

For informed decision-making

APRIL 2024



HEAVY-DUTY TRUCKS: Upgraded technology for enhanced safety on new Volvo models

ROAD INFRASTRUCTURE: SA's first EV charging stations for commercial vehicles

TRAILER
MANUFACTURING
Serco Industries is
broadening its product range
PAGE 08

VEHICLE FINANCE OPTIONS: EasyGO widens truck rental options

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THE DAWN OF ENHANCED LOGISTICAL SOLUTIONS IN SOUTH AFRICA

become paramount in the fastpaced world of logistics, where the efficient movement of goods is essential for economic growth.

Due to the failure of rail systems on our shores, South African freight and logistics are now road-based.

Unitrans has stepped in as a pioneering force in the industry. This year, it launched its upgraded Centre of Excellence (COE), setting a new benchmark.

This move underscores the commitment to providing cutting-edge supply chain solutions in South Africa and across the continent.

At the heart of Unitrans' COE lies a sophisticated data-driven approach that harnesses the power of technology to optimise operations and enhance efficiency.

Collecting and analysing vast amounts of data in real-time, the COE empowers decision-makers with actionable insights that drive informed decision-making and streamline operations. This marks a

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significant departure from traditional logistics practices, where decision-making often relied on historical data and intuition rather than real-time information.

The integration of predictive analytics within Unitrans' COE represents a paradigm shift in risk management practices within the logistics industry. By leveraging historical and real-time data to forecast future outcomes, businesses can proactively identify and address potential issues before they escalate.

This reduces operational risks and enhances cost efficiency and safety standards, ultimately leading to a more reliable and sustainable supply chain ecosystem.

One of the standout features of Unitrans' COE is its commitment to providing bespoke solutions tailored to industry needs. In an industry where one size rarely fits all, this personalised approach sets Unitrans apart.

This is noteworthy since it can provide a compelling local supply chain and fill the slack left by our barely there rail system.

Moreover, Unitrans' COE is a testament to the company's unwavering commitment to innovation and excellence. By continuously pushing the boundaries of what is possible, Unitrans is driving value for the industry by shaping the future of the logistics industry in Africa and beyond.

In addition to its technological prowess, Unitrans' COE strongly emphasises safety and security measures.

By optimising operations and mitigating risks, the COE contributes to the overall efficiency of its customers' supply chains and ensures the safety of both drivers and cargo—a critical consideration in an industry where safety is paramount.

Looking ahead, the launch of Unitrans' COE signals a new era of logistical solutions in South Africa, one characterised by innovation, efficiency, and sustainability. As the industry continues to evolve, Unitrans stands poised to lead the charge, driving positive change and delivering value to its clients across the continent

Unitrans' Centre of Excellence represents a bold step forward in the quest for enhanced logistical solutions in South Africa.

By leveraging technology, data analytics, and a commitment to excellence, Unitrans is redefining the industry standards and setting a new precedent for others to follow.

As we embrace the opportunities and challenges of the future, also look at our heavy trucks feature this month (page 12), which indicates a local transition to electronic vehicles. On top of that, South Africa will soon have wider access to electric charging stations for trucks (page 16)

A total of 120 charging stations are planned across South Africa's national and provincial roads, with the first six planned for the main N3 route from the Durban port to Johannesburg.

This infrastructure will ensure the uptake of electric commercial vehicles used in freight and logistics due to the availability of infrastructure to charge fleets.

It will also increase the use of more sustainable road transport in place of quick and efficient rail transport between major cities in the country. Combined with the COE, South Africa can be a modern, sustainable, and, above all, influential country in the inland supply chain, and this is a well-deserved silver lining in a country plagued with ageing infrastructure.

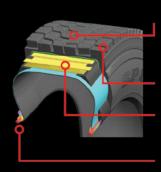
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In these tough times, there's a locally-made class leader with up to 18% more mileage* to help you reduce your fleet costs.

TAKE THE ROAD





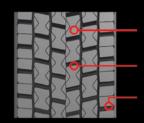
TREAD

Cut and low rolling-resistant compound, developed for high mileage in long-haul highway applications, increases mileage and reduces fuel consumption.

Tread construction improves heat dissipation, increasing case life for more retreadibility.

Revised breakers angle improves ground contact pressure distribution, enhancing uniform tread wear.

Steel filler reinforced bead gives even wear performance.



PATTERN

Partial abrasion reduced during block movement.

Different lug groove angle helps minimise stone retention.

Shoulder block tie-bar reduces heel and toe wear, increasing driver comfort.

* Subject to vehicle application and routes.







The 37.5-ton BOMAG compactor.

EnviroServ trials BOMAG waste compactor in South Africa

A newly imported demo waste compactor model, designed especially for developing countries by German equipment manufacturer BOMAG, is being trialed in South African conditions by EnviroServ Waste Management.

The 37.5-ton compactor, powered by a Cummins engine, is tailor-made for countries like Africa and South America. It boasts superior waste compaction capabilities and has innovative features such as a hydraulically operated engine hood and high air intake, enhancing work efficiency.

The machine will undergo a comprehensive two-month trial at EnviroServ's Chloorkop general waste management facility and another two months at the Holfontein hazardous waste management facility. This rigorous testing under a variety of conditions ensures the compactor's performance and durability.

The key to a landfill's efficiency is the optimal compaction of diverse waste materials. BOMAG's new blade version RB and shovel version RS compactors are a game-changer, offering all-in-one compaction, loading, and transporting capabilities. This not only saves time and costs but also streamlines waste management operations.

"The decision to ask EnviroServ to test the new model is because it can be tested across general and hazardous waste conditions, and we know the machine will really be put to test, working eight to 20 hours a day in high temperatures," Haripersad said.

"We are ecstatic to have been selected by BOMAG for this trial, as it shows that we are recognised as an African leader in waste management. Being associated with a premium brand like BOMAG means quality and reliability, and we have supported the company for many years," said EnviroServ's Senior General Manager of Operations, Rhyno Gouws. \$\mathbf{\textit{G}}\$

Forklift operator training is essential to support business

Ensuring the safe and effective operation of forklifts and other material handling equipment demands more than just technical expertise; it requires comprehensive training, regular maintenance, and an unwavering commitment to workplace safety. Recognising this critical need, CFAO Equipment SA has made it a cornerstone of their business to provide accredited forklift driver license instruction and a merSETA (Manufacturing, Engineering and Related Services Sector Education and Training Authority) recognised forklift mechanic qualification. While forklifts are incredibly versatile machines, their full potential can only be realised by skilled, competent, and well-trained operators. Similarly, their operational life can only be prolonged through regular servicing and maintenance performed by expert technicians.

"Training serves as the central pillar of effective forklift operations," emphasises Pumza Sikaka, Learning and Development Manager at CFAO Equipment SA. Trained operators are more adept at navigating challenges and adhering to safety protocols, ultimately reducing the risk of accidents and damage to equipment. CFAO Equipment SA offers comprehensive training in two key areas. Firstly, the company's forklift driver training equips participants with the necessary skills to legally and safely operate the various types of forklifts that they sell. Upon completion, drivers receive an official license, validating their competence to operate specific machines. This training covers a wide range of topics, including



The CFAO Equipment SA Training Academy, offers a four-year course.

start-up and shut-down checks, operational procedures, manoeuvring, load collection and handling, and familiarisation with the advanced features found in modern forklifts.

Additionally, the CFAO Equipment SA Training Academy, offers a four-year course endorsed by NAMB (the National Artisan Moderating Body). Eligible apprentices from Further Education and Training (FET) colleges and technical high schools undergo training to become accredited forklift mechanics, earning a highly regarded "Red Seal" trade certificate. This indicates that candidates have met the trade's national standard criteria. Training. delivered by technical trainers who are registered assessors and moderators, includes theoretical instruction and practical skills, ensuring operators can efficiently and safely handle machinery in various environments. Candidates typically enter the programme as apprentices and emerge as highly skilled technicians, ready to contribute to CFAO Equipment SA's workforce. O

Goscor East London branch celebrates a decade of success

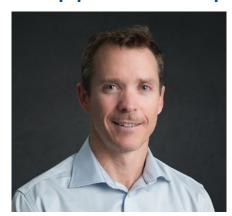
Goscor Lift Trucks (GLT), a key player in the industrial warehousing equipment sector, proudly commemorates a decade of success in East London. Ten yearsago, Goscor Lift Trucks' East London Branch opened its doors with a team of just five individuals. Today, the branch has grown substantially, with a dedicated staff of 44 professionals.

The branch's establishment was prompted by the acquisition of 39 machines through outright purchase, coupled with maintenance contracts for the motor logistics industry. Additionally, the branch introduced a complete battery bay solution, encompassing on-site maintenance and battery replacements. During the same period, the branch pioneered an in-house concept for constructing battery bays tailored for the motor logistics industry.

Founded in 1984, GLT has consistently led the way in providing best-practice solutions for industrial warehousing equipment. Renowned for its expansive range of electric and diesel-powered forklifts and its exceptional after-sales service, GLT has firmly established itself as a dynamic forklift company offering comprehensive warehousing solutions with the lowest total cost of ownership. Today, GLT stands as a leading supplier in the South African materials handling industry.

The branch's customer base has experienced significant growth in the beverage, retail, and motor logistics industries, with the latter playing a major role. This growth is directly attributed to the dedicated support and service implemented in East London. The Service department

Bell Equipment's resilience pays off



Bell's CEO, Ashley Bell.

Bell Equipment (Bell), a prominent global manufacturer, distributor, and exporter of heavy equipment serving various industries, has achieved record-breaking sales and production figures. These accomplishments further solidify its reputation as a premier capital equipment supplier worldwide.

In their recently released results for the year ending 31 December 2023, Bell's CEO, Ashley Bell, highlighted the unprecedented global demand for equipment across most markets. This surge in demand was bolstered by favourable commodity cycles and increased infrastructure spending, resulting in an exceptionally pleasing outcome for the company for the second consecutive year.

Despite grappling with significant challenges such as supply chain disruptions, port congestion in South Africa, and labour shortages in Europe, Bell's team demonstrated exceptional resilience and adaptability. Their unwavering commitment and hard work were instrumental in navigating these hurdles. However, the team's efforts were not without their costs, as higher logistics expenses and the need for inventory

buffers have impacted margins, inventory levels, debt, and return on invested capital (ROIC).

To address challenges like load shedding in South Africa, Bell made strategic investments in solar power installations at their Richards Bay factory and Johannesburg sales and distribution facility. These installations not only promise significant long-term cost savings but also offer operational advantages. They reduce generator running costs and associated emissions during power outages, demonstrating Bell's commitment to sustainability and its ability to adapt to changing circumstances.

Bell's sustainability efforts respond to current trends and a strategic focus on long-term growth. The company is committed to organic growth through continuous development and enhancement of its OEM products, expanding market share in key sectors, and growing its contract manufacturing business, Bell Heavy Industries (BHI), in Richards Bay. The BHI initiative bolsters the South African economy and ensures the sustainability of employment and skills.

