aligned with the Paris Agreement

One tree will be planted for every Scania Sustainability Pioneer who partners with them to drive the shift to a sustainable transport system.

Scania's sustainable transport solutions include low-emission Euro 5 vehicles, the soon-to-be-launched Scania Super with Euro 6 engines, Natural Gas Vehicles and zero-emission Scania Battery Electric Vehicles.



TALKING POINT



“By managing their operations with less climate impact than their competitors, they are paving the way for a new and sustainable transport system across Southern Africa.”

Erik Bergvall, Managing Director, Scania Southern Africa



In South Africa, transport has been identified as the fastest-growing source of greenhouse emissions, accounting for 10.8% of National GHG Emissions



Scania measures the climate impact of vehicles using operational data from globally connected trucks and buses



The transport sector is particularly exposed and vulnerable to the impacts of natural disasters

The trees for the proposed forest will be planted in areas where they have the most impact. Many communities in South Africa lack green spaces. Research links trees to a reduction in crime, better school performance and improved health benefits.

Every tree planted in a Scania Sustainability Pioneer's name will create a healthy and sustainable community ecosystem while ensuring these business

visionaries are forever a part of the environment, they are helping Scania to protect.

Link to nature

“Considering that our roads carry more than 70% of all goods transported across South Africa, ensuring the effects of climate change are drastically reduced is a pressing responsibility,” explains Erik Bergvall, Managing Director, Scania

Southern Africa.

As the first heavy commercial vehicle manufacturer to set science-based targets aligned to the Paris Agreement, Scania is, together with its sustainably minded customers, taking collective ownership of its role in climate change.

“Already our science-based targets aim to ensure our vehicles produced in 2025 will emit 20% less carbon emissions than those produced in 2015,” says Bergvall.



"To further increase efficiencies, we have introduced optimised vehicle specifications that include better powertrains and further fuel efficiencies."

Net-zero targets

When fossil fuels, like diesel burn, they release carbon dioxide. These gases

are trapped in the atmosphere, causing temperatures to rise, and leading to climate change.

The transport sector is particularly exposed and vulnerable to the impacts of natural disasters.

Climate change is expected to exacerbate future risks. Extreme

weather may disrupt and damage the vital connections that provide access to economic opportunities, healthcare, education and social connections.

In South Africa, transport has been identified as the fastest-growing source of greenhouse emissions, accounting for 10.8% of National GHG Emissions. Direct emissions from the road sector, account for 91.2%.

"The shift to sustainable transport solutions is a collective effort," says Bergvall.

"We can't do it alone. By partnering with our Scania Sustainability Pioneers, we are working together to reduce the carbon emissions necessary to limit climate change in Southern Africa."

Sustainable solutions

Sustainable transport solutions offer transport operators a competitive advantage. Many companies have climate-related targets and are looking across their supply chains for opportunities to reduce carbon emissions.

A fleet that includes sustainable transport solutions could soon become a factor to enable transport operators to win in a competitive bid.

"By differentiating as a transport operator, with a distinct focus on people and the planet, your company engages with a sense of purpose and could attract a new customer base who prefers to do business with sustainably minded suppliers," says Bergvall.

The costs of inaction are steep, especially if carbon emissions continue to rise. Resilient transport interventions can significantly help to reduce future losses across the transport sector.

"At Scania, we measure the climate impact from our vehicles using operational data from all our globally connected trucks and buses," explains Bergvall.

This commitment to a transparent process of tracking emissions ensures Scania and its visionary customers can play a leadership role in combatting climate change.

"We look forward to growing our Scania Southern Africa Sustainable Forest, with each tree a symbol of the on-the-ground partnership we have with our visionary customers," says Bergvall.

"By managing their operations with less climate impact than their competitors, they are paving the way for a new and sustainable transport system across Southern Africa."

A shift that promises to deliver long-term benefits for the transport industry, society and the environment. 🌱

HOW TO ADDRESS THREAT OF SUBSTANCE ABUSE AT MINES

Mining companies face significant safety risks associated with the use of nyaope and cannabis among their employees, jeopardising both the well-being of workers and the overall safety of operations.

By Rhys Evans, Managing Director at ALCO-Safe

These substances can severely impair users' ability to concentrate, posing challenges to maintaining focus during work.

To ensure the safety of mineworkers, minimise incidents of injury, and maximise productivity, mining companies should consider adopting saliva testing as a more suitable method of screening. Saliva testing offers shorter detection periods indicating recent usage when compared to urine testing. Its sample collection process is less invasive, making employees more willing to comply with testing requirements. Furthermore, drugs can be detected in saliva within minutes of usage, enabling quicker identification compared to urine samples, which may take up to 72 hours to reveal drug presence. Embracing saliva testing can effectively accelerate the detection of drug use among mine employees, promoting a safer work environment.

Legislative necessity for testing

The Mine Health and Safety Act (MHSA) is the primary legislation that regulates health and safety in the mining industry. The MHSA requires mine owners to take all reasonable steps to prevent accidents and injuries, including the prevention of drug use. The Occupational Health and Safety Act requires employers to take all reasonable steps to prevent accidents and injuries, including the prevention of drug use.

Dangerous substances

Nyaope and cannabis are both drugs that can have a significant impact on a person's ability to work safely and effectively. Nyaope is a dangerous and highly addictive drug that is made from a mixture of heroin, rat poison, and other substances.

Worryingly, nyaope is increasingly mixed and sold with cannabis, often without the user's knowledge which results in addiction, and can cause several health complications, including respiratory and heart problems as well as mental health problems. Nyaope can also impair a person's judgment and

coordination, which can lead to accidents and injuries in the workplace.

A great concern surrounding nyaope is the fact that it can create a culture of addiction among several mine employees as they share the experience of smoking the substance. Furthermore, due to its harsh nature, the after-effect of the drug is so intense on an individual that it often leads to violent and aggressive tendencies among users – leading to an even more unsafe working environment.

While cannabis is a less dangerous drug than nyaope, it can still impair a person's ability to work safely and effectively as it can cause drowsiness, impaired judgment, and slowed reaction time. These effects can make it difficult for people to operate machinery or equipment safely, and they can also increase the risk of accidents and injuries.

In addition to the physical dangers, the use of nyaope and cannabis in the workplace can also lead to several other problems. These include decreased morale and productivity, increased absenteeism, and staff turnover. This is why it is important for mines to facilitate regular testing to eliminate a possible culture of using these harmful and addictive substances.

Stem the tide of substance abuse

There are several steps that mining organisations can take to stem the use of drugs in the industry, such as implementing regular drug testing programs. Drug testing programmes can help to identify employees who are using drugs and prevent them from entering the workplace intoxicated. To achieve this, mines need to implement a strategy of testing a set number or percentage of employees per day. This method will have a much stronger and more successful deterrent effect, as word spreads through the workforce of the likelihood of being tested – helping prevent unnecessary accidents and injuries, while aiming to improve productivity and morale.

To ensure that testing programmes are not perceived as having a purely disciplinary purpose, mining organisations should provide employee awareness and assistance programmes. These must educate workers on the dangers associated with substance abuse and provide support to employees who are struggling with addiction through counselling, support groups, and other resources to get the treatment they need. Through awareness and testing, mining companies can establish a drug-free workplace culture by educating employees about the dangers of drugs and setting clear expectations for drug use through a written workplace substance policy. This can help to discourage employees from using drugs in the first place. It is also important for mining organisations to work closely with unions and other stakeholders in the development and implementation of drug prevention programmes. This can help to ensure that all employees are aware of the dangers of drugs and that they have access to the resources they need to get help.

Testing technology

For the purposes of saliva testing, disposable multi-panel tests are no longer the only option. Today, mining organisations should be investing in a SoToxa Mobile Test System, designed for rapid drug screening and detection in oral fluid. This handheld analyser can detect the presence of six kinds of drugs: cocaine, methamphetamine, opiates, cannabis (THC), amphetamine and benzodiazepines. One of the major benefits associated with this testing system is its reporting functionality, which can be filtered by various factors such as age group and gender. This can be used to assess progress in the establishment of a drug-free workplace and measure the effectiveness of workplace interventions over time.

Drug-free culture

It is important to remember that drug testing is not a perfect solution, but it is an important tool that can help to reduce the use of drugs in the workplace.

It should be used in conjunction with other measures, such as employee assistance programmes to create a drug-free workplace culture. Furthermore, drug testing should be fair and consistent, and should always be conducted in a way that respects the privacy of employees. By taking such steps, mining companies can help to create a safe and productive workplace for their employees. 🌱

The TL859 features heightened thrust, improved lifting stability, and enhanced safety.



TONLY'S NEW RANGE OF DUMP TRUCKS GIVES DOOSAN/DEVELON AN EDGE

In the realm of mining and quarrying, Doosan/Develon's pioneering range of Tonly engineering transportation equipment is creating waves of excitement across South Africa. The synergy between Doosan and Develon has given birth to a remarkable lineup of machinery, with the spotlight shining particularly bright on the newly launched Tonly TL859 off-road dump trucks.

These cutting-edge machines are poised to redefine industry benchmarks and usher in unparalleled efficiencies in off-road operations.

Darrel Holton, Managing Director of DISA

Equipment, elaborates on the significance of this revolutionary addition: "The local Doosan/Develon team is pleased to include Tonly machines in our wide range of mining and construction equipment. Of particular interest to our customers are the newly launched Tonly TL859 off-road dump trucks, which are poised to set new industry standards and drive efficiencies in off-road operations."

The TL859 series is the result of meticulous research and development undertaken in Indonesia, where the design team focused on integrating key mining dump truck technologies and adaptive applications for large-scale mine site working conditions.

Efficiency and Power

The TL859 AWD 6-by-6 all-wheel drive

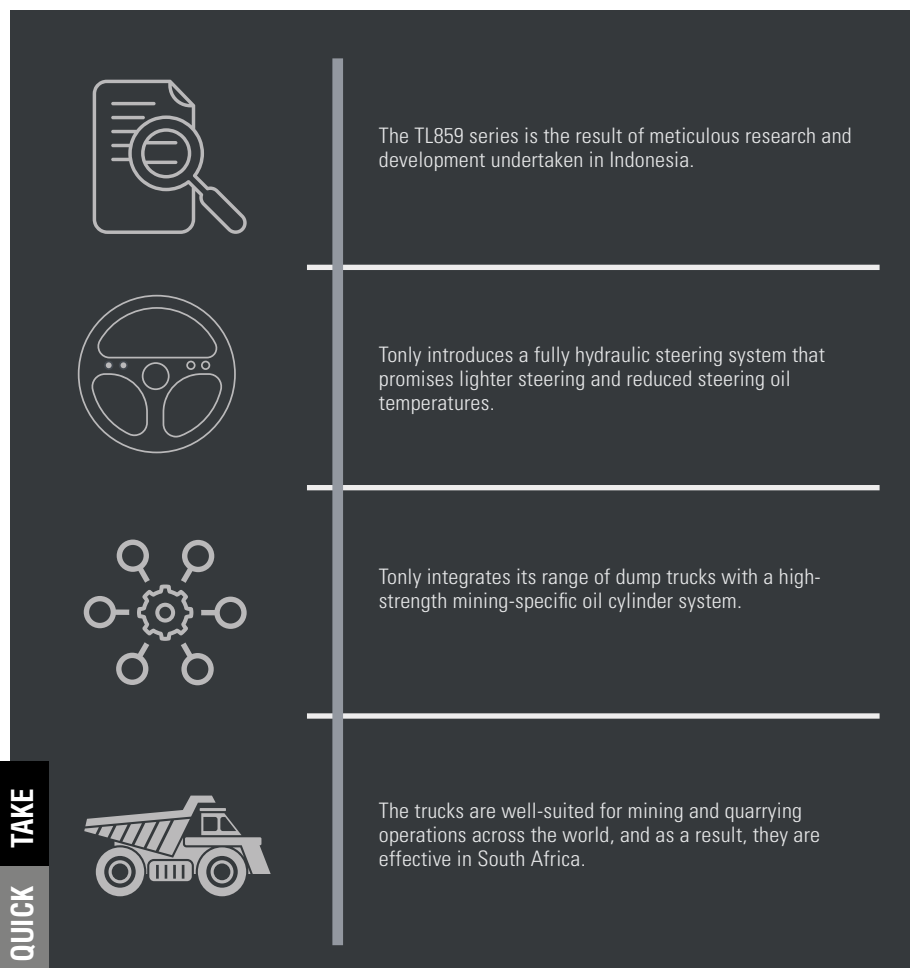
"Of particular interest to our customers are the newly launched Tonly TL859 off-road dump trucks, which are poised to set new industry standards and drive efficiencies in off-road operations."

Darrel Holton, managing director, DISA
Equipment





Doosan/Develon's new Tonly TL859 off-road dump trucks have impressive features for high productivity, fuel efficiency, a large loading capacity and greater safety in tough operating conditions.



off-road dump trucks are engineered for optimum performance on soft road surfaces, as well as in wet and muddy working conditions. These trucks feature an electronically controlled engine and an automatic gearbox, accompanied by user-friendly controls that elevate operational efficiency.

At the heart of this robust series lies a high-performance 12L engine, meticulously optimized for exceptional fuel efficiency and dependable power delivery across a broad spectrum of operating scenarios. The automatic transmission boasts an integrated hydraulic retarder that enhances auxiliary braking capabilities for handling heavy loads,

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The local Doosan/Develon team is pleased to include Tonly machines in our wide range of mining and construction equipment. Of particular interest to our customers are the newly launched Tonly TL859 off-road dump trucks, which are poised to set new industry standards and drive efficiencies in off-road operations.

thereby enhancing operational safety, even in the most demanding conditions.

The marriage of the transmission design and the hydraulic retarder brings about controlled speed reduction when traversing steep slopes, facilitating extended periods of high-power operation. This advanced arrangement not only mitigates wear on components and tires but also underscores the series' focus on sustainability and longevity.

Innovations that elevate performance

In a bid to enhance off-road capabilities, the efficient transfer gear case showcases a two-way twisting ability, enhancing the truck's agility. Furthermore, the integrated active lubricating oil pump bolsters reliability and ensures prolonged component durability.

The TL859 series encompasses a reinforced double-reduction axle housing, delivering exceptional torque capacity and transmission efficiency, essential for ensuring reliable mine transportation.



Tonly TL859 off-road dump trucks are poised to set new industry standards and drive efficiencies in off-road operations.

The utilization of flexible bolt and rivet connections on the main frame optimizes torsional bearing efficiency and significantly extends the machine's service life. The U-type cargo box, complete with an integrated flip shaft, stands as a

testament to the meticulous design that improves machine stability during unloading.

Driving comfort takes precedence with the introduction of the front suspension multi-level shock absorption element. On the other

hand, the patented rear leaf spring clamping mechanism significantly enhances the system's reliability.

Driving a dream

To cater to the specialised needs of the global mining sector, Tonly integrates its range of dump trucks with a high-strength mining-specific oil cylinder system, complemented by optimised connecting support.

This results in heightened thrust improved lifting stability, and enhanced safety. The adoption of a three-stage combined air filter further enhances the efficiency of air filtering, ultimately leading to improved air cleanliness.

Innovating the steering system, Tonly introduces a fully hydraulic steering system that promises lighter steering and reduced steering oil temperatures. The benefits of this innovation encompass extended system component life cycles and heightened truck safety.

Comfort and safety in mind

Amidst the innovations of the new trucks lies a spacious cabin design that prioritises the operator's comfort and safety.

The expansive visibility, combined with effective noise reduction technology, fosters a productive and serene environment for operators, translating into enhanced productivity. Moreover, an anti-collision beam and bumper structure provide critical protection to both the driver and the truck.

Equally important is the truck tyres, which are considered some of the best. Tonly's commitment to excellence extends to the design of special mining tyres, characterized by a longitudinal and transverse groove layout that facilitates outstanding grip performance. These tyres exhibit a superior load-carrying capacity, extended service life, and improved operational comfort.

A new era in mining and quarrying

With Tonly's TL859 off-road dump trucks spearheading the charge, the landscape of mining and quarrying in South Africa is undergoing a transformative shift.

Doosan/Develon's unwavering commitment to innovation, efficiency, and sustainability serves as a beacon, guiding the industry towards a future characterized by cutting-edge technology and enhanced performance.

The partnership between Doosan and Develon promises a landscape marked by excellence, setting new industry standards and propelling South Africa's mining and quarrying sectors towards a horizon of unprecedented growth and efficiency.

The local Doosan/Develon operation doesn't limit itself to Tonly equipment. It proudly showcases an extensive range of Develon excavators, wheel loaders, articulated dump trucks (ADTs), and attachments, each meticulously crafted to cater to diverse requirements across various conditions. The Doosan team complements this offering with comprehensive technical advisory, repair, maintenance, and spare parts services, facilitated through a robust national network of branches and carefully curated distributors. 🌟

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RENEWABLE ENERGY EARLY ADOPTERS – WE’VE GOT SOME GOOD NEWS

As South Africa struggles to find some form of power provision normalcy, it is encouraging to see how many businesses and homes are moving to renewable and alternative energy resources to substitute and stabilise energy demand and usage.

By Mark Freeman, Offer Manager Digital Buildings, Anglophone Africa and Nishandra Baijnath, Systems Architect, Power Systems, Anglophone Africa at Schneider Electric



Mark Freeman, Offer Manager Digital Buildings.



Nishandra Baijnath, Systems Architect, Power Systems, Anglophone Africa at Schneider Electric.

By and large, most of the renewable energy installations, particularly solar, are ticking all the boxes when it comes to realistically delivering on the promised returns whilst transitioning to a greener source of energy. The market is becoming more educated, and the playing field, competitive, as more providers emerge to meet the demands of this burgeoning industry.

But what about the early adopters, those businesses and even homes that started implementing renewable energy resources after South Africa first experienced its daily load shedding in January 2008?

The subsequent fallout of 2008 also saw dramatic hikes in power cost, which again encouraged businesses to use solar and other renewable resources whilst relying on fossil fuel power generators as alternative sources of energy to ensure the continuity of business operations.

Fast forward to 2023 and these renewable sources such as solar arrays are no longer just a valuable cost saver but also an integral part of keeping businesses running. This, coupled with a genset (diesel generator) of some sort, ensures that the business can power through the rolling blackouts that have become the *de facto* standard. However, this is also where we hit a snag.

Many of these systems are not equipped to seamlessly switch over from the grid to solar supply without some form of interruption or optimise the use of the genset to reduce the consumption of fuel.

A real-life example: your local shopping centre goes pitch dark for a few minutes every time loadshedding starts or the grid returns as a result of the operation to the automatic changeover unit to swing the load from the grid to the genset and then back again when the grid supply returns.

A genset is necessary to provide the critical voltage reference for the solar system but this PV system does not communicate with the genset to reduce its output when the solar PV system has the capability to manage most of the load. Not only is this frustrating and even a bit unnerving but the interruption in power supply inflicts havoc on PoS systems, HVACs, and other technologies.

New pieces of a puzzle

The reality is, older solar or other renewable systems do not offer smart and intelligent system integration. The limited functionality in these types of systems does not provide the flexibility required to manage multiple energy sources whilst at the same time handling interconnected loads in the most efficient manner.