Recognising the growing demand in the Northern Hemisphere, Bell plans to increase the manufacturing of its Articulated Dump Trucks (ADTs) in Germany. This strategic move aligns with the expansion of its BHI division and aims to optimise supply chain efficiency.

Bell's commitment to innovation is evident in its pursuit of alternative fuel and propulsion solutions for a zero-carbon future. Additionally, it responds proactively to regulatory changes, such as new mining safety regulations in South Africa, by offering solutions like Pedestrian Detection Systems (PDS) on its equipment. •

has received various accolades and awards over the past decade. In 2022, the branch received recognition as the Service Branch of the Year and was awarded the Branch of the Year in 2018. This recognition is also attributed to the company's implementation of ISO 9001 standards in 2017.

The East London branch operates independently, maintaining its own parts inventory and short-term rental fleet. It provides new and pre-owned sales along with a vast service network to support East London and its surrounding areas.

Since its inception, the branch has expanded its facility three times to

accommodate the growing staff. The recent rebranding of the building brought several structural changes, resulting in a larger parts department and increased stock capacity.

Being the first to introduce the DEC Tow Motors nationally, the East London branch played a pivotal role in providing logistics for the substantial growth in the motor industry. Mark Rennie, the General Manager of the branch, expresses gratitude for the past decade, acknowledging the achievements and growth experienced. He attributes the branch's success to the customers, community, and the dedicated team, acknowledging their role in bringing the branch to its current position.

Modified excavator can be controlled remotely



A new Bobcat E88 8.9-tonne mini-excavator has been specially modified in Sweden with several features, including remote control, for work on building ventilation shafts for the Förbifart Stockholm (Stockholm Bypass) road tunnel project.

The Stockholm Bypass project, carried out by main contractor AF Gruppen, is one of Sweden's most significant infrastructure projects. Its goal is to create a series of underground motorway tunnels between the Kungens Kurva interchange in the south of Stockholm and the Häggvik interchange north of Stockholm. More than 17 out of 21 kilometres of this bypass are being built underground.

New carrier machine for slurry wall construction LBX 600



Liebherr launches a new carrier machine for slurry wall construction on the market. The compact size of the LBX 600 fulfils the requirements of job sites in urban areas.

The electrically driven unplugged version also impresses with its zero-emission advantages. The LBX 600 can be fitted with mechanical or hydraulic grabs. The modular boom system allows for three different machine versions and a high degree of flexibility.

The carrier machine is designed for work using a hydraulic grab and a mechanical grab or chisel, thanks to the two free-fall winches with a line pull of 300 kN each. In combination with the HSG 5-18 hydraulic slurry wall grab, the LBX 600 offers very intuitive operation. This also enables hydraulic corrections to the grab alignment and, thus, a higher verticality of the trench.

Road Freight Association ready for annual conference next month

The Road Freight Association (RFA) is gearing up for its annual conference, which will take place in Hermanus, Western Cape.

The three-day event, held from May 24 to 26 at the Arabella Hotel and Spa, will bring together key stakeholders, thought leaders, and professionals from the road freight industry for networking, innovative ideas, learning, and relationship-building.

Promising to be a melting pot of knowledge and collaboration, attendees can look forward to a dynamic conference agenda featuring engaging panel discussions and insightful presentations. "The conference is a highlight on our calendar," says RFA CEO Gavin Kelly.

"It offers a pivotal platform for industry to come together to share and create dialogue that propels our sector forward." Television presenter Jeremy Maggs will anchor the event as MC. The Minister of Transport traditionally delivers the keynote address at the conference, which this year will centre around the conference theme, Changing the Rhythm of Trucking.

A lineup of speakers, including political analyst Ongama Mtimka, logistics expert Professor Jan Havenga, and Athena Executive Director Devon Palanee, will join the Minister. Additionally, RFA CEO Gavin Kelly and chairman Penwell Lunga will give insights into the RFA's vision for the year.

In addition to the conference programme, delegates can explore an exhibition and truck display, providing interactive engagement with cutting-edge technologies, industry advancements, and innovative solutions. Golf enthusiasts are invited to join their clubs at Arabella's esteemed golf course.

"We look forward to welcoming industry to the conference as we celebrate the backbone of our nation's economy—the road freight sector. Without Trucks, South



Political analyst Ongama Mtimka.

Africa stops. Let us convene, robustly discuss issues affecting the industry, share insights, and propel our industry forward together," says Kelly.

Registration for the conference is still open on the RFA website. �

Webfleet fleet management now available in the United Arab Emirates

Webfleet, Bridgestone's globally trusted fleet management solution, launched its services in the UAE, extending its global footprint to the Middle East region. The official launch underlined that organisations thrive to advance innovative technologies in sustainable mobility and optimise fleet operations.

"The UAE is headed towards being a leader in smart cities globally. Its government is committed to making investments in smart city technology and many innovative projects concentrating on several areas, including transportation. As a result, we realised the need to expand the company's presence in the UAE", said Justin Manson, Webfleet South Africa Sales Director.

Over 60,000 customers worldwide count on Webfleet with its broad portfolio, from vehicle and asset tracking to comprehensive fleet management, with live diagnostic data collection, real-time route optimisation, driver coaching, video telematics and more.

The launch of Webfleet in the UAE will pave the way for a more sustainable future through data-driven mobility solutions. These solutions will support fleet managers and drivers in saving fuel and emissions, helping them stay compliant with evolving regulations, and enabling fleet electrification while running a profit-



An aerial view of Dubai's expansive highways.

able and reliable business.

Jan Maarten de Vries, President of Fleet Management Solutions at Bridgestone Mobility Solutions, said: "Webfleet's launch in the UAE is a strategic move and the next step in our global expansion strategy. We are optimistic about the transformative impact our

solutions will have on fleet management in the region. Beyond traditional telematics offerings, Webfleet will provide small and large businesses with actionable data insights to increase operating performance, reduce costs, increase road safety, and enable a more sustainable operation."

SATMC renews focus on the illicit tyre trade

The South African Tyre Manufacturers Conference (SATMC) is gearing up for a proactive year ahead in 2024, reinforcing its dedication to the country's tyre manufacturing sector. With a comprehensive strategy, the SATMC aims to tackle illicit trade, promote local manufacturing, prepare for the industry's future, enhance skills development, and bolster environmental sustainability within the local tyre industry.

In 2023, the SATMC successfully advocated for anti-dumping duties on unfairly traded tyre imports from China.

This year their focus is on monitoring the impact of this intervention. SATMC Managing Executive Ndu Chala highlighted the establishment of the Illicit Trade Tyre Forum as a critical initiative. This platform, in collaboration with industry associations and stakeholders, is actively combating the misdeclaration of tyre consignments and smuggling activities.

Chala emphasized the importance of ethical trade practices, proposing an industry-wide pledge to ensure integrity from sourcing to distribution. Quarterly meetings with the SARS Tyre Forum facilitate



Members of the SATMC team after announcing their renewed focus on illicit trade for 2024.

reporting of suspected illicit activity for investigation.

Additionally, the SATMC plans to partner with Transnet to address vulnerabilities at ports and harbours.

The SATMC's ongoing Homegrown #DrivingLocal initiative is a testament to its commitment to promoting locally manufactured tyres, emphasizing quality, job creation, and economic contribution. Recognizing the need for skills development, particularly in New Energy Vehicles (NEVs), the SATMC is steadfast in keeping the local workforce updated with industry advancements.

Regarding waste tyre management, the

SATMC is collaborating with relevant authorities to finalize the Waste Tyre Management Plan. They stress responsible dealer practices, with fines for non-compliance.

Efforts also include promoting proper storage practices and exploring commercial opportunities for waste tyres. Chala highlighted the need for regulation concerning end-of-life tyres, mainly second-hand or part-worn, to ensure road safety. Through these strategic priorities, the SATMC aims to build a sustainable and ethical tyre industry in South Africa, protecting local jobs, ensuring consumer safety, and contributing to a thriving automotive sector.

Ronnies Commercial Vehicles East London bags top DTSA award

Daimler Truck Southern Africa (DTSA) recently hosted its Dealer of the Year awards to recognise dealers and general distributors for their 2023 performance.

The award evening theme was that fortune favours the brave, commending dealers and general distributors for demonstrating bravery and emerging victorious in 2023. As a result, Mercedes-Benz Trucks maintained its market leadership position in the Extra Heavy Commercial Vehicle segment. At the same time, sustained growth was recorded for FUSO Trucks, Mercedes-Benz Buses, TruckStore, and Daimler Truck Financial Services.

Twelve awards across seven categories were handed out at the exclusive gala dinner. Ronnies Commercial Vehicles East London won the most sought-after award of the evening: the 2023 Overall Dealer of the Year award.

In addition, and for the first time, Ronnies Motors Commercial Vehicles, being the 2023 Overall Dealer Of The Year, is also recognised as the Daimler Truck Overseas (DTO) EliteClass winner for Southern Africa



The team from Ronnies Commercial Vehicles East London at the gala event.

and will represent our region at the Global EliteClub Awards in Germany, later in 2024.

The DTO EliteClub global partner recognition programme aims to appreciate and award the highest performance across the entire DTO network, including regional centres: Australia, Central Africa, Latin America, Middle East and Africa, Southern Africa and East Asia, for being one of the pillars for sustainable success.

"A massive congratulations to Ronnies Commercial Vehicle East London and its entire team for walking away with the most prestigious award of the evening: Overall 2023 Dealer of the Year and for being Southern Africa's first DTO EliteClass winner. Your commitment to excellence did not go unnoticed and fortune favoured the bravery, resilience, and determination you displayed in 2023. Congratulations to all other nominees and winners, collectively we set the benchmark for the local commercial vehicle industry." Michael Dietz, President and Group CEO of Daimler Truck Southern Africa

Mike Honiball, CEO of Daimler Truck Financial Services, adds, "Daimler Truck Financial Services continues to flourish and grow thanks to the support from our network. Well done to all the winners, especially Ronnie's Motors, for this colossal achievement."



SERCO NOT TRAILING BEHIND IN DRIVE TO MEET CUSTOMER NEEDS

By broadening its product range, Serco Industries has effectively responded to the challenging business environment in South Africa. With Serco's specialisation in the design and manufacturing of truck bodies and trailers, the company has gained an edge in a competitive market, writes *Adriaan Roets*.

t the start of 2024, truck body and trailer building company Serco Industries expected business challenges. However, despite the onslaught of these, Serco focuses on delivering quality products by optimising its vehicles for better payloads, reduced running costs, and improved durability.

"Over the past year, our focus has been on diversifying our product range to grow our dry freight offerings, and we've seen positive growth there, but the refrigerated trailer side is feeling the pinch of the stagnant economy," says Serco CEO

Clinton Holcroft.