For a system to be smart, it must be able to communicate with the devices part of the system whilst possessing the intelligence to manage the energy and power with interconnected loads operating in parallel with the grid or disconnected from the grid in an islanded manner, all in real time.

If not, it can result in damaged equipment, interruption in operations and safety issues whilst both mitigating energy generation through the solar system and reducing the consumption of fuel of the genset.

For solar energy to start running immediately, it needs a reference point, and this is where battery backup comes into play. Older grid inverters must also be replaced with hybrid inverters to allow for seamless switchover between various energy sources such as solar, batteries and grid.

Put in layman’s, a hybrid inverter uses DC power (from the solar panels or backup battery/ies) and converts it to AC power that is usable in your home or any other building that requires electrical energy.

Alternatively, it can use AC power from the grid to convert to DC power that is used to charge the batteries that store this energy in the form of DC power.

The second last piece of the puzzle is then battery energy storage. Due to the variability of solar power generation (due to unpredictable weather conditions, for example), it’s not always possible to use it as it’s generated. Batteries allow a means to store this generated energy for use at a later stage or facilitates the few seconds switchover from AC from solar to grid and the other way around.

Once all the pieces of the puzzle are in place i.e., hybrid inverter, battery storage and energy management, businesses will be able to truly reap the benefits of their initial investment in renewable energy whilst enjoying a fuel cost reduction without reinventing the wheel. 🌞

A major highlight of this year's event was the unveiling of the L95 model, an impending addition to Bobcat's compact wheel loader lineup.



UNVEILING FUTURE-READY LOADER CONCEPTS

Exploring revolutionary concepts and advancements that redefine construction equipment was the order of the day for Bobcat, when the brand showed how its range of wheel loaders can be used in almost any environment.

Bobcat, a stalwart in the construction equipment industry, stepped into the spotlight at this year's Demo Days event held in the Czech Republic at the start of the European summer.

The event captivated the attention of industry aficionados, dealers, and the press from across Europe, the Middle East, and Africa (EMEA).

As we head into the South African Spring and then summer season, it's a good opportunity to reflect on Bobcat's offering in the wheel loader arena, and how these small machines can take on big tasks.

The past five years have witnessed Bobcat's remarkable expansion, with the launch of a multitude of



A major highlight of this year's event was the unveiling of the L95 model, an impending addition to Bobcat's compact wheel loader lineup, which sets the stage for future excellence. Bolstered by a robust 75 HP engine, the L95 surges with a top speed of 40 km/h and enhanced lift capacity.



The L35, a versatile small articulated loader, expands the horizon of high-performance machines that can be transported with ease on trailers.

the legacy of tried-and-true Bobcat products with the allure of cutting-edge developments, allowing participants to immerse themselves in the world of Bobcat's wheeled and tracked loaders, mini-excavators, telehandlers, light compaction tools, and an array of attachments, all in live-action scenarios.

A major highlight of this year's event was the unveiling of the L95 model, an impending addition to Bobcat's compact wheel loader lineup, which sets the stage for future excellence. Bolstered by a robust 75 HP engine, the L95 surges with a top speed of 40 km/h and enhanced lift capacity. The machine's versatility is underlined by multiple Bobcat loader attachments, including the new 1.0 m³ general-purpose bucket and a 1.5 m³ light material bucket, tailored for diverse applications.

Other load of concepts

Bobcat's innovation prowess is showcased with a series of concepts that redefine industry standards. The L35 Small Articulated Loader (SAL) and L40 Compact Wheel Loader encapsulate the brand's commitment to versatility and efficiency.

The new MaxControl system, now enhanced by the new Kishi physical remote, takes operator control to unprecedented heights. The unveiling of the S7X, the world's first all-electric skid-steer loader, marks a paradigm shift towards sustainability, while the T-OLED (Transparent Touch OLED Display) and E35z Electro-hydraulic Mini-Excavator equipped with MaxControl remote operation underscore Bobcat's tech-driven future.

Expanding wheel loader portfolio


Bobcat's pursuit of excellence is manifest in its expanding wheel loader portfolio. Ranging from the compact to the substantial, the portfolio paints a holistic picture of the brand's commitment to redefining industry standards.

This is exemplified by the L40 Compact Wheel Loader and the L35 Small Articulated Loader (SAL). Designed to cater to diverse construction needs, the L40, weighing less than 2.5 tonnes, powers through load and carry applications, simplifying complex tasks. Meanwhile, the L35, a versatile small articulated loader, expands the horizon of high-performance machines that can be transported with ease on trailers.


The T86 Compact Track Loader

The T86 Compact Track Loader, a marquee product, has elevated auxiliary flow outputs to unprecedented levels, including the groundbreaking Super Flow function with auxiliary flow of 159 l/min. This


QUICK TAKE




Operators can effortlessly operate the MaxControl system via physical joysticks.



The T-OLED touchscreen empowers operators with a customizable interface, smart widgets, and interactive applications during operation.



The S7X reigns supreme as the world's first all-electric skid-steer loader.



Operating on a 60.5-kWh lithium-ion battery, the S7X boasts electric drive motors and ball screw actuators for lift and tilt functions.

machines and attachments. Bolstered by a commitment to innovation, Bobcat has established its foothold in various domains, from compact wheel loaders to ground maintenance equipment.

A panorama of Bobcat's latest innovations, including the groundbreaking S7X – the world's first all-electric skid-steer loader, alongside a plethora of exciting technological advancements like the MaxControl system with the innovative

Kishi physical remote, was on full display during the Bobcat Demo Days event.

The event showed what is in store for Bobcat loyalists and those curious about the brand. In South Africa, it shows the country what is to come – and it is specifically wheel loader technology that enjoyed the bulk of the attention.

A gateway to industry evolution

The event seamlessly integrated

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The world's first all-electric skid steer loader, the S7X, delivers unmatched torque and performance and combines sustainability, zero emissions, and top-tier efficiency.



Bobcat's MaxControl Remote Operation revolutionises machine control, and at Demo Days, it had an exciting twist with the integration of the Razer Kishi mobile gaming controller.

The L40 Compact Wheel Loader and the L35 Small Articulated Loader (SAL) are designed to cater to diverse construction needs.



innovation is showcased through a forestry application, where the T86, paired with the XT FRC extra torque forestry cutter, seamlessly mulches tree sections into smaller chips, offering a potent tool for arboricultural tasks.

A Glimpse into the Future of Skid-Steer Loaders

At the forefront of sustainable innovation, the S7X reigns supreme as the world's first all-electric skid-steer loader. Operating on a 60.5-kWh lithium-ion battery, the

S7X boasts electric drive motors and ball screw actuators for lift and tilt functions. Delivering unmatched torque and performance, the S7X combines sustainability, zero emissions, and top-tier efficiency, offering operators a near-silent and vibration-free experience. With an impressive 8-hour runtime on a single charge, the S7X sets a new standard for electric construction machinery.

Technology at the forefront

Bobcat's MaxControl Remote Operation revolutionises machine control, and at Demo Days, it had an exciting twist with the integration of the Razer Kishi mobile gaming controller. By harnessing the intuitive control capabilities of the Kishi controller, operators can effortlessly operate the MaxControl system via physical joysticks, offering console-level precision.

Pioneering transparency, Bobcat unveils the T-OLED touchscreen, a collaborative endeavour with LG. Mounted on a compact loader, the T-OLED touchscreen empowers operators with a customizable interface, smart widgets, and interactive applications. This revolutionary innovation provides real-time job site data, delivering critical insights and machine information seamlessly while allowing operators to maintain situational awareness.

The E35z Electro-hydraulic Mini-Excavator, paired with Bobcat's MaxControl remote operation system, heralds a new era in versatile equipment operation. Empowering operators to control the excavator remotely using an iPhone, the E35z combines electro-hydraulic control with precision and programmability, enabling users to conduct intricate operations with ease.

Bobcat in South Africa

While not all the machines from Demo Days are available locally, Goscor Earthmoving Equipment, as the exclusive Bobcat dealer in South Africa, is committed to providing construction professionals with expert support and personalised service when it comes to Bobcat machines locally.

In South Africa, the Bobcat range of Skid Steer Loaders and Compact Track Loaders are particularly well populated, and considering the uptake of electric equipment available locally, Bobcat models such as the S7X all-electric skid steer loader and the L95 wheel loader could just be driving onto a construction site locally soon enough. 🌱

REAPING THE REWARDS OF A MATERIALS HANDLING GROWTH STRATEGY IN SA

Over the past two years, South Africa's industrial equipment and material handling industry recorded its largest markets in history, with 10, 724 units into the country in 2021 and 9,828 units in 2022.

By Vuyokazi Bangazi, National sales manager for Toyota Material Handling.

The industrial equipment and materials handling industry has historically averaged about 7,000 units a year.

The new growth spurt is largely due to an increased demand for forklifts in industries such as manufacturing, FMCG and distribution as well as in response to a rise in e-commerce, which grew significantly during the pandemic.

National sales manager for Toyota Material Handling, Vuyokazi Bangazi, says in addition to increased demand from the e-commerce and industrial sectors, an increase in infrastructure development and urbanisation in the country have propelled growth in the market. Post the pandemic, Toyota Material Handling experienced double-digit growth in market share from 2021 to 2022.

"While this growth is expected to remain relatively strong this year, I do foresee a slowdown by 2024, given the cyclical nature of the business," she adds.

Bangazi says greater demand for electric, counterbalance and electric low- and high-level warehouse equipment has shown the country is moving towards electric, warehousing and high stacking, most likely due to the increased cost of space.

"Between 2021 and 2022, we noted steady growth from 45% to 57% in electric versus IC orders. This increase in the market shows that businesses are utilising and maximising their operational space to the fullest. Understandably, this has resulted in an increased demand for electric equipment trucks."

Greater focus on fuel efficiency and a reduction of carbon footprints (ahead of carbon tax being implemented) means the majority of manufacturers are interested in battery operated equipment as opposed to diesel.

"Notably, the use of electric forklifts is a standard requirement for the agricultural, food production, distribution and wine export industries, even as South Africa continues to grapple with loadshedding,"

adds Bangazi.

"In 2021, our strategy was to pursue the markets we didn't have. Since then, we have grown new business significantly. This strategy was underpinned by our commitment to improving our customer interactions and service support infrastructure and empowering and developing our employees."

In fact, the business did so well that it was awarded the 2022 Toyota Material Handling International (TMHI) President's Award (Silver) at the TMHI conference held in Japan this year. "This distinguished recognition by our distributor in Japan underscores the remarkable contributions made by our entire team and its dedication to excellence across all facets of our operations," notes Bangazi.

Toyota Material Handling also received a Crystal Award, which recognises businesses that have held a significant part of the market for three consecutive years, including the most recent year.

In addition, the business was recognised by Toyota Industries Corporation Organisation (TICO) and Toyota Tsusho Corporation (TTC), its OEM in Japan, for the highest number of factory orders for material handling equipment placed in South Africa since its inception.

Bangazi says this would not have been possible without the support of the business's customers, suppliers and employees. "In addition, our culture has shifted over the past two years towards an improved understanding of the market and a concerted effort to enhance all areas of operation."

Going forward, the industry – like so many others in the country – has several challenges to deal with, including loadshedding, interest rate adjustments, the exchange rate, a lack of skilled labour, inadequate infrastructure, and limited access to financing, amongst others.

Bangazi says loadshedding is a massive issue for Toyota Material Handling customers. "Loadshedding diminishes our



Vuyokazi Bangazi, National sales manager for Toyota Material Handling.

customers' ability to achieve their goals, which means they have to make cost-saving decisions such as whether to invest in new material handling equipment or rent it - to stay afloat."

The challenges customers face mean they take longer to make decisions, sometimes deliberating on tenders for a long time before they are awarded. "It is important to be able to read the market and act accordingly. Being agile is critical, because waiting for things to change does not come with any guarantees," adds Bangazi.

In addition to agility, Bangazi says the business understands how important it is for executives to support its sales force and understand their challenges. "It is just as important as having open conversations with our customers, because this can open the doors to negotiate different options.

"Imperative too is offering our customers innovations that help improve safety and efficiencies for their businesses, as well as the value adds we can deliver, such as telematics and after-market support.

"Today, our business is more consultative and less transactional. The relationships we nurture, the conversations we have and the value we add are paramount to succeeding in the current marketplace," she concludes. 🌟

JOHN DEERE'S DEMO PROGRAMME UNDERPINS IMPROVED GRADER SALES

The evolution of John Deere graders from the first grader launched in 1967 to its most recent, the technologically advanced G and GP models, have all been key in positioning John Deere amongst the world's top suppliers of motor graders. *Capital Equipment News* recently spoke to Griffiths Makgate: Construction & Forestry Sales Manager for Africa about John Deere's range of graders, their performance, and their uptake by the sectors.

According to Makgate, the function of graders is to prepare the road, angling it to allow for water run-off, and to establish deeper trenches to the sides of the road.

"These heavy-duty machines are designed to smooth a rough terrain and ensure a suitable surface for the movement of large equipment transporting ore and goods from pit to processing plant. They are precision machines that level the land to within a millimetre of the required angle."

Since the production of the first grader, the JD 570, John Deere's product range has evolved to meet industry's needs for improved performance, lower fuel consumption and increased safety.

"The JD 570 grader was equipped with a scarifier that was located at the front of the machine and, given that the safety requirements at the time were not as stringent as they are today, the unprotected cab allowed the operator to sit or stand while operating the machine. Today, the latest products are technologically advanced, containing enclosed fit-for-comfort cabs and surpassing the safety standards required by the mining sector."

John Deere's latest range offers some of the most innovative graders, including the 870G/GP and 872G/GP models, which come in three options – the Tandem Drive, a four-wheel drive option and the Hydrostatic six-wheel front wheel drive equipped with the latest technology, including Auto-Shift PLUS, which reduces foot movement by up to 65%; machine pre-sets to boost efficiency; and Blade Flip to streamline grading passes, amongst others.

The equipment supplier currently offers eight grader models in different configurations, including the 620G/GP, 622G/GP, 670G/GP, 672G/GP, 770G/GP, 772G/GP as well as the 870G/GP and 872G/GP models.

Demo programmes

According to Makgate, John Deere's "intentional strategy" of providing a



A selection of John Deere Graders.



The function of graders is to prepare the road, angling it to allow for water run-off.

platform for its client-base to engage with and fully test its products, has led to an increased interest in the product range and subsequently a massive uptake of John Deere graders.

In fact, 2023 is proving to be exceptional in terms of product sales.

While product demonstrations (demos) have long been part of the company's strategy, this year John Deere's suppliers

have extended the hours and the reach of the demos.

"To ensure that clients get the full experience of the machines, we offer extended hours for the demos, and this has allowed customers at different sites to compare aspects such as fuel consumption and productivity, amongst others." John Deere dealers running the demo programmes across South Africa include AFGRI, Senwes, Mascor. 🌟

BATTERY-POWERED FORKLIFT MARKET POISED FOR GROWTH

Over the past few years, Toyota Material Handling, a division of CFAO Equipment SA that sells forklifts and related solutions, has seen a steady increase in demand for battery-operated equipment.

By Brent Light, National Product Manager for Toyota Material Handling – Counterbalance Equipment

Typical market growth has been sitting at between 2% and 3%, mostly due to customers shifting from traditional internal combustion engine (ICE) forklifts to battery-operated forklifts. Last year however, growth was measured at 5%, a significant increase that exceeded the division's expectations.

This increase was driven predominantly by the adoption of lithium-ion battery-operated forklifts, which are now responsible for around 80% of sales versus lead-acid battery forklifts.

Battery technologies have come a long way in the past few years. Where lead-acid battery technology might have held back the adoption of battery-operated forklifts, due mainly to the rate of discharge and the maintenance required for these batteries, lithium-ion is now propelling the market. This has been augmented by business cycles, such as the large-scale fleet replacements that occur every three to four years.

The adoption of battery-operated forklifts is being driven by three main benefits.

Greater efficiencies and return on investment (ROI)

ICE forklifts are more expensive to run. Whereas fuel for an ICE truck costs between R20 and R25 per litre, electricity for battery-operated equipment costs just R1.50 per kilowatt. Furthermore, the per hour efficiency of an electric machine makes it more economical to run, particularly considering the virtually 100% energy efficiency of a lithium-ion battery.

Energy consumption, and the cost of that energy, is less for an electric forklift compared to an ICE forklift. Therefore, in all applications, even though the upfront costs may be high, lithium-ion will eventually result in a cost saving. This saving can however be delayed in some very low utilisation applications, so it might not

always be justifiable to the business. However, with a high or medium intensity operation, ROI will be realised fairly quickly – within 24 to 36 months you will see significant savings.

ROI is also realised through the cost of maintenance, which is a lot less on an electric forklift. It has fewer moving components, so less can go wrong, and tyre wear is also reduced because it is almost impossible to create wheel spin.

Sustainability

As the world looks towards a more sustainable future, more businesses are being guided by regulations to reduce carbon emissions. For example, in applications such as food handling, businesses can no longer use LPG units, a stipulation of new legislation that came into effect in 2020.

ICE forklifts expel diesel and gas emissions, and a lead-acid battery emits gases when charged. With the use of lithium-ion batteries, emissions are eliminated, resulting in a cleaner and more environmentally conscious working environment.

Driver comfort

Since an electric forklift has zero vibration, and its noise levels are less than that of an ICE forklift, it is a lot more comfortable to operate.

While we are focused on growing the electric market, most businesses still use ICE forklifts, and will do so for some time. The move towards electric forklifts is happening slowly, but as battery-powered machinery becomes more capable in handling difficult environments, adoption should speed up.

It is important to consider that different applications require different technologies.