Holcroft mentions that Serco's refrigerated body business was down 18% for December 2023 to February this year compared to the same period in 2022/23, and the trend looks likely to continue into March. This drop primarily reflected lower-than-expected refrigerated trailer sales.

Identifying challenges

Holcroft assesses that the most significant factors restricting economic growth in South Africa were corruption, load shedding, crime, and poor performance

accountability, which contribute to excessive unemployment and headwinds to business growth for companies like Serco Industries.

Serco also faces competition in South Africa in the form of second-hand trailers.

"We saw a flood of second-hand refrigerated trailers into the market last year as certain corporate fleets reduced unutilised trailers," he says.

For customers purchasing these trailers, they do come with their own set of issues, primarily related to costs.



We have broadened our product range to include van bodies and curtain sider vehicles to complement the range of refrigerated and dry freight box body vehicles for which we are well known. We have also engaged with our customers to identify pain points and opportunities for innovate solutions.

Clinton Holcroft, CEO of Serco Industries.





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Serco Industries expanded its product range, focusing on dry freight offerings amidst a challenging economic environment, witnessing growth in this segment.



Serco responded to customer demands for longer-lasting and higher payload trucks and trailers by developing innovative solutions.



Despite facing competition from second-hand trailers and economic uncertainties, Serco remains optimistic. It expects improvements in trailer and truck body sales.

TAKE



Trailer demand has allowed Serco to offer a diverse range of transport solutions which meet the needs of cargo transportation in South Africa.

"Older equipment tends to require higher maintenance levels, while new equipment often comes with improved payload and reliability."

According to Holcroft, high interest rates also affected general sales, but he hopes they will reduce soon, improving the affordability of new trailer purchases as the interest rate cycle changes.

"To survive in challenging economic conditions, we focus fanatically on giving our customers the edge, which we do through designing and building products with low life cycle costs and through offering innovative solutions. Our national manufacturing and after-sales service also ensures that our customers can develop their products at locations that are convenient for their operations. We also believe that as a forward-thinking business, we need to take sustainability seriously, which we have done by putting solar into our main production sites in Durban, Johannesburg and Cape Town as part of our goal to achieve 75% of our power from sustainable sources," said Holcroft.

In February, Serco set a record of 67% of its power usage being generated from solar.

New trailers

According to Holcroft, trailers serve as the backbone of cargo transportation. They facilitate the movement of goods across South Africa and are vital to ensure the smooth flow of supply chains.

"The unreliable rail system has forced the private sector to find solutions for moving goods. Particularly for bulk commodities and cargo, much of which was previously transported on rail has now moved to the road, which has been positive for the trailer building industry, who have stepped up to meet the demand.

"Other growth areas include the increasing shift toward online sales and door-to-door deliveries. This trend has led to the need for high-volume, long-distance vehicles as well as lighter-weight last-mile delivery vehicles specifically designed for door-to-door service."

This demand has allowed Serco to offer a diverse range of transport solutions which meet the needs of cargo transportation in South Africa.

He said a key issue raised by clients was the need for their trucks and trailers to last longer. "With this in mind, we have worked with our technical team and key global suppliers to develop innovative solutions to improve the durability and performance of our truck and trailer bodies," explains Holcroft.

"This has included improving payload with the introduction of our Protec Lite trailer, which is 700kg lighter than the

TRAILER MANUFACTURING







standard offering, and the introduction last year of the premium panel technology Protec Plus refrigerated trailer—both are receiving positive feedback for durability and payload."

More options

"We have broadened our product range to include van bodies and curtain sider vehicles to complement the range of refrigerated and dry freight box body vehicles for which we are well known. We have engaged with our customers to identify pain points and opportunities for innovative solutions. This has included improving payload, loading volume and vehicle body durability. These directly contribute to reducing running costs for our customers, which is critical to gaining an edge in a competitive market," says

Holcroft about how Serco has been able to operate effectively despite the influx of second-hand trailers and the stagnant economy.

Holcroft adds that they are introducing a new lightweight aluminium van body for small to medium-sized truck chassis to offer improved payload over the standard.

"We have also recently completed six refrigerated trailers with an electric axledriven system which powers the fridge unit instead of diesel. With sustainability being a high priority for many fleet owners and us, we are seeing more interest towards innovative solutions to reduce the amount of diesel being used," adds Holcroft.

In addition, Serco's broadening product range has seen a significant increase in the number of quotes being generated during the first quarter of 2024, which bodes well for a better year ahead.

"The drive to reduce distribution costs by transporters is generating some positive activity as older vehicles are replaced with more efficient newer models. Hopefully, the elections will create better certainty and hopefully a more performance-oriented government, which will bode well for unlocking the country's economic growth potential," he adds.

Holcroft is optimistic about 2024, seeing a "reasonable" improvement in Serco's trailer and truck body sales. Recent product enhancements, including a high-volume dry freight interlink trailer and the lightweight Protec Lite refrigerated trailer, have attracted positive client feedback.

"Serco is meeting challenges, committed to delivering exceptional service, while helping steer the truck and trailer building industry towards a brighter future," he concludes.

A PLATFORM TO ACCELERATE CHANGE IN AFRICA THROUGH INNOVATION

Futuroad Expo, the premier platform for showcasing cutting-edge innovations in the truck, bus and commercial vehicle sectors, is set to take place from 19 to 21 November at the Johannesburg Expo Centre, Nasrec.





rganised by Messe Frankfurt
South Africa, the 2024 edition
of the Futuroad Expo will bring
together industry leaders, innovators, and stakeholders from sub-Saharan Africa, to explore the latest trends,
technologies, and strategies shaping the
future of transportation.

Safety awards

A major highlight at this year's event is the Fleet Safety Awards hosted by MasterDrive. The awards recognise fleet managers and companies for their dedication to promoting road safety in South Africa. During the inaugural ceremony in 2022, more than 100 entries were submitted, culminating in the awarding of the first Best Fleet Manager and the first Best Company Award.

Since then, the focus of the Awards has

grown to include new categories and a wider variety of individuals and fleets.

"Through interaction with judges, nominees, winners, companies, and attendees combined with the event's support, the time was right in 2023 to take the Fleet Safety Awards to the next level," explains Eugene Herbert, CEO of MasterDrive.

The types of vehicles were then analysed according to their unique requirements and challenges. Differentiating the vehicle classes and considering one group against likeminded competitors further improved the quality, value, and importance of the Fleet Safety Awards.

Herbert adds: "For 2024, our expectations are huge. We are anticipating a substantial increase in the number of entries and, as such, stiffer



Michael Dehn, Managing Director at Messe Frankfurt South Africa

competition, which, in turn, raises the bar. This makes the awards a vital contributor to road safety in South Africa, Africa and the world at large."

Dual event

Co-located alongside Automechanika, the Futuroad expo showcases the latest commercial vehicle trends, cutting-edge technologies, and industry expertise.

Michael Dehn, Managing Director at Messe Frankfurt South Africa, expresses his enthusiasm for the upcoming event: "Futuroad Expo is not just a trade show; it's a platform for collaboration, innovation, and progress. We are excited to bring together industry leaders, policymakers, and innovators to drive meaningful conversations and catalyse positive change in the transportation landscape while celebrating the continued progress in fleet safety through the MasterDrive Fleet Safety Awards."

With a focus on driving sustainable and efficient road networks, Futuroad Expo 2024 will feature an extensive exhibition displaying a wide range of products, including new heavy, medium and light commercial vehicles, trucks, trailers and superstructures, truck bodies and refrigeration, buses, mini-buses, bus and coach bodies, specialised utility vehicles and more.



UPGRADED TECHNOLOGY FOR ENHANCED SAFETY ON VOLVO TRUCKS

Volvo is upgrading its heavy-duty trucks - the Volvo FH, FM, and FMX - with new technologies and camera monitoring to improve business efficiency, safety, and productivity.



Just a few years ago, many thought it was impossible to electrify heavy truck transport. But we decided early on that electrification is our main path to zero emissions. Now we can offer an industry-leading range of purpose-built electric trucks in commercial operation worldwide.

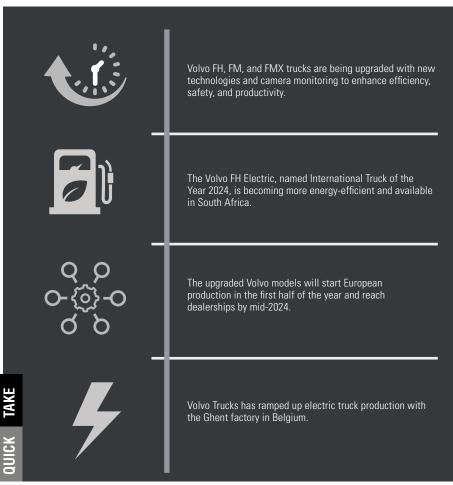
Roger Alm, President of Volvo Trucks

he Volvo FH, FM and FMX truck upgrades are the latest in Volvo Trucks' continuous engineering efforts to optimise its trucks.

The Volvo FH Electric – recently chosen as International Truck of the Year 2024 and available in South Africa since June 2023 – becomes even more energy-efficient.

Also, the familiar face of the Volvo FH, FM and FMX range is getting a mild refresh with a bold Volvo Iron Mark — the biggest ever on a Volvo Truck in modern times.







Regardless of which powertrain a customer chooses

– electric, gas or diesel – all variants of Volvo's
extra heavy trucks will benefit from a high level of
efficiency, safety and driving experience.

Waldemar Christensen, MD of Volvo Trucks South Africa The upgraded Volvo models will enter European production during the first half of the year and reach dealerships in mid-2024.

Customers expect to see the new-look models in South Africa by quarter 4.

"The extra heavy Volvo trucks are icons in the industry and, with the latest upgrades, I am confident that we will further strengthen our position in this segment", comments Roger Alm, President of Volvo Trucks. "Our skilled engineers have done a tremendous job in fine-tuning our heavy-duty trucks for reduced CO_2 emissions, improved safety and even better productivity and customer satisfaction."

Waldemar Christensen, MD of Volvo Trucks South Africa, reassures, "Regardless of which powertrain a customer chooses — electric, gas or diesel — all variants of Volvo's extra heavy trucks will benefit from a high level of efficiency, safety and driving experience."

Improved safety

An advanced Camera Monitor System contributes to better aerodynamics and improved safety. This new solution, available locally as an option, will replace traditional exterior mirrors and give the driver a more comprehensive visual field, thus enhancing safety for both the driver and surrounding road users.

"The camera system has a positive impact on the driver's visibility in rainy and dark conditions, as well as in direct sunlight and when driving in tunnels. When pulling a trailer, the camera system also has an auto-panning function that zooms in on the turning trailer," explains Christensen.

"This feature will be particularly relevant in local driving conditions where trucks often travel on unlit roads and

NEW HEAVY-DUTY TRUCKS







challenging weather conditions."