For example, in a brickyard or concrete facility, using electric forklifts might be a drawback, as they don't have the extra

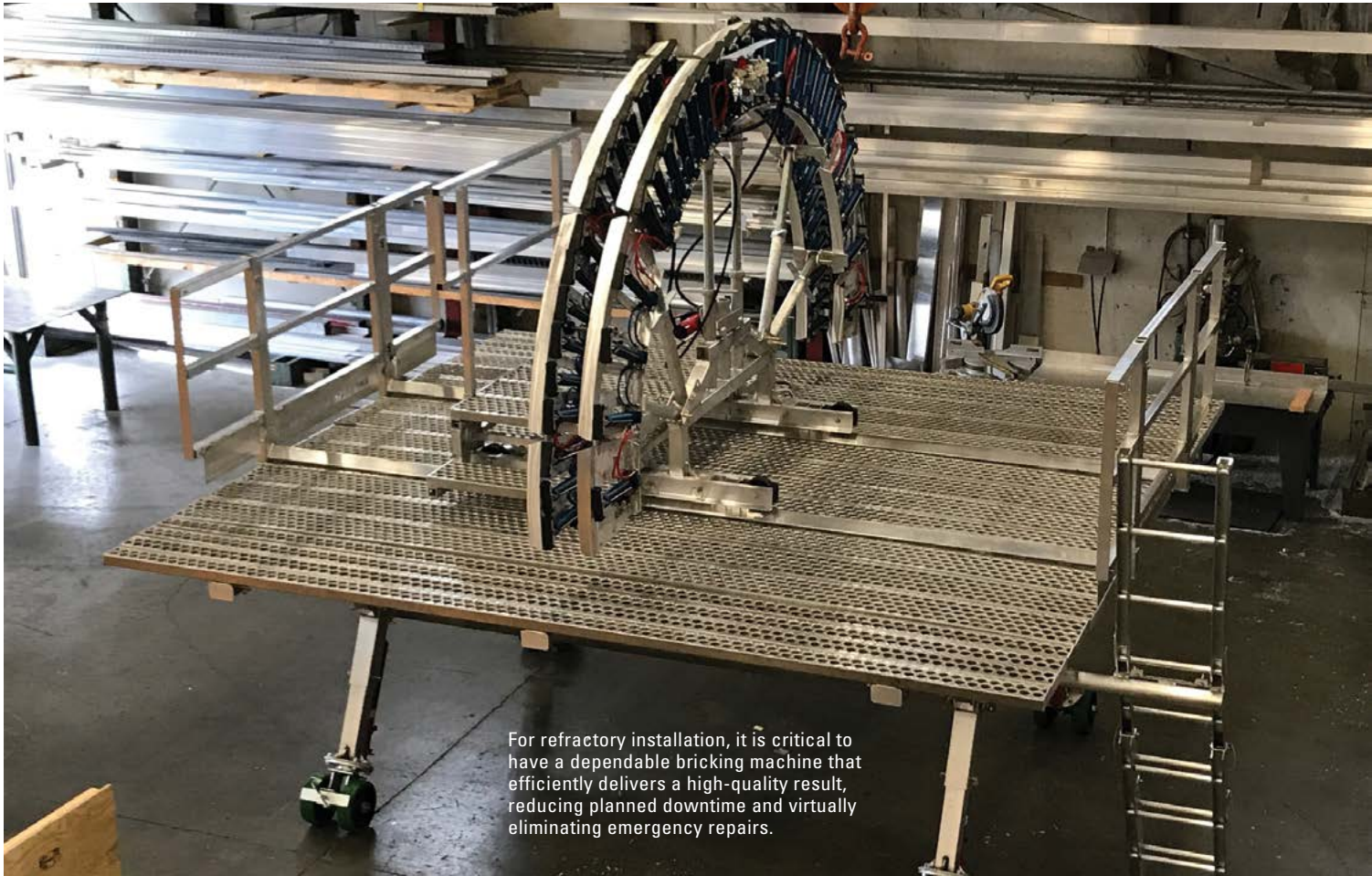


Brent Light, National Product Manager for Toyota Material Handling – Counterbalance Equipment.

power provided by ICE forklifts, and since the work area is mainly outdoors, the emissions requirements will most likely not be as stringent.

There are also certain applications where lead-acid battery technology is still viable, and lithium-ion potentially less. However, we do find customers moving to lithium-ion because of the maintenance benefit, even when they don't require the longer lifespan or the longer operating time of the lithium-ion battery. With lithium-ion batteries they do not need to worry about topping up water levels, and if they need to short-charge, they can do so without any impact on the battery.

Having a variety of forklifts available will continue to appeal to customers, and their choice of machine will depend on what it will be used for. It is important that they consider all options and choose the most suitable machine for the application. 🌟



For refractory installation, it is critical to have a dependable bricking machine that efficiently delivers a high-quality result, reducing planned downtime and virtually eliminating emergency repairs.

WHY INVESTING IN QUALITY SAVES TIME AND MONEY

For refractory installation, it is critical to have a dependable bricking machine that efficiently delivers a high-quality result, reduces planned downtime and virtually eliminates emergency repairs. When looking to buy equipment for refractory maintenance, it can be tempting to choose the lowest-cost option, writes Heather Harding, Managing Director at Bricking Solutions.

A bricking machine has a dedicated and limited purpose and is not used daily. That raises the question: Why invest in a premium product for occasional use? Minimising the initial investment may seem like the way to go; however, not all bricking machines are created equal when it comes to the total cost of ownership.

Bricking Solutions, a division of Brokk, available in South Africa through Demolition & Drilling Equipment in Boksburg, is a solution-based brand to make bricking simple. For that to happen, the right machine



Plants that want to complete maintenance as quickly as possible and to have the best quality installation must make sure to invest in equipment that is not the least expensive to buy, but the least inexpensive to own.



A high-quality installation guards against premature failure, downtime and safety risks while also protecting a plant's substantial brick investment.

QUICK TAKE

With machines not used daily, you should expect quality installations, twice a year, for 20 to 30 years.



Bargain machines are bargains because they are manufactured with a one-size-fits-all approach, and don't last.



With proper maintenance, a machine built with high-quality aluminum has a minimum lifespan of 20 years.



A four-person team can set up the all-aluminium, pin-together machine in 60 to 90 minutes.



needs to be in the field doing the work.

Factors such as the design and quality of the machine affect productivity and how well the installation is executed. Plants that want to complete maintenance as quickly as possible and to have the best quality installation must make sure to invest in equipment that is not the least expensive to buy, but the least inexpensive to own.

So how can operations make this distinction? There are a few key indicators to look for to help determine which machine will be the best long-term investment and offer the lowest total cost of ownership.

Purchase Price

The most obvious and easily factored-in component of the total cost of ownership is purchase price. While it can be tempting to favour the cheapest possible option, operations must evaluate whether the product offers good value and what the long-term costs might be.

A bargain bricking machine may be constructed from aluminium and galvanized steel or painted wood and steel – making the machine heavy and cumbersome to handle. Such machines can tip the scales at 1 850 kilograms and take five to six crew members, a forklift and 6 to 10 hours to set up – wasting an entire shift simply getting ready to work.

A bricking machine constructed of strong, yet lightweight 6061-T6 aircraft grade aluminum is a lean 1 400 kilograms. A four-person team can easily set up the all-aluminium, pin-together machine in just 60 to 90 minutes, and a larger crew can finish even faster. That allows most of the shift to be used for actual installation and brings the job to completion more quickly.

Despite the heftiness of bargain machines, they can lack durability. They are often manufactured with lower-quality material that is not welded to the highest industry standards, resulting in premature cracking. These machines have a lifespan of no more than a decade and sometimes three years or less. With proper maintenance, however, a machine built with high-quality aluminum has a minimum lifespan of 20 years, offering many more years of efficient, quality performance. That means operations could end up replacing the bargain machine two to six times over 20 years while a higher quality machine could perform reliably throughout that time. At that point, the bargain machine starts costing more than the single investment in a higher quality option.



Plants that want to complete maintenance as quickly as possible and have the best quality installation must make sure to invest in equipment that is not the least expensive to buy – but the least inexpensive to own.

Productivity

Setup is just one aspect of an efficient refractory installation process. A well-designed bricking machine can significantly improve installation productivity and save the operation thousands of dollars in labour with a single use.

Consider arch design. Most bargain bricking machines have only a single arch. Some bricking machines are designed with a double arch, making it possible for a crew to install a second ring of brick while the first is being keyed, doubling productivity. Using a bricking machine with a dual arch, a crew can complete up to one metre of brick per hour compared to 0.5 metres with a single arch machine.

Keying access is another design feature that has a major effect on productivity. A cut-away section in the front arch allows keying masons to have an unobstructed area and see the previously keyed ring as a guideline when placing bricks. Bargain bricking machines typically don't include an opening in the arch, which means the installers must try to reach around the arch, reducing the speed and quality of installation. The cut-away section is a simple but effective design element that can save up to 37.5 hours per job.

Quality Installation

A quick installation and the savings associated with it, however, are

meaningless if the quality is poor and results in failures. Refractory issues, such as spiralling and twisting, account for as much as 50% of unscheduled outages and are almost always tied to the quality of the installation. Downtime aside, the brick itself is a large investment that is wasted if it's improperly installed and fails prematurely.

An important aspect of achieving a tight, high-quality installation is a bricking machine that fits the kiln and accounts for any distortions, conical sections or ovality. Bargain machines are bargains because they are manufactured with a one-size-fits-all approach. They won't fit perfectly, which can result in air gaps between the shell and brickwork and interlocking rings. Then it's a matter of when, not if, the premature failure will happen. The initial investment will be higher, but there are bricking machines on the market that are custom designed to fit the kiln and can provide reliable, quality installations, twice a year, for 20 to 30 years.

The elements of a custom, high-productivity bricking machine are also elements that help achieve precision that prevents unplanned, costly problems. The double arch, for example, is designed to be fully adjustable inside the kiln to accommodate distortions or tapered areas. Even if there are irregularities in the kiln, the arch holds each brick firmly against the kiln shell until the key brick is installed. Then the master valve retracts or extends all cylinders simultaneously, allowing the arch to advance to the next row. This ensures a tight fit.

The cut-away section for keying is also critical. It gives the keying mason a clear view of the previously keyed ring. The mason can then use that ring as a guide and will immediately see any open space between bricks. Should there be any sagging, it can be immediately corrected. Bargain machines have a solid arch, giving no such assurances that a problem can be identified and addressed immediately. The mistake becomes apparent when brick starts falling out.

By thinking long-term about the kind of installation your bricking machine will deliver, you are not only guarding against downtime and safety risks, you're also protecting your investment in the brick. And a quality bricking machine that is custom designed to fit the kiln and offers a dual arch and a keying section virtually eliminates the risk of loose brick. A bargain machine that lacks these design elements cannot make the same claim. 🌟

NEW PPE FOR WOMEN IS THE RIGHT MOVE

The Chief Inspector of Mines has issued an updated guideline outlining considerations that mines should incorporate into Mandatory Codes of Practice to tackle the health and safety concerns that women have faced from using PPE designed for men.

by Kate Collier, Partner at Webber Wentzel

On 28 AUGUST this year, the Chief Inspector of Mines introduced a new Guideline for a Mandatory Code of Practice (COP) for the Selection and Provision of Personal Protective Equipment (PPE) for Women in the South African Mining Industry (2023 Guideline).

While the 2023 Guideline retains the core elements of the version first published in 2015 under section 49(6) of the Mine Health and Safety Act (MHSA), the new guideline seeks to address the very real body issues faced by Women in Mining (WIM). In previously male-centric work environments, the impact that PPE has on menstrual health as well as women's dignity is a much-skirted topic.

The 2023 Guideline recognises the importance of addressing women's unique health and safety concerns around work attire, particularly ill-fitting PPE designed for male proportions, which can impact their comfort, mobility, and well-being in the mining industry.

The objective of the guideline is to provide a framework within which all South African mines must compile and implement a mandatory code of practice addressing the provision of PPE for WIM. It should take into account the unique health and safety concerns faced by women in various work roles, from underground miners to engineers and managers. The 2023 Guideline expands the scope beyond the provision of PPE and now provides guidelines on the selection of PPE as well.

The 2023 Guideline introduces an important emphasis on the establishment of WIM structures at mine sites. These structures must reflect technical, professional, and managerial demographics, ensuring that women in various roles are included. This will foster a more inclusive approach to addressing gender-related issues related to occupational health and safety and PPE.

A significant addition in the 2023 Guideline is a summary of the SIMRAC Research Project SIM 10 09 04, which identified safety concerns related to PPE use

for WIM. The research project revealed that female mineworkers have often encountered challenges related to using the bathroom or changing their sanitary products while wearing standard issue PPE. Ill-fitting PPE, such as overalls designed to male proportions, can be cumbersome to remove, making it difficult for women to address their sanitary needs. The research project found that this resulted in many women avoiding going to the bathroom or drinking water while on site. The health risks associated with dehydration (especially in high heat environments), ignoring the urge to urinate, and prolonged gaps between changing sanitary products can drastically affect the health, safety, and comfort of WIM.

Building on the findings of the SIMRAC research, the 2023 Guideline emphasises the need for greater consultation with female employees before selecting and procuring PPE to ensure that the selected protective equipment is suitable for WIM, considering their anatomical and physiological attributes. For example, it may be appropriate to give women the option to wear a two-piece overall, depending on the working environment. There is also a possible link between certain types of PPE used by women and an increased vulnerability to skin conditions such as contact dermatitis, chafing, rashes, and infections. The research highlighted the health and safety risks associated with the coping mechanisms that women developed in response to wearing ill-fitting PPE designed and sized for men, such as lesions from wearing thick woollen socks to improve the fit of large safety boots.

The SIMRAC research places significant emphasis on the need for adequate sanitary amenities at mine sites. Historically, mining facilities lacked separate toilet facilities for women. However, the increased presence of women in mining has highlighted the importance of dedicated and private female toilets, not only to attend to women's sanitary needs but also to guard against gender-based harassment and associated



Kate Collier, Partner at Webber Wentzel.

safety concerns.

The updated guideline recommends providing additional separate toilets per work section to ensure privacy, protection, and dignity for female mineworkers. Such toilets should be equipped with sanitary bins that are regularly emptied to dispose of sanitary products. Proper waste management in these facilities ensures hygiene and reduces health risks for WIM. In addition, facilities should be equipped with toilet paper and hand washing facilities. Access to clean water is crucial in reducing the risk of infections, particularly for those who are menstruating. Well-lit areas surrounding toilets ensure safety for women users, especially during night shifts or in underground environments.

To improve the provision of appropriate PPE for WIM, the 2023 Guideline advocates an approach towards selecting and providing PPE that considers ergonomics and comfort, taking into account the dimensions and individual attributes of female workers. A woman's body should not be a barrier to her career in mining. Sourcing PPE from manufacturers and suppliers that accommodates the broad range of sizes and designs that better suit the female anatomy is best done in consultation with WIM. Employers in the mining sector should review their COP for the provision of PPE for women to update it with the more detailed framework provided in the 2023 Guideline. By addressing the challenges identified during the implementation of the 2015 Guideline, this updated version represents a positive step towards progress and gender equality in the industry, fostering a safer and more inclusive work environment for WIM. 🌟



Pilot Crushtec has sold and commissioned over 2,000 mobile jaws, cones, screens, washing and stock piling plants.

CUSTOMER COMMITMENT IS NOT ON THE SALES QUOTE

Driving home the importance of quality equipment and unmatched service infrastructure, Pilot Crushtec argues that the numbers that really matter are never found on a sales quotation. Rather, the numbers deserving as much attention as the quoted price are those that reflect decades of investment in quality engineering, service excellence and customer support.

While the quotation for an item of equipment reflects its upfront price, it says nothing about the history, experience, product quality and service infrastructure required to sustain optimal production levels for the customer.

"Sustainable and reliable production are at the heart of any crushing operation, and this is what customers are really paying for when they purchase capital equipment," says Francois Marais, Sales and Marketing Director at Pilot Crushtec.

"For this reason, the numbers that matter are those that reflect a supply partner's ability to help customers meet their vital deliverables."

Customer history

Marais highlights that Pilot Crushtec has spent 33 years

building a reputation for its quality of product and its outstanding service levels. Its engineering prowess has already seen over 300 Pilot Crushtec modular plants placed into operation with customers, with over 2,000 mobile crushers, screens and conveyors sold and commissioned.

"Other numbers that matter include the 170 modular cone crushers and the 200 modular jaw crushers that we have sold into the market," he explains. "We estimate that our equipment has to date processed about 5 billion tonnes of material – in around 1,000 different applications and processes."

He notes that, all too often, equipment purchases are made purely based on capital pricing. Down the line, he says, it may be realised that the necessary technical assistance, experience or parts are not readily available to support the equipment. Pilot Crushtec has made a strategic philosophy of its customer commitment, by investing heavily and



Pilot Crushtec runs a 24/7 operation and has over 15 dedicated support technicians available to ensure your plant and operation have minimum downtime.

TALKING POINT



“We estimate that our equipment has to date processed about 5 billion tonnes of material – in around 1,000 different applications and processes.”

Francois Marais, Sales and Marketing Director at Pilot Crushtec



To date, there are over 300 Pilot Modular plants operating worldwide.

QUICK TAKE

There are 20 dedicated parts personnel to efficiently manage this valuable resource.



A group of 15 full-time service technicians travel a million kilometres annually to see customers.



Pilot Crushtec has spent 33 years building a reputation for the quality of its product.



The company has a large stockholding of around 93,000 items.



continuously in service infrastructure, spares and wear parts and continuous training of its people.

Training greatness

“For instance, we train, develop and retain the skills necessary to keep customers’ equipment up and running – to avoid costly downtime that could threaten their contracts and reputations,” he says. “This includes our 15 full-time service technicians, who travel a million kilometres a year to see customers and deliver quality support.”

Underpinning these superior levels of service – which are available 24/7 365 days a year – is the company’s parts and aftermarket infrastructure, which is similarly always open for business. This starts with a large stockholding of around 93,000 items, including about 2,500 wear parts alone. There are 20 dedicated parts personnel to efficiently manage this valuable resource, dispatching 6,788 parts on average every month.

“These numbers reflect the real value that we deliver to our customers and should be fundamental factors taken into account when any quotations are considered,” says Marais. “While the procurement function for equipment is often incentivised to save a little money upfront in a capital purchase, this can create unintended consequences for buyers when production is jeopardised.”

Booyesen Bore celebrates milestone drill rig purchase

In the realm of sustainable business triumphs, the bedrock of success lies in the enduring partnership between a customer and a supplier.

Beyond mere transactions, this alliance thrives on the bedrock of trust, shared vision, and a mutual dedication to crafting lasting value. This fundamental ethos has been the guiding force in the remarkable 30-year journey between Epiroc and Booyesen Bore, culminating in the delivery of the 80th FlexiROC D65 machine to Booyesen Bore, marking a milestone in their symbiotic collaboration. Scheduled for delivery in August 2023, this drill rig will find its purpose in an iron ore mine in the Northern Cape.

Booyesen Bore, founded in 1977 by Chief Executive Officer Hennie Booyesen, initially focused on exploration drilling before expanding its services to encompass blast-hole drilling. What commenced as a family endeavour has now burgeoned into one of the world's largest privately owned drilling companies, holding a prominent position within the mining landscape of the Northern Cape. As a member of Mogs (Mineral, Oil & Gas Services), Booyesen Bore extends services like Down-The-Hole (DTH), percussion, exploration, core drilling, and in-pit dewatering drilling. Their footprint extends to iron ore,

manganese mines, and even solar facilities within the region.

The foundation of their partnership with Epiroc, formerly Atlas Copco Mining & Rock Excavation, was laid in the late 1980s and early 1990s when Booyesen Bore transitioned from jumper rigs to percussion rigs and integrated Atlas Copco compressors into their operations.

Today, Booyesen Bore boasts a formidable fleet consisting of FlexiROC D60, D65, D65 Smart, and several core drilling machines. Booyesen emphasises, "Our oldest FlexiROC, a D60 model from 2012, has logged an impressive 50,000 hours. Working under the harshest surface and weather conditions, drilling into some of the world's most unyielding rocks with compressive strengths exceeding 500 MPa, these robust drilling machines have proven their reliability beyond doubt."