Expanded production

Last year, Volvo Trucks ramped up electric truck volumes and started the serial production of heavy battery electric trucks

at the Ghent factory in Belgium. Electric Volvo trucks are now built in four factories – three in Europe and one in the US.

These trucks are steadily making their way to South Africa, soon to be joined by the latest Volvo FH, FM and FMX

truck upgrades.

Three electric models will be built in Ghent — the Volvo FH, the Volvo FM and the Volvo FMX Electric. These trucks can operate at a total weight of 44 tonnes and can be adapted for a wide range of transport needs.

"Our trucks are loved for their outstanding quality, safety, design, and driver comfort. It makes me very pleased that our customers can get all these benefits and, at the same time, transport goods without emitting any CO₂," says Alm.

The Ghent factory is the largest Volvo Trucks production site, with a yearly capacity of around 50,000 trucks.

The electric trucks are assembled on the same platform and line as the diesel and gas-powered trucks in a production set-up that gives the factory high flexibility when handling different variants and demands. The battery packs come from the recently opened battery assembly plant in Ghent, located next to the production line.

Ghent is the fourth Volvo Trucks factory to produce battery electric trucks.

Growing numbers

Volvo Trucks has taken orders, including letters of intent to buy, for around 6,000 electric trucks in 42 countries on six continents.

"Just a few years ago, many thought it was impossible to electrify heavy truck transport. But we decided early on that electrification is our main path to zero emissions. Now we can offer an industry-leading range of purpose-built electric trucks in commercial operation worldwide," says Alm.

"However, for the big electric shift to happen, governments need to act now and offer incentive programmes for those who invest in the new technology, increase capacity in the power grid and also introduce CO₂ taxes, to make sustainable transport more competitive."

CHANGE IN TACTICS REQUIRED TO STIMULATE DEMAND FOR EVS

The uptake of electric vehicles (EVs) in South Africa has been slow compared to other world markets. While local consumer interest in new-energy vehicles continues on an upward trajectory, demand remains subdued due to a number of factors, key among these being the relatively high cost of EVs compared to vehicles powered by an internal combustion engine (ICE).

By Lebo Gaoaketse, Head of Marketing and Communication at WesBank

ollowing intensive industry lobbying through the National Association of Automobile Manufacturers of South Africa's New Energy Vehicle Committee, there was hope for a government pronouncement that would reduce the import duties imposed on electric vehicles, lowering the retail price of EVs.

However, South African's policy on EVs, as previously communicated by Minister of Trade, Industry and Competition Ebrahim Patel and more recently by Finance Minister Enoch Godongwane in his budget speech, remains focused on advancing the country's aspirations to become a manufacturing hub for EVs and EV batteries, while demand stimulation through reduced import duties and incentives for end-users would not be considered in the near term.

Guaranteed Future Value

With the current taxation model set to continue, where EVs attract import duties of 25% as opposed to the 18% imposed on ICE vehicles, it is up to the various players in the automotive sector to devise new ways to stimulate greater demand for EVs. Better strategies are required to highlight the solutions that are available that make EV ownership a viable option in South Africa.

From a vehicle finance perspective, finance options such as Guaranteed Future Value (GFV) could be ideal for customers who worry about the aggressive depreciation that generally plagues high-value vehicles like EVs.

As the name implies, GFV means the future residual value of a vehicle can be guaranteed at the outset of the finance term, thereby protecting the vehicle from excessive depreciation, irrespective of what happens in the new or used vehicle market.

When the time comes to trade in their EV, GFV gives owners the peace of mind



Lebo Gaoaketse, Head of Marketing and Communication at WesBank

of knowing exactly how much the vehicle will be worth. This, of course, would depend on the condition of the vehicle and the usage parameters being met.

Marketing the future

A fundamental shift is also required in the way EVs are marketed. A lot of emphasis is currently placed on the performance and range of EVs, which is appropriate for the high-end models currently on offer in the local market.

However, it is a commonly held view that more affordable models are needed to stimulate wider adoption of EVs. Such models, though, are likely to have smaller battery packs and motors and more modest performance and range figures.

To ensure acceptance of these more cost-effective models when they do become available, work to shift attention beyond power and range should start now. The low running costs associated with EVs, especially amid the relatively high fuel prices, should be more prominent in marketing campaigns. EVs also have

fewer moving parts, which makes them inherently cheaper to maintain. These advantages and superior comfort for urban commuting should be communicated more deliberately to South Africans.

Looking at China as an example, which is the only market in the world that continues to experience exponential growth in the uptake of EVs, A-segment and B-segment EVs rank among the top 10 best-selling vehicles in the that country. This is despite being down on power and range compared to more premium models. This underscores the role that more affordable EV models can play in growing the EV market in SA.

The fact that South Africans have largely adapted to life with loadshedding bodes well for the future of EVs in the country. To ensure a solid foundation is laid when the cost of entry into the EV market is eventually reduced, a sustained consumer education campaign needs to be implemented right now to whet the appetite for electric mobility among locals.



FIRST OFF-GRID ELECTRIC TRUCK CHARGING STATIONS SET FOR SOUTH AFRICAN LAUNCH

This month, Zero Carbon Charge launched its new subsidiary, Zero Carbon Logistics, which will roll out 120 solar PV electric truck charging sites on national highways. This will be the country's first off-grid, 100% green electric truck charging network.

nvesting in electric trucks locally is becoming increasingly desirable, considering trucks now have access to specially adapted charging ports in the country.

The initial six sites will be built on the significant N3 freight route between Durban and Johannesburg (see locations below)

This 120-truck charging network will be an additional charge for 120 electric

passenger vehicle off-grid charging sites currently built by Zero Carbon Charge.

Supporting change

This offering is in response to the growing shift by significant truck manufacturers to producing electric truck models. Many truck manufacturers have already committed to achieving a complete electric transition by 2040.

"The shift to electric trucks offers a major opportunity for South Africa to meet its Green Transport Strategy goal of reducing transport-related CO_2 emissions by 5% by 2050", said Joubert Roux, cofounder of Zero Carbon Charge.

"Every day, 8,756 trucks travel on the N3 between Durban and Johannesburg, using over 658 million litres of fuel at an import cost of R8 billion, emitting 1,781,256,762 kg of $\rm CO_2$ emissions per year. Replacing these fuel powered trucks with electric models will save 670 kg of $\rm CO_2$ emissions per truck per day, significantly reducing our country's reliance on expensive dirty fossil fuel imports," Roux added.

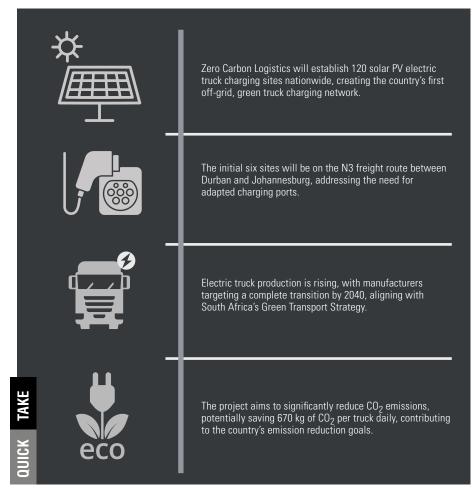
Safeguarding the grid

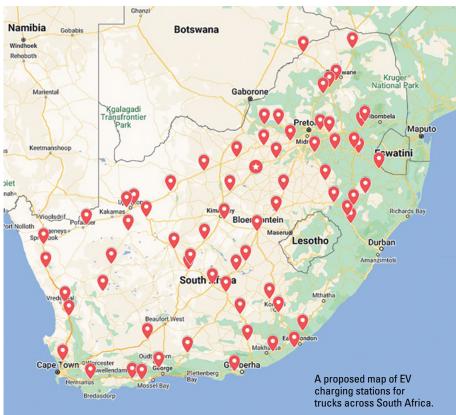
It is estimated that the growth in electric trucks will create an increased energy demand: the electricity required to charge the 8,756 trucks using the N3 route daily totals an additional 2.3 billion kWh/year alone.



Every day 8, 756 trucks travel on the N3 between Durban and Johannesburg, using over 658 million litres of fuel at an import cost of R8 billion, emitting 1,781,256,762 kg of CO₂ emissions per year.

Joubert Roux, co-founder of Zero Carbon
Charge





Considering all 14 national roads, the country would need an additional 8 billion kWh/year of electricity to power the 30,000 electric trucks travelling on these routes daily, placing a significant strain on

the national grid.

"It is, therefore, critical that we start investing in off-grid infrastructure to power these trucks, particularly while travelling on long-haul routes. This is the focus of Zero Carbon Logistics, which will build 120 truck charging stations across all national roads in South Africa. The first six sites on the N3 have started the permitting process, and we hope to be up and running by November 2027", said Andries Malherbe, co-founder of Zero Carbon Charge.

What to expect

These charging stations will be completely off-grid, with each facility powered by 35 MWp of Solar PV. This means they can continue servicing customers during load-shedding and will not contribute to greenhouse gas emissions.

In light of Eskom's electricity network being powered primarily by dirty coal for the foreseeable future, a significant shift towards electric trucks poses the real risk of increased CO₂ emissions. Zero Carbon Charge's research shows that an electric truck charged by the Eskom network could emit 37.5% more CO₂e emissions per kilometre than an equivalent diesel-powered truck.

To ensure reduced emissions, each station will deploy ultra-fast charging technology and modular battery packs developed in China, aiming to charge a truck within 20 minutes.

Oasis for truck drivers

A big focus of the project is creating safe, clean facilities for truck drivers to rest, which will increase road safety.

Each station will offer restrooms, a shop, fast WIFI, and truck repair and wash facilities. Secured day and overnight truck parking bays will be available, monitored 24/7 by CCTV cameras linked to local security companies.

"We are extremely excited to be launching our ambitious Zero Carbon Logistic project, which feeds off the foundation created by Zero Carbon Charge that remains on track to have built 120 electric passenger vehicle charging stations across the country by September 2025," adds Roux.

Investment for success

"Critical to the success of our electric truck charging network roll-out, is obtaining the necessary government approvals to build the sites. In this regard, we would like to thank the Green Energy unit from InvestSA in the Department of Trade, Industry and Competition (DTIC) as well as the KwaZulu Natal Trade and Industry Authority for the guidance they have provided thus far to get the project off the ground," says Roux

Zero Carbon Charge remains committed to working with the government to create mass-scale renewable energy solutions to support South Africa's shift to green mobility and create a net-zero transport industry.



DUNLOP SET TO BOOST OE-QUALITY TYRES ON THE ROAD

One in five vehicles on South African roads is estimated to be fitted with locally produced Dunlop tyres. The tyre manufacturer is forging ahead with a multi-billion-rand investment project backed by its Japan-based parent company, Sumitomo Rubber Industries (SRI).

ocal tyre production capacity is being boosted as more Original Equipment Manufacturers (OEMs) turn to domestic tyre producers to meet their vehicle specifications.