Epiroc's unwavering commitment to innovation, engineering excellence, and technological advancement is evident in the evolution of FlexiROC drill rigs over the years. These machines, aligning with industry benchmarks, have witnessed enhancements in performance, durability, and adaptability to withstand the most challenging terrains. Upgraded engines, efficient compressors, improved cooling systems, faster and more precise hole



alignment, and advanced troubleshooting capabilities characterise these modern marvels. Fuel-saving technology, including options like HNS and One Touch Drilling, reflects Epiroc's commitment to efficiency.

Booyesen highlights the transformative impact of these innovations, stating, "These advancements have revolutionised drilling, saving both time and money in the long run. When it comes to drilling machines, Epiroc's FlexiROC is unparalleled. The combination of unwavering reliability and cutting-edge technology makes it our top choice. The value it adds to our operations is immeasurable."

Epiroc's role transcends being a supplier; it's a collaborative journey from the inception of inquiries to post-purchase support. As Booyesen Bore navigates the road ahead, its focus remains steadfast on delivering quality service. 🌟

Redpath Mining South Africa partners with Sandvik

In a milestone that is likely to revolutionise mining training and safety practices in Southern Africa, Sandvik Mining and Rock Solutions has provided its state-of-the-art digital trainers to leading mining contractor Redpath Mining South Africa.

"Our digital trainers offer a range of advantages that are set to transform the way mining personnel acquire skills and knowledge," says Vusi Thobela, Key Accounts Manager at Sandvik Mining and Rock Solutions. "These cutting-edge training tools provide an immersive and realistic simulation of mining operations, empowering trainees to gain practical experience in a controlled environment."

This innovative technology provides trainees with interactive interfaces that closely resemble the controls and displays found on real mining equipment. This ensures a seamless transition from training to on-site applications for trainees. It also enables them to learn and practice safety protocols and emergency procedures without exposing them to the risks associated with real-life mining activities.

The strategic partnership between Sandvik

Mining and Rock Solutions and Redpath Mining South Africa – under a global framework agreement – signifies a shared vision of promoting excellence and safety in the mining industry. According to Sudesh Deonarain, General Manager of Engineering at Redpath Mining, the high-fidelity simulations offered by Sandvik's digital trainers enhance the training experience.

"Our trainees can familiarise themselves with a range of mining environments, equipment behaviour and tasks, allowing them to hone their skills in a life-like setting," says Deonarain. "From equipment operation and maintenance to troubleshooting and teamwork, they can practice various scenarios, ensuring they are well-prepared to tackle real-world challenges."

He says these cutting-edge tools help to better equip Redpath's workforce to navigate the complexities of modern mining operations and to ensure safety and productivity.

Thobela adds that the accurate simulation of mining equipment and processes allows trainees to develop a deep understanding of the intricacies of operating and maintaining the Sandvik machines.

"This supports increased productivity and



reduced downtime, ultimately optimising operational efficiency in mining operations," he says. "Furthermore, the digital trainers may incorporate data analytics capabilities, providing valuable insights into trainee performance, equipment utilisation and operational efficiency."

He notes that the data-driven approach fosters continuous improvement in training methodologies, contributing to the overall growth and success of mining operations.

"Redpath's commitment to operational excellence, combined with Sandvik's leading technology, is paving the way towards enhanced training and safety standards throughout Africa's mining landscape," says Thobela. 🌟

Pioneering sustainable growth through ESG initiatives

Vedanta Resources Limited (Vedanta) is a trailblazer in its pursuit of sustainable and responsible growth, aiming to generate value for both its shareholders and stakeholders. The company's steadfast commitment to Environmental, Social, and Governance (ESG) principles is firmly anchored in three fundamental pillars: Transforming Communities, Transforming the Workplace, and Transforming the Planet for good.

Within this framework, Vedanta Zinc International (VZI), a subsidiary of Vedanta, stands as a beacon of dedication, channelling its efforts into robust community programmes that encompass 100% coverage of its host communities. Concurrently, VZI strives to foster an exemplary workplace environment for its employees, while also driving forward its visionary quest for a green zinc solution. This ambitious endeavour aims not only to make the company water-positive but also to achieve carbon neutrality.

Pursuing its overarching goal of Transforming the Planet, VZI has embarked on the inaugural phase of its Renewable Energy Programme. The company recently inked a pivotal Power Purchase Agreement (PPA) with Enernet Global (Enernet), a pioneering Independent Power Producer.

This partnership will see the establishment, operation, and maintenance of a 12MW DC Solar Photovoltaic (PV) plant at VZI's Black Mountain Mining operations in South Africa's Northern Cape.

This state-of-the-art solar plant is project-



ed to generate an impressive 29 gigawatt hours of electricity annually, making significant strides in reducing carbon emissions by around 25 tonnes per year. Construction is slated to commence in the first quarter of 2024, with an estimated completion timeframe of 9 months.

Beyond its environmental merits, the project promises to create a substantial number of direct and indirect employment opportunities for local communities, spanning both the construction phase and the anticipated 25-year operational lifespan of the plant.

Enernet, renowned for its innovative hybrid power systems geared toward cost reduction, emissions mitigation, and heightened reliability, is the natural collaborator for this transformative endeavour. With over 140MW of capacity either in operation or contracted, including a substantial 60MW across Africa, Enernet is well poised to usher in a new era of sustainable energy solutions.

Bart Haverkamp, Enernet's Managing Director, in Africa, expressed enthusiasm about the collaboration, stating, "We are excited to be Vedanta's long-term partner for power on their decarbonisation journey, working together on the roadmap, phasing, and roll-out of renewables."

Looking ahead, VZI is resolutely committed to decarbonising its operations through the continuation of its Renewable Energy Programme. Phase 2 of this initiative will encompass the establishment of another vital Power Purchase Agreement. Pushpender Singla, VZI Executive Director & CFO, underlined the company's unswerving ESG focus and outlined their visionary goals: "Our aim is carbon neutrality by 2040, and as such, we are excited to partner with Enernet to safely complete this 12MW solar energy project, which will reduce emissions and enhance energy reliability and security, bringing us one step closer to our goal." 🌱

Plant optimisation and hybridisation for your mining operation

Energising a mining operation is a huge expense, but it presents the biggest opportunity for you to optimise costs and help you meet your ESG goals. Energy costs for approximately 30% of a mine's total operating costs, therefore it is critical for mining companies to optimise their power infrastructure to optimise their profits.

Aggreko has been working as a long-term energy partner with mining operations across the globe, and in Africa, guiding them on the right energy mix to achieve their energy transition aspirations. The company works alongside the mining companies to provide a tailored solution that is most suited to where they are in the energy transition. These partnerships are driven by Aggreko's commitment to creating better energy solutions with its clients. With mining companies in all corners of the world facing capital expen-

diture constraints, the idea of updating or decarbonising their systems can seem like a distant and complex goal. Aggreko works with mining companies to accelerate their energy transition visions and journey, by assisting them to optimise their current power infrastructure and set up and upgrade their power technology to the most efficient available on the market. Aggreko further helps mining companies transition to lower-impact carbon fuels such as gas through LNG or LPG virtual pipelines or hybridising their thermal plants by adding solar and energy storage via batteries.

The implementation of hybrid power is one way in which miners can drastically improve efficiency and their bottom lines. As mines are going deeper and more remote than ever before, finding innovative ways to keep costs and emissions in check is an ongoing challenge.

Hybrid power plants combine the ad-

vantages of renewable energy and battery storage with the reliability of thermal generators. The integration of different components comes with some complexity but is needed to ensure a reliable supply of energy, particularly in industries such as mining, where downtime is not only costly but poses a health risk. This is where it is critical to work with a long-term energy partner such as Aggreko to navigate the complexities and ensure that the integration is optimised to yield the best, most reliable and most cost-effective results. Once installed, the costs of producing solar power are almost zero - and so are emissions.

Our battery and energy storage systems give you greater power quality and resilience and deliver savings to your project, by improving the overall plant efficiency and thereby reducing fuel consumption and carbon emissions. 🌱

JCA marks 15-year anniversary in the South African transport sector

JC Auditors (JCA) is celebrating 15 years in South Africa by introducing a series of impactful initiatives aimed at fostering safety, compliance, and efficiency.

The JCA team is launching initiatives based on industry demand that address the pressing challenges faced by the transport sector, particularly the distressingly high accident rate on the roads.

With a sound understanding of the South African road transport landscape, JCA offers a comprehensive set of initiatives that are poised to create a positive and lasting impact on road safety, compliance, and operational effectiveness.

The JCA team is optimistic that these initiatives will contribute significantly to a safer and more efficient transport sector.

"We are proud to mark our 15-year anniversary by launching initiatives that align with our core values of integrity, responsibility, and excellence," says Oliver Naidoo, Managing Director at JC Auditors.

"These initiatives are a testament to our team's dedication to making a meaningful contribution to road safety and operational efficiency within the South African transport sector."

The initiatives introduced by JCA

include free RTMS self-assessments, complementary RTMS audits, online defensive driver training for heavy vehicles, an e-Learning programme for defensive driving of light motor vehicles and a "Preparing for AARTO" Webinar.

Another major initiative is a webinar on how to Achieve ISO Certification. Here JCA will provide transport companies with insights into achieving international standards for quality management, safety, environmental responsibility and overall good governance. Driven by the increasing trend of ISO certifications being a pre-requisite for RFQs, the webinar will explain the requirements and how to start the process.

"As we celebrate this significant mile-



JCA Managing Director, Oliver Naidoo with Dr Paul Nordengen (RTMS Chair) & Adrian van Tonder, seen here with the longest road train in South Africa.

stone, we are reminded of the invaluable relationships we have built with our clients and partners. These initiatives are our way of expressing gratitude and giving back to an industry that has been instrumental in our growth. We look forward to the next 15 years of continued collaboration and shared success," adds Naidoo. 🌟

It's time to reward the best truckers

There's a lot of negative publicity that abounds around truckers, their impact on our roads and their driving habits.

Owing to the fact that the major industrial and consumer output of South Africa is landlocked, located in the interior of the country, our economy is reliant on efficient transport systems both for import and export. The rail network has struggled to compete with truckers, who deliver door to door, thus reducing double handling, reducing risk, and vastly improving delivery times, making truck transport the preferred option.

The costs of fuel, repair and maintenance, and insurance are constantly rising and squeezing margins in the road freight industry. Drivers have a major influence on all these factors and can safeguard the sustainability of the business through safe and efficient driving.

"To recognise the expertise and awareness of effective truck drivers, we launched the #ThankYouTrucker campaign in conjunction with the Road Freight Association (RFA), three years ago," says Elvis Mutseura, Product Marketing Manager of Iveco.

According to him, the objective of this is to pay tribute to truckers who keep the logistics industry moving, to raise aware-

ness about the important contribution that the drivers make and to provide motivation for those that are entering into their trucking journey.

Truck drivers carry a great deal of responsibility, not just in ensuring that the deliveries remain profitable and are delivered timeously, but also in terms of road safety.

"Any incentive that leads to responsible behaviour in trucker performance will have many unseen consumer benefits," adds Gavin Kelly, CEO of the RFA.

The #ThankyouTrucker campaign is looking for the most extraordinary freight driver, a remarkable individual who goes above and beyond the call of duty. Some of the criteria used to judge the drivers include their helpfulness, trustworthiness, dependability, safety records as well as the care and passion that they display towards their chosen career.

Drivers are nominated by company owners, operations managers, direct line managers or fleet managers and only South African drivers in the road freight industry in South Africa can be nominated. The nomination period is open till 2 September 2023, voting is open to anyone but limited to one vote per person/device. The driver who re-



Last year's winner David Mashiane, from Imperial, with his co-workers.

ceives the most votes wins and the winner will be announced on www.thankyoutrucker.co.za on 9 October 2023.

In addition to the recognition that comes from winning the competition, the overall winner will receive an R50 000 cash prize. The first runner-up receives R10 000 and the second runner-up R5 000. 🌟

Women that rule the road

Truck and bus drivers are the unsung heroes on the highways and byways of South Africa. They play an instrumental role in connecting people with their wares, ensuring the efficient transport of merchandise and keeping our economy going.

Hollard's annual Highway Heroes competition aims to shine a spotlight on these unsung heroes. This year, for the first time, the competition is open to drivers of all truck and bus fleets – not only those affiliated with Hollard.

The competition is fierce as it enters the first monitoring phase: this is where truck and bus drivers are assessed on speeding, harsh braking, day and night excessive driving, and distances travelled. Safe, responsible driving is the ultimate focus – and reward.

Mega Bus female drivers Thuliswa Ntsimbi and Sipati Melupe, who hail from Welkom in the Free State, are glad to have been afforded the opportunity to be included in this year's competition, saying it enables them to show the world that they are just as capable as their male counterparts.

For Hollard, the competition has had a positive spinoff: not only have extraordinary drivers been recognised for their safe and

responsible habits behind the wheel, but other participating drivers have also been inspired – and, as a result, have improved their driving behaviour significantly. Better driving, in turn, reduces risk and leads to safer roads. It also means lower fuel and maintenance costs and fewer claims. For Ntsimbi (28) and Melupe (33), it is exciting to be rewarded for practising good driving habits, which already form part of their daily routine.

The pair became bus drivers by joining the leadership programme offered by Mega Bus and eventually qualifying to become full-time bus drivers.

"In 2017, I was unemployed and uncertain about my next move in life," says Ntsimbi.

"I found the learnership listed in an advert and decided to apply. I was accepted into the learnership and began my training, which I found challenging but not impossible. I persevered and completed my training. I am now a professional driver, and safety is always a key priority."

She is one of many talented young female bus drivers at Mega Bus, but her skills don't stop there. Ntsimbi has enrolled in an advanced computer course and is also busy working on acquiring a health

and safety certificate.

For Melupe, the chance to become a bus driver was an opportunity to prove that female drivers are more than capable.

"I joined the learnership programme in 2017 and quickly realised that women were not always taken seriously in the transportation industry," she says.

"My mission is to prove the doubters wrong. I am determined to win the Highway Heroes competition."

In this competition, the winner in the bus category walks away with R100 000, sponsored by Clarendon Transport Underwriters (CTU). Melupe sees this as her opportunity to buy a house for her two adoring children.

The fate of the enthusiastic pair is yet to be determined, but they have to be on their best, most alert behaviour to stay in the running.

"Hollard is thrilled by the number of entries received for the competition. The decision to include bus drivers in the Highway Heroes campaign expands our commitment to road safety. We know that two-thirds of our truck drivers maintain good driving habits even outside of the competition, and we expect bus drivers to exhibit the same practices," says Elka Du Piesanie. 🌟

A podcast for the SA trucking community

Michelin is backing a new thought leadership platform, **What's Treading**, an industry-focused podcast that looks at ways to get South Africa's economy moving.

The show brings key opinion leaders from across the commercial industry to share issues, insights, and solutions on South Africa's key sectors, including construction, mining, transport, and agriculture.

The South African economy has faced many issues in the last few years.

Power cuts, volatile commodity prices, ailing infrastructure and a challenging external environment have hampered growth, leading to low levels of business and consumer confidence.

Using this as a starting point, What's Treading has curated the best minds in the commercial industry to give a holistic view of the issues and offer innovative and pragmatic solutions.

Leading the conversation is veteran journalist, Bongani Bingwa, who takes listeners on a journey with the likes of Gavin Kelly (CEO of the Road Freight Association), Nicci Scott Anderson (CEO of the Commercial Transport Academy), Jehiel Oliver (founder of Hello Tractor), Njombo Lekula (MD of PPC's South African Cement and Materials Division), Wandile Sihlobo (author and Chief Economist of the Agricultural Business Chamber of South Africa), Abdool Kamdar (Green Transport and Net Zero activist and author) and Eugene Herbert (CEO of MasterDrive)

Each episode homes in on a specific sector, giving listeners in-depth industry insights, challenges and most importantly, solutions.



Bongani Bingwa in the studio with a guest for the What's Treading podcast.

What's Treading is an attempt to start and have honest conversations about what is needed from government, business and labour to kickstart the country's economic engine.

"Michelin is proud to sponsor this podcast created by the industry, for the industry, which gives listeners an unfiltered and authentic view of what's truly happening in key sectors of the country. Each episode is truly an eye opener and will leave listeners hopeful and energised to play their part toward the success of our country," commented Saajid Hoosen, Marketing Manager for the sub-Saharan Africa Business-to-Business division at Michelin.

What's Treading explores exciting topics like nurturing and growing the pipeline of women truck drivers, educating more people on sustainability and net zero initiatives in the transport sector, using technology in agriculture to empower small-scale farmers and building capability in the construction industry to grow the economy. 🌟

TELEMATICS CAN HELP PROTECT SA TRUCKS AGAINST EXPANDING RISKS

South Africa's road freight transport sector currently accounts for about 85% of all goods transported in the country, and is growing rapidly each year. To ensure that goods are delivered safely, promptly, and affordably – all without interfering with traffic – it is now more crucial than ever that transporters and their clients use cutting-edge technology,

By Justin Manson, Sales Director at Webfleet

The global geopolitical climate, as well as the South African socio-economic situation have contributed to a rapidly advancing inflationary environment. Electricity and fuel are both contributing to higher prices at the tills. Transporters can use fleet telematics systems that monitor fuel consumption in real-time, to reduce the cost of operations and ease the impact on the total cost of production.

The road and freight industries have encountered hideous challenges in the past few weeks, with 21 trucks being set alight in KwaZulu-Natal, Mpumalanga, and Limpopo. Not only do these attacks put truck drivers' lives in danger, but they also affect the country's economy. With the ongoing truck vandalism, Telematics systems can be used in such instances to expand their data source to flag crime hotspots or areas of anticipated social unrest along a regular route and redirect fleets to avoid any potential damage to assets or injury to drivers.

Keeping up-to-date with maintenance schedules is vital in extending the life cycle of vehicles, and doing so manually leaves too much room for error. Not only does a commercial-grade telematics system provide regular reminders of upcoming scheduled maintenance for each vehicle, but it also monitors mechanical components in real-time to flag any repairs that may need to be done, thus avoiding larger workshop bills down the line.

As national and provincial road agencies work tirelessly to expand and refurbish ageing road networks, there is a concern that this may lead to congestion or tyre damage (or worse) along routes with recently potholed roads. To address these issues, telematics capabilities are expanding to notify drivers and their dispatchers where significant road works are taking place that will cause congestion. This allows them to take caution or reroute entirely, depending on the severity of the



Justin Manson, Sales Director at Webfleet.

damage or disruption.

Powered by artificial intelligence, telematics systems are drawing from an exponentially growing repository of data related to historical car crash data, driver behaviour and other risk factors. Most importantly, they monitor the drivers themselves and help them to improve by reminding them to take regular breaks, and advising them on driving habits to correct, such as over (or under) steering,

taking corners too fast, overall speeding or excessive revving.

Over time, advanced telematics systems enable transport operators and their customers to gain much better control and visibility of their fleets and valuable assets. This not only helps reduce the cost pressure on consumers, but also ensures safer roads for drivers and other road users in South Africa, even during economic crises. 🌐

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Phone: +27 11 622 4770

CROWN HOUSE
2 Theunis Street
Cnr Sovereign Street
Bedford Gardens, Bedfordview, 2007
P.O. Box 140
Bedfordview 2008

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