Dunlop holds approximately 20% of the local OE market and has agreements with Toyota, Nissan, Isuzu, Hino, Tata, Scania, and UD Trucks. These agreements effectively result in one in five vehicles factory-fitted on South Africa's roads with tyres produced from the revamped Dunlop Ladysmith plant.

50 years of success

A R1.7 billion investment drive was announced last year during the 50th anniversary of Dunlop's Ladysmith manufacturing plant. The plant opened in October 1973 and has since been at the forefront of tyre production in South Africa.

During a visit to the plant during the celebration, Minister of Trade Industry and Competition Ebrahim Patel said, "I welcome the announcement of a new investment of R1.7 billion. This investment will boost local production, strengthen

the factory's output, and support local jobs. Furthermore, the new investment will aid in modernising and improving the plant. It also marks a significant step toward achieving President Ramaphosa's R2 trillion target for new investments over the next five years."

Patel highlighted that South Africa has an 88-year history of tyre manufacturing, and the Ladysmith plant is Africa's largest tyre producer.

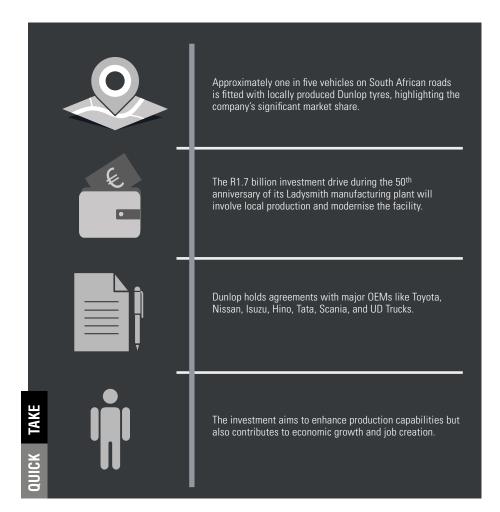
Sumitomo Rubber South Africa (SRSA) CEO Lubin Ozoux says the milestone anniversary for Dunlop is critical.

"With the backing of our parent company, we are investing significantly into our passenger car radial production facility to make a larger impact in the automotive industry. The plant will be able to run a wider set of products, producing more tyres that meet and exceed OE specifications and are safety-tested for all South Africans. At the same time, it allows us to continue our investment in our local community and municipality, creating a vibrant environment for us all to thrive."



"The plant will be able to run a wider set of products, producing more tyres that meet and exceed OE specifications and are safety-tested for all South Africans. At the same time, it allows us to continue our investment in our local community and municipality, creating a vibrant environment for us all to thrive."

Lubin Ozoux , CEO of Sumitomo Rubber South Africa (SRSA)





Pictured at the 50th anniversary of the Dunlop Ladysmith plant is Lubin Ozoux (CEO of Sumitomo Rubber South Africa); Inkosi Ntandoyenkosi Shabalala (Mayor of Uthukela District Municipality); Nomalungelo Gina (Deputy Minister of Trade, Industry and Competition); Satoru Yamamoto (President of Sumitomo Rubber Industries); Minister of Trade Industry and Competition, Ebrahim Patel; His Excellency, Ushio Shigeru, Ambassador of Japan to the Republic of South Africa; Cllr Zama Sibisi (Mayor of Alfred Duma Local Municipality).

Why the investment matters

The investment includes new plant equipment and machinery, such as a new mixer, tread line, and sidewall line, which will increase passenger car tyre production capabilities, efficiencies, and product offerings to support the OE market further. This comes from SRSA's multi-billion rand investment in 2018 in a state-of-the-art 180,000m² Truck and Bus Radial (TBR) factory at the plant, facilitating the local manufacture of truck and bus tyres.

Sustainability

The automotive industry is requesting a reduction in global environmental impact. Dunlop's new high-spec, technology-driven equipment and optimised production processes will reduce the plant's environmental impact, aligning with Sumitomo Rubber Industries' global sustainability goal of zero carbon emissions by 2050.

"Once the investment is complete, the new equipment will improve current process capability and decrease our overall plant



waste by over 60%. Power consumption will be significantly reduced, and the equipment will also be able to produce very low rolling resistance tyres that will help meet future emissions requirements for OE manufacturers who choose to use our products. Our new mixer, with improved technology, will result in an energy saving of approximately 300KWH," says Ozoux.

Economic investment

Sumitomo Rubber South Africa, through Dunlop Tyres, is proud to play its role in economic growth and job creation, buoyed by the commitment of local and national governments to smooth the path for investment growth and opportunities.

The latest investment plans further entrench Dunlop as an employer of choice in the region, committing investment into the local automotive manufacturing sector. Dunlop hired 1257 people into the company between 2014 to 2023, made up of permanent staff members, ex-pats, temporary employees, fixed-term employees, graduates, in-service trainees, apprenticeships, and leadership, with 90% of employees residing in the uThukela District Municipality, within which the Alfred Duma Local Municipality is located. "Dunlop plays a vital role in the Ladysmith economy as we are one of the largest employers in the town. In addition, our spending in the local economy has a multiplier effect on job creation and sustaining local businesses. We have endeavoured to source locally, and a local Ladysmith supplier has been developed as SRSA's main mould management vendor," adds Ozoux.

"The time is always right for investment and development, and we thank the relevant stakeholders and partners for supporting a conducive manufacturing industry. We are excited to see what the next 50 years hold for Dunlop, the community, and the greater OE manufacturing industry nationally," he concludes.



RECYCLED TYRES BECOME SA'S NEW ROADS

Dr Mehran Zarrebini, CEO of Hammarsdale-based radial truck tyre recycler Mathe Group, points out that the use of large amounts of recycled rubber crumb for the manufacture of road surfaces and related products is propelling South Africa towards a circular economy where waste products are usefully used to address essential infrastructure needs.

uch of the production from the Mathe Group factory, which recycles approximately 1,000 radial truck tyres per day to produce 45 tons of rubber crumb, goes to bitumen product manufacturer Tosas.

The rubber is used to manufacture rubber-modified bitumen. This product is

being used by the South Africa National Road Agency (SANRAL) for upgrades to the N1 in Gauteng and the N2 / N3 leading from the port of Durban.

A new partnership

Tosas approached Mathe Group in 2016 to supply rubber crumbs. This was shortly after Mathe Group moved from a small facility in New Germany to its present location in Hammarsdale in KwaZulu-Natal. Since then, it has significantly increased crumb production.

Deon Pagel, managing director of Tosas, explains that the company has been operating for over five decades and was originally jointly owned by Total and Sasol. The company became part of the JSE-listed Raubex Group and operated from seven locations: Wadeville, Bloemfontein, Worcester, East London, Durban, Gaborone in Botswana, and Tsumeb in Namibia.

He says Tosas became a leading bitumen-supplying company by constantly keeping abreast of the latest technological developments.

The company has one of the best bitumen testing laboratories in Southern Africa and is a world leader in developing new bitumen products.

According to Pagel, although people still refer to so-called blacktop roads as tarred roads, the use of tar, extracted from coal and carcinogenic, has been discontinued and replaced with bitumen extracted from crude oil.

Insight into bitumen

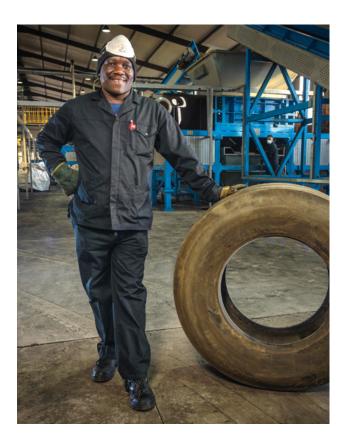
For chip seal applications, bitumen is sprayed onto the road surface at up to double the temperature of boiling water, sealing the top road layer works, protecting the foundation layers beneath, and acting as a waterproofing layer.

Alternatively, it can be mixed with the asphalt and act as a glue, strengthening the road.



The specific rubber crumb size used for rubbermodified bitumen is of the finer quality. The courser grades are used as infill for artificial turf and as elastic layers for sports applications. The material that is finer than that used in rubber-modified bitumen is utilised in non-slip paints, automotive brake pads. and to manufacture new tyres.

Dr Mehran Zarrebini, CEO of Mathe Group



This bitumen that exits a refinery, known as penetration grade bitumen, is modified by adding various modifiers. Rubber-modified bitumen is created by mixing 20% rubber crumb with 80% bitumen and extender oils.

"This is one of the most superior road bitumen products in the world and, on top of that, you have the benefit of recycling. You take old tyres and convert them into a usable product. It is a win-win," he notes.

Applied use

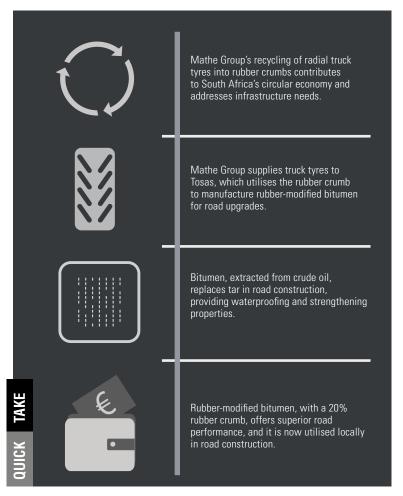
This win-win has extended to the point where bitumen rubber has now been generically specified by the government and other road authorities and owners for use in the construction of roads throughout the country.

Mathe Group's role goes beyond simply producing rubber crumb through ambient grinding of radial truck tyres for Tosas. Together with Tosas, it designed and developed a second plant to make what is known as New Crumb Rubber Technology (NCRT).

This involves coating the rubber crumb with aromatic oil and specialised waxes to produce a pre-swollen bitumen rubber crumb for asphalt mixes and spray seal applications with greater longevity and much lower mixing temperatures.

Dr Mehran Zarrebini is now looking to install a further line that will double output at Mathe Group's Hammarsdale factory and is confident that the company can accommodate the growing need for rubber crumb for roads and other applications.

"The recycling plant that we have designed is flexible and we can manufacture different particle sizes of rubber crumb for different end uses at the same time. The specific rubber crumb size that is used for rubber modified bitumen is of the finer quality. The courser grades are used as infill for artificial turf and as elastic layers for sports applications. The material that is finer than that used in rubber modified bitumen is utilised in non-slip paints, automotive brake pads and to manufac-





ture new tyres," he explains.

He adds that there is room for growing the amount of rubber crumb utilised in the road industry. However, this mainly depends on SANRAL awarding tenders for infrastructure projects and having the available funding to follow through with these projects.

"From a production perspective, we have the flexibility of only manufacturing the grade of rubber crumb utilised in rubber-modified bitumen or if the demand is lower, then we can switch to manufacturing a combination of grades of rubber crumb for other industrial uses. During 2023, we implemented machinery upgrades which enhanced output. We continue to invest in maintaining and upgrading our equipment. In 2024, we will see further enhancements to the plant which will result in greater output," he concludes. \bullet

COMMERCIAL VEHICLE FINANCE OPTIONS



SMMES DO NOT ALWAYS NEED OUTRIGHT OWNERSHIP OF COMMERCIAL FLEETS

To get more small businesses to participate actively in the economy, Isuzu Motors South Africa is making commercial vehicle acquisition more accessible for entrepreneurs and small business owners on its Ready To Work line-up of commercial medium and heavyweight trucks.

mall to medium businesses that are well-established with a solid financial track record have the option to secure a range of Isuzu trucks through a rental agreement off their balance sheet. The fleet ownership can effectively be written off as a monthly expense, not an asset on their books.

EasyGO is a novel financing approach to acquiring commercial vehicles for first-time trucking entrants, and Isuzu is cultivating the market.

"Isuzu's Ready To Work portfolio of commercial vehicles showcases pre-built trucks with their applications so business owners can generate revenue almost immediately. Coupled with our unique rental offer, this represents a gamechanging moment for small businesses' access to the trucking economy," says Craig Uren, Isuzu Senior Vice President of SACU Revenue Generation.

The EasyGO rental truck programme, formed in partnership with Isuzu Finance, provides peace of mind as ownership rests with the bank.



Qualifying small businesses pay a monthly rental based on the selected truck, application, and rental period. Companies can choose between a minimum of 36 months and a maximum of 60 months.

Less rigorous credit checks

This option falls outside of the National Credit Act and is designed with the customer in mind. Small businesses seldom have the capital outlay to buy and own assets like trucks, so they can focus on their business instead of

worrying about how to purchase a truck.

The ISUZU Truck Rental Programme allows customers to use a different credit checking process that focuses on a business's contracts and revenue streams.

Applications to the ISUZU Truck Rental Programme are subject to qualification; however, Uren offers valuable advice on why it is a sound financial option.

Pick your truck

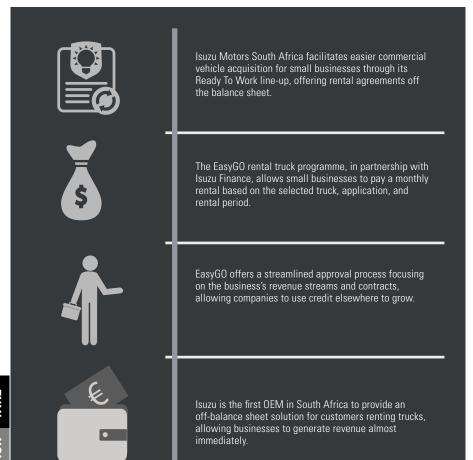
According to Uren, Isuzu is the first OEM in South Africa to offer an off-balance sheet solution for customers renting a



EasyGO is a straightforward profit and loss statement expense. This has multiple advantages such as a lower debt burden as the vehicle is rented, not owned. This allows the business to use its credit elsewhere to grow the business.

Craig Uren, Isuzu Senior Vice President of SACU Revenue Generation





truck rather than owning it.

"We identified this need as many Small to Medium businesses would not qualify for traditional finance based on evaluating their assets and liabilities. EasyGO focuses on the business's revenue streams and contracts rather than its assets and liabilities," says Uren.

The financial benefit of EasyGO contracts is that it is an off-balance sheet.

"EasyGO is a straightforward profit and loss statement expense. This has multiple advantages such as a lower debt burden as the vehicle is rented, not owned. This allows the business to use its credit elsewhere to grow the business," adds Uren

Under EasyGo, three Ready To Work Isuzu commercial vehicles are available, each with truck-body options. EasyGO members have versatile fleet options to drive an NPR 400, NQR 500, and FTR 850 to optimise productivity.

"The Ready To Work truck programme provides an off-the-shelf pre-built truck solution. The time saved because the vehicle does not have to go to a bodybuilder can be anything from 60 to 180 days, depending on the configuration. This allows a business to generate revenue almost immediately—a key win in trucking.

The Isuzu Finance EasyGO process is a streamlined approval mechanism that fast-tracks applications. Once the go-ahead is given, the business can immediately order their desired truck and truck body.

"Businesses that fulfil the EasyGO credit application process may rent several trucks simultaneously, as well," adds Uren.

The same benefits

EasyGO trucks come with a suite of aftersales benefits, including a warranty, optional service or maintenance plans and roadside assistance.

"For our truck Customers, service schedules are variable based on each customer's needs and form part of our Variable Warranty and Service offerings," says Uren.

Depending on the nature of the contracts, including duration, customers can choose a rental period that corresponds with the contract period, with a minimum of 36 months and a maximum of 60 months.

Uren mentions that the success of Isuzu trucks locally has been a commitment to customers. "We don't only sell the trucks; we offer solutions that grow business' bottom lines based on arguably the widest selection of trucks in the marketplace."

Cost of Ownership figures for Isuzu truck owners are among the industry's lowest, which adds to the appeal of Isuzu's EasyGO and Ready To Work truck offers.





THE BENEFITS OF DRY ICE BLASTING

Maintaining and cleaning equipment is a constant challenge. Traditional mechanical and chemical methods often have drawbacks, including time-consuming procedures, environmental risks, and potential damage to components. Enter Dry Ice Blasting, an innovative cleaning technique that reshapes how equipment is maintained and cleaned, writes *Adriaan Roets*.

he nature of dry ice blast cleaning is such that it can remove most contaminants. This, however, is subject to the component being cleaned, what the component substrate is made of, the available air pressure, and the level of competence of the person using the process," emphasises Deon Roux, CEO of Dry Ice Blasting.

Dry Ice Blasting starkly contrasts traditional cleaning methods, which is why it has many benefits.

"Mechanical methods involve labourintensive processes using abrasive media, posing a risk of component damage and wear. Chemical cleaning, on the other hand, introduces safety risks and requires additional cleanup to neutralise chemicals," adds Roux.

Dry ice blasting utilises dry ice pellets (CO₂) to blast surfaces. It employs kinetic energy and thermal shock to freeze and remove contaminants. The process leaves no

secondary waste and does not damage the cleaned surface.

Efficiency without disassembly

One key advantage of Dry Ice Blasting is removing stubborn contaminants without disassembly. Roux notes that the dry ice pellets used in the process, the size of a grain of rice, are blasted at ultrasonic speeds onto the surface being cleaned, providing abrasive friction and explosive force as they sublimate. This unique process allows dry ice pellets to reach inaccessible cavities without disassembly, effectively removing contaminants. Carbon cement and sand dust, oil, grease, chemicals, bitumen, and weld slag, among others, can be cleared this way.

"Dry Ice Blasting is a fast-cleaning method because it doesn't require disassembly or cooling downtime, which can save businesses time and money. Stripping to clean components always risks damage, ultimately impacting equipment longevity. Cleaning the components without removing them reduces equipment downtime, increases availability, and saves on maintenance costs. A clean machine could operate more efficiently, especially in a high-dust area like construction and mining. Regular cleaning cycles can be implemented because dry ice blast cleaning can be done anywhere on site," explains Roux.

Equipment cleaning

Since dry ice blast cleaning offers a more precise, sustainable, and cost-effective cleaning method, it is naturally well-suited for vehicle chassis and engines.

One of the most successful uses of dry ice blasting is cleaning electrical equipment. Dust and moisture typically found in industry enter electrical motors and panels. Apart from reducing the equipment's efficiency, random failures occur when the switchgear or motors become heavily contaminated. Dry ice blast cleaning very quickly and safely removes this build-up of contaminants, improving the system's functionality and reliability.

"Another common problem that dry ice blast cleaning effectively solves is the removal of grime and dust on equipment drive systems. This grime becomes a grinding paste for mechanical components revolving or moving, ultimately destroying the components," says Roux.

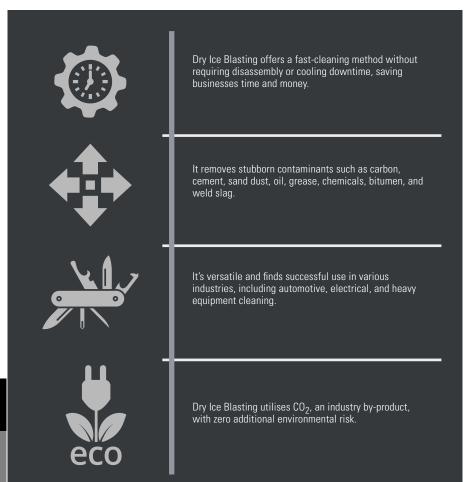
"Some examples include gear drives and drive chains. Dry ice blast cleaning is used to reach into these difficult areas exposed to the grime and remove it quickly and safely, preserving the equipment from



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Deon Roux, CEO of Dry Ice Blasting

UICK



Real-World applications

Dry ice blasting has played a crucial role in overcoming specific challenges in maintaining large equipment. The non-abrasive nature of dry ice blasting contributes significantly to preserving the integrity of surfaces and structures in construction industries. While almost anything can be cleaned using this method, specific limitations exist, such as removing epoxy paint or hard-wearing coatings. Heavy-scale build-up may require traditional mechanical cleaning methods.

The expert envisions a continued evolution of dry ice blasting in the construction industry. Despite challenges in industry acceptance, ongoing developments focus on efficiency and cost reduction for users. As environmental focus intensifies globally, dry ice blasting, being 100% natural, emerges as a preferred alternative to traditional cleaning methods, firmly establishing itself as a sustainable and efficient solution for the construction industry.

"The advantage of dry ice blast cleaning is that the dry ice pellets the size of a grain of rice are blasted at ultrasonic speeds onto the surface being cleaned. Firstly, the pellets provide abrasive friction as they strike the surface, then provide additional explosive force as they sublimate, expanding to 400 times their volume at the surface of the cleaning site," concludes Roux. •

further degeneration. This needs to be done on a scheduled maintenance programme to ensure the reliability of the equipment," adds Roux.

This method is also safe for modern vehicles with many electronic components and computer boxes in the engine bay. Dry ice blast cleaning is a dry process, which means no damage can occur to these sensitive components, unlike high-pressure water cleaning, which can penetrate and damage all electronics in the engine bay.

Versatility

Dry ice blasting's versatility is showcased through various successful uses, including mould and mildew remediation, fire restoration, historical restoration, heavy equipment cleaning, electrical equipment cleaning, concrete surface cleaning, surface preparation, radioactive removal from painted surfaces, lead paint removal, and more. This flexibility positions dry ice blasting as a go-to solution for diverse cleaning needs in many heavy industries.

With the growing emphasis on environmental sustainability globally, the environmental impact of cleaning methods is being scrutinised, and here, dry ice blasting offers another steadfast solution.

"Dry ice blast cleaning uses CO_2 , an industry by-product, with zero additional environmental risk," says Roux.

The dry ice pellets impact the surface by removing dirt through kinetic energy and thermal shock. The dry ice at $-78.5\,^\circ\text{C}$ rapidly freezes the dirt, and the kinetic energy removes the frozen particles.

"There is no secondary waste and no damage to the surface being cleaned, and the dry ice simply returns to its original gas state," Roux adds.



The role of data in recruitment has emerged as a crucial factor in staying competitive and relevant. By understanding the challenges unique to the Architecture & Engineering sector, businesses can leverage datadriven recruitment to ensure a steady pipeline of qualified candidates and reinforce their position in a competitive market.



SNAPSHOT OF THE ARCHITECTURE & ENGINEERING SECTOR

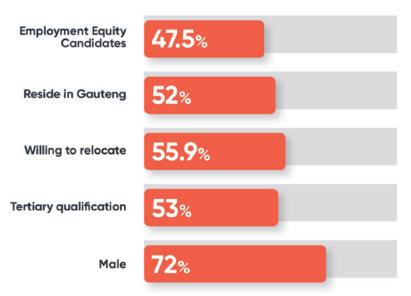
AVERAGE STAY BY CANDIDATES IN THEIR JOBS

On average, people stay in Architecture & Engineering jobs for 2 years and 11 months.

This is higher than the **average tenure** in South Africa across all sectors (**2 years and 4 months**).







53% of candidates in this sector
have a tertiary qualification; 55.9% of
candidates are willing to relocate, with
52% currently residing in Gauteng; and
53% are employment equity candidates.
72% of candidates are male.

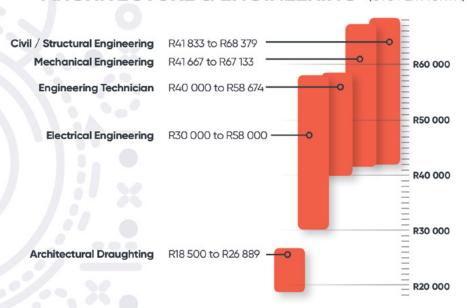
At Pnet, our purpose is "The Right Job for Everyone". By partnering with Pnet, businesses can find the right person for the job, at the right time, and at the right cost – empowering them to compete with larger corporations and attract quality talent that drives their business growth and success.

Pnet – South Africa's leading online recruitment platform – provides datadriven insights into recruitment and employment trends in the local market. Developed to give local businesses a comprehensive summary of the trends shaping the local recruitment market, the report also unpacks specific sector insights – from both an employer and candidate perspective.

2024 SALARY GUIDE FOR ARCHITECTURE & ENGINEERING PROFESSIONALS



ARCHITECTURE & ENGINEERING (CTC PER MONTH)



In the interest of job seekers, employers and recruitment specialists and experts, Pnet has taken a deep dive into market-related salaries, providing insights into what the job market is offering for specific job roles and professionals.

Pnet's analysis is **based on actual salary offers** from advertised vacancies advertised over the past 12 months.



Year-on-year increases

in salary offerings were evident for Mechanical Engineering professionals (between 25% and 33%) and Civil / Structural Engineering professionals (between 7% and 33%).



There was a year-onyear decrease in salary offerings for Architectural Draughting professionals (between -8% and -11%).



Top earners in Architecture & Engineering are Civil / Structural Engineering and Mechanical Engineering professionals.

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Popular and versatile rollers get an upgrade

South Africa's best-loved walk-behind roller has received significant upgrades that stretch its versatility far beyond the ordinary and extend its effectiveness to more types of job sites.

With multiple settings for standard compaction of substructures on construction sites or more specialised road settings, the Ammann ARW65 takes the place of several different types of rollers where its range of vibratory frequencies allows it to punch well above its weight in specific applications. At the same time, its manoeuvrability, controllability, and advanced safety features make it an excellent option for tight quarters.

Craig Sheppard of ELB Equipment, a local distributor of Ammann equipment, attests to the Ammann ARW65's popularity in the southern African region. Its versatility, durability, and reliability in extreme conditions have earned it a trusted reputation. Unlike other vibratory rollers with complex drive systems, this machine boasts a fully hydraulic drive, eliminating the need for high-maintenance centrifugal clutch and V-belts, ensuring reliable performance on



every job site.

The hydrostatic drive of the Ammann ARW65 not only enhances its versatility but also improves its traction and gradability. With individual drive motors in both drums for smooth stopping and starting, the machine ensures efficient operation, particularly in asphalt applications. The weight-adjustable vibratory system, set between the two drums, provides perfect balance and is settable with two frequencies and two centrifugal forces, enabling compaction of up to 30cm on the sand and

20cm on the soil. These features combine to maximise the machine's performance and productivity on a wide range of work sites.

"Ammann have made the most versatile walk-behind roller even better and focussed on some of the small things that make a big difference to easier and safer operation on site. Its difficult to think that such a well-loved machine can be improved, yet Amman has done a fine job of updating it to suit local requirements," says Craig. ©

Sideboards to haul more material with each load while minimising material loss

Philippi-Hagenbuch Sideboards are installed quickly and precisely fit to vertically extend the sides of off-highway haul truck bodies. The company works with each operation to custom engineer Sideboards to achieve the optimal height based on the truck's rated weight, the hauled material, and the loading equipment. Sideboards increase the haul truck's capacity while reducing or even preventing spillage, keeping haul roads clean—reducing downtime to clear the road—and protecting haul truck tyres.

"We have decades of experience in providing custom and incredibly durable solutions to optimise hauling operations," said Josh Swank, Philippi-Hagenbuch vice president of sales and marketing.

"Our Sideboards are a great solution to help producers enable their trucks to haul their full rated capacity. Sideboards offer the simplest, least-expensive way to add volume to a truck body."

Sideboards are available in 2.54-centimetre increments from 15.24 centimetres to 101.6 centimetres. In some cases, they may be available even larger, depending

on the haul truck, the environment, and the material being hauled. The company also considers the operation's loading equipment to ensure the final height will not exceed the loader's capabilities.

Philippi-Hagenbuch determines the proper size for sideboards using a calculation based on material density, 2:1 heap capacity, and haul truck body volume. For example, suppose a haul truck's tonnage capacity is 71 tons, and the volumetric capacity is 52.3 cubic metres at a 2:1 heap. In that case, sideboards add 0.84 cubic metres of volumetric capacity for every centimetre height added to the truck body.

Designed in an upside-down "U" shape,

Sideboards fit over the existing body sides and are securely welded to the body. Philippi-Hagenbuch engineers Sideboards to fit the specific make and model of an off-highway haul truck, and the front is "trim to fit" for optimal mating with the front slope of the body. Operations can utilise Sideboards

alone or pair them with Philippi-Hagenbuch Autogate Tailgates to further increase capacity and prevent material from spilling from the back of the body.

Philippi-Hagenbuch Sideboards are built of Grade 80 steel for trucks ranging from 20 to 150 tons and 450 Brinell on trucks 150-plus tons for excellent durability. They're also engineered with internal structural gussets to help provide a long service life. Sideboards can be installed at Philippi-Hagenbuch's factory in Peoria, Illinois, in the field with Philippi-Hagenbuch supervisory assistance or self-installed by a dealer or customer.



Sideboards are available in 2.54-centimetre increments from 15.24 centimetres to more than 101.6 centimetres, depending on the haul truck, the environment, and the material being hauled.

Komatsu and Williams Racing Reunite in Multi-Year Partnership

Komatsu, a leading heavy equipment manufacturer, has rekindled its historic partnership with Williams Racing, becoming the British team's principal partner for the 2024 FIA Formula One World Championship (F1) season and beyond.

Having been a vital collaborator during the 1980s and 1990s, Komatsu played a pivotal role in Williams Racing's remarkable successes, notably securing Constructors' and Drivers' Championships in 1996 and 1997. Now, with a shared legacy and a focus on the future, the two brands are excited to embark on a new chapter together.

Based in Tokyo, Komatsu boasts over a century of equipment manufacturing innovations. Their motto, "Creating value together," underscores their belief in the power of collaborative partnerships to drive lasting positive change.

The official designations within the partnership reflect the shared commitment to long-term development in engineering, technology, and talent cultivation. Komatsu will serve as the Official STEM and Early Careers



Partner, Official Esports Partner, and Official Construction Machinery Partner of Williams Racing, leveraging these roles to engage the next generation of innovators through STEM events and esports initiatives.

Hiroyuki Ogawa, President and CEO of Komatsu Ltd., emphasised the shared values of innovation and people development, stating, "Our partnership with Williams Racing is aligned with Komatsu's mission to create value through manufacturing and technology innovations for a sustainable future."

The partnership is driven by a shared vision between the two brands, characterised by cutting-edge technology, quality, and reliability. This collaboration lays the groundwork for future endeavours, particularly in talent development and technical engineering. James Vowles, Team Principal of Williams Racing, expressed his delight

at rekindling the partnership, highlighting the shared commitment to attracting and nurturing young talent.

Komatsu's branding will prominently feature on the 2024 Williams Racing livery, underscoring their deep integration into the team. With operations in over 140 countries, Komatsu is a global leader in heavy equipment. It offers premium solutions and is leading the charge towards carbon neutrality with its innovative range of electric, hybrid, and fuel cell equipment.

Williams Racing, a stalwart in Formula One, boasts a rich history of victories, podiums, and championships, making them one of the sport's most iconic teams.

As Komatsu and Williams Racing join forces again, the partnership signals a new era of collaboration, innovation, and success on and off the track 😂

Bobcat launches new family of rotary telehandlers

Bobcat has launched a new range of Rotary Telehandlers for markets in Europe, the Middle East, and Africa. The new range offers nine Stage V-powered models for the European market, covering lifting heights from 18 to 39 m and lifting capacities from 5 to 8 tonnes. These are complemented by four Stage IIIA machines for sale in the Middle East and Africa, covering heights from 18 to 26 m and capacities from 5 to 6 tonnes.

Deutz engines power the models with lifting heights from 18 to 26 m, and Volvo engines power the higher lift models from 27 to 39 m. The same engine manufacturers are expected to use Stage IIIA and Stage V models, allowing easier maintenance and training.

One key aspect of the new line of rotary telehandlers is the patented panoramic cab, which offers the best visibility on the market and a wide range of features.

Inside the cab, all the Bobcat rotary telehandlers are equipped with a new dashboard with a 7—or 12-inch display offering three different views: the classic real-time load chart, a new boom dynamic load chart—showing only the area in which the operator can move safely with a load—and, thirdly, a 360° view from above.



The cab also offers additional interior finishes, including a new courtesy LED light behind the operator's seat for better illumination within the cab. When not in use, the remote-control system for the telehandler can now be stored inside a new dedicated compartment. A new LED light has also been inserted under the left armrest, activated by opening the door and lighting the floor area to make it easier to enter the cab.

The new rotary telehandlers have improved access to the cab by placing and modifying the access ladder. The ladder is equipped with two handles for ease of use and is in a more central position in front of the cab. An additional ladder—located at

the rear, right-hand side of the machine—has also been introduced as standard and is particularly useful for service operations on the back of the boom.

With the core models available in the new rotary telehandler range, Bobcat offers a choice of solutions for four key lifting height segments, namely 18 m, 21-22 m, 25-26 m and 30-32 m, with a competitive choice in terms of machine capacities at these heights. Bobcat also offers additional models in these segments, each with a further 1 tonne in lift capacity.

The new range also allows Bobcat to cover a fifth segment with 27, 35 and 39 m rotary telehandlers with a heavier lift capacity of up to 8 tonnes.

Six FlexiROC D65 surface drill rigs from Epiroc for QKR Navachab in Namibia

Epiroc South Africa recently delivered five of six FlexiROC D65 drilling machines to key customer QKR Namibia Navachab Gold Mine. The sixth surface drill rig is earmarked for delivery in Q4 2024.

QKR Mineral Holdings operates in the gold commodity and owns 92.5% of the Navachab open-pit gold mine in Karibib, located in Namibia's commodity-rich Erongo region. Navachab initially conducted drilling and blasting as an owner operation before moving to a contractor business model. Epiroc has provided maintenance and cost-per-meter on-site contract support to Navachab since the mining company initiated contractor drilling in 2014.

The findings of an optimisation study conducted by Navachab in Q3 2023 prompted the mining company to make a strategic decision to move away from contractor work and return to an owner-operated drilling operation.

The current positive outlook on gold is expected to provide sustainable growth for

Navachab's surface operations and its proposed underground projects. Furthermore, a projected LOM (Life of Mine) that extends beyond 2030 attests that Navachab's operation is highly stable. On the back of these optimistic forecasts, coupled with the shift back to owner

drilling, Navachab has committed to capital expenditure on necessary equipment as part of their future-planning strategy to support successful long-term business sustainability.

The rugged and robust FlexiROC D65 surface drill rig perfectly balances productivity and efficiency. The machine has a proven reputation for being a premium-quality, highly dependable rig for DTH (Down-the-hole) drilling in mining and large



quarrying applications. Epiroc has built this multi-functional machine to handle the toughest drilling demands, seamlessly delivering high performance and efficiencies.

Epiroc's service scope of supply to support the customer's FlexiROC D65s includes a Vendor Managed Inventory Agreement (VMI), which comprises Particle-Size Distribution (PSD) site support as well as assistance from the organisation's Drilling Tools & Attachments Division (TLD).

Lifecycle approach with OEM parts for sustainable solutions

Capital equipment like pumps operate only as well as their components and wear parts allow, so it makes little sense to risk this performance by installing a replicated part.

"Mining and other industrial applications rely heavily on continuous operations to reach the productivity levels that make them profitable," says Marnus Koorts, General Manager of Pumps at Weir Minerals Africa. "This productivity is in turn the result of decades of partnership with original equipment manufacturers (OEMs) like Weir Minerals, who provide much of the technological foundation underpinning a mining operation."

Koorts emphasises that the lifecycle cost of key equipment like pumps is many orders of magnitude higher than its upfront capital cost — as they all need a high standard of maintenance that matches the quality of their initial manufacture. As long as the equipment performs to expectation, it will contribute to the mine's success.

"What is often not fully understood, however, is that OEM spare parts are as carefully designed and manufactured as the core equipment itself," he explains.

"As an OEM with over 150 years of field experience, we have deep insights into how our parts perform – and can confidently provide our customers with performance predictions and service intervals."

These promises that an OEM makes become the basis of its long term partner-



Weir Minerals walks the challenging journey of mining with customers to assist them in achieving their goals.

ships with customers, he says, and allow the mining industry to effectively mitigate operational risk so that mines succeed. By contrast, a replicated part is a reverse-engineered product that tries to look the same as the original, and must simply fit in the appropriate space.

"This is where the similarity with the OEM part ends," argues Koorts. "The performance and longevity of the replicated part can seldom be guaranteed, and this undermines the principles of risk mitigation and productivity that the mine is trying to achieve."

Weir Minerals' original spares form

an essential part of the journey that it walks with customers toward sustainability and commercial success, he explains. While the efficiency and robustness of the parts reduce mines' energy consumption and carbon footprint, the sustainability efforts of Weir Minerals also contribute to improving customers' Scope 3 emissions.

"Having a parts supplier with a concerted sustainability commitment — including the use of renewable energy in many of our facilities — further assists our customers in reaching their strategic corporate objectives," he concludes.

Internal combustion engine forklifts suit mining operations

Criterion Equipment's new generation TCM internal combustion forklift trucks, which replace the previous iNoma series, have been developed with advanced features for precise control, improved manoeuvrability, higher efficiencies and enhanced safety.

The new TCM P-Series — representing power, productivity and performance in materials handling — ensures reliable operation and low maintenance requirements in all sectors, including general engineering, manufacturing, warehousing, construction and mining.

The new generation TCM P-Series, which is diesel, gas or petrol powered, boasts notable features including a floating power train and a steering synchroniser for safe and effortless steering.

In addition, standard features comprise an anti-corrosion radiator, an advantage in tough conditions in Africa, a starter motor protection system, a double-action parking brake lever, and a full-suspension safety seat with a seat belt and warning light designed to reduce operator fatigue.

Other features include a mechanical hydraulic control system, tilt cylinders, and a single-element cyclone air cleaner. Head, front and rear lamps enable safe and precise operation in dark conditions. These machines have a new counterweight design for enhanced stability, a 26mm reinforced foregate and yellow reflectors for greater safety.

An acrylic roof, which is easy to install and remove, improves comfort and protection for the operator in outdoor conditions.

FDM P-series forklifts are equipped with Tier 3 diesel engines that minimise noise levels and reduce vibration, ensuring greater comfort. These environmentally-friendly units are also designed for efficient fuel consumption and low emissions.

FDM forklifts equipped with 2,5 litre S402 diesel engines have capacities between 1,5 and 2 Ton, while machines fitted with 3 litre S4S engines have capac-

ities from 2 to 3,5 Ton. Diesel units have anti-rust paint on the exhaust manifold.

FGM forklift trucks in the P-series are equipped with gasoline electronic control engines as standard. Machines fitted with GK21 gasoline engines have capacities from 1,5 to 2,5 Ton and GK25 engines have capacities between 2 and 3,5 Ton.

An important feature of P-series diesel machine is an advanced wheelspin suppression system that enhances engine control in order to reduce unnecessary fuel injection, thus improving fuel efficiency and extending the service life of tyres. •



Automation for Sandvik surface drills

Making mines safer and more productive has long been the strategic intention of mine automation, and surface drill rigs are now part of this technological evolution.

According to Kabelo Nkoana, Business Line Manager for Automation and Digitisation at Sandvik Southern Africa, AutoMine[®] is available for Sandvik i-Series models in the company's intelligent range of down-the-hole top hammer and rotary blast hole drill rigs. Mining customers in southern Africa have been embracing the functionality, and reporting positive results.

"Sandvik AutoMine® system essentially replicates the machine control system to enable remote automation over the mine's Wi-Fi network," he says. "There is an awareness that safety could be compromised when rigs are operating close to a highwall, or when there are unstable geological conditions on the bench. Automating a drill rig in these conditions is an important contributor to safety."

Sandvik's i-Series machines come standard with features such

as the onboard data collection unit technology for engine operation and other major components. Various operational and machine health data from the sensors are collected in the OEM's Knowledge Box, and transmitted to cloud storage for analysis and real time reporting to support informed and accurate decision making. This creates the foundation for the automation process, which also enhances reliability and performance

Nkoana explains that the machines' extensive sensing capability — where it is picking up valuable data about its working environment — allows it to operate autonomously within its design limits.

"This means that it will respond quickly to changes in its drilling conditions — in the properties of the rock it is drilling, for instance," he says. "By not exceeding its limitations, its operating behaviour will extend the life of consumables and components, generally leading to a lower total operational cost."

Having been in operation for over two decades, Sandvik Mining and Rock Solutions' AutoMine[®] system today plays an integral



The DI650i is compatible with AutoMine® Surface Drilling to enable fully autonomous fleet operation from a control room.

role in making mining safer and more efficient. It is installed in more than 100 mines worldwide, with a positive impact on safety. The automated equipment operating $AutoMine^{\$}$ system has logged more than five million Lost-Time-Injury-Free (LTIF) hours.

The company is also incorporating artificial intelligence (Al) into its next generation AutoMine $^{\circledR}$ system solutions, with the launch of its concept loader and underground drill. These innovations make use of perception-sensing technologies to detect obstacles, and can make decisions about its movements when there is a person or other manual equpment in their proximity.

Nkoana highlights that mines in southern Africa are gradually moving toward 'smart mining' through digital monitoring and control and automation. The process, however, needs to be well planned and gradual, with all stakeholders buying into the successful implementation of the concept. \bullet

HOW TO PREVENT TRUCK ROLLOVERS

A study conducted by the Road Traffic Management Corporation (RTMC) says that 9.4% of all fatal traffic accidents on South African roads involve heavy-load vehicles. Additionally, statistics attribute between 80 and 85% of truck crashes to human error. 73% of the people killed in truck crashes are occupants of other vehicles.

By Eugene Herbert, CEO of MasterDrive



ruck rollovers do not require significant increases in speed or serious misjudgement of a corner. In certain situations, it only takes an extra 5km/h to cause a rollover. What is more concerning is that when a truck starts to roll, a driver will not be able to feel it until it is too late. The truck will reach a point of no return in just two seconds.

While 50% of rollovers can be attributed to speed, this is not the only cause. Incorrectly loading the vehicle can affect its balance, resulting in its overturning. Fatigue and distraction also play a major role in truck overturning.

Preventing a rollover depends on understanding the 'mechanics' around it. Speed is a major culprit because the front wheels turn faster than the cargo, which offsets the centre of gravity and causes the load to shift. A complete understanding of the centre of gravity and its effect on rollovers is essential.

Training drivers

Practical demonstrations are an effective way to understand how a rollover happens. MasterDrive's Rollover Prevention Training delivers on this by taking drivers to the edge, utilising specialised rigs that simulate 'stretching

the envelope.' The programme is designed to allow truck drivers to experience exactly what it is like at that moment — before a crash."

Seasoned truck drivers are left astounded after their experience in the training truck. From the time that the vehicle starts to tip, it takes approximately two seconds for the driver even to feel that a rollover is happening.

Only once the truck's outriggers make contact with the road is one aware that things went wrong. By this point, there is no stopping a rollover from occurring.

Practical experience

Experiencing a rollover without going all the way over will have the greatest impact on motivating change. Practical examples are the most effective way to create understanding. It also has a deeper impact on minds and, consequently, driving skills. This also results in drivers retaining what they learn and applying it when encountering high-risk situations.

MasterDrive's Rollover Prevention Training is the only-of-its-kind in Africa. The training vehicle is specially designed with outriggers that allow for theoretical classroom training and an applied understanding of rollovers.

Reading about how easily a rollover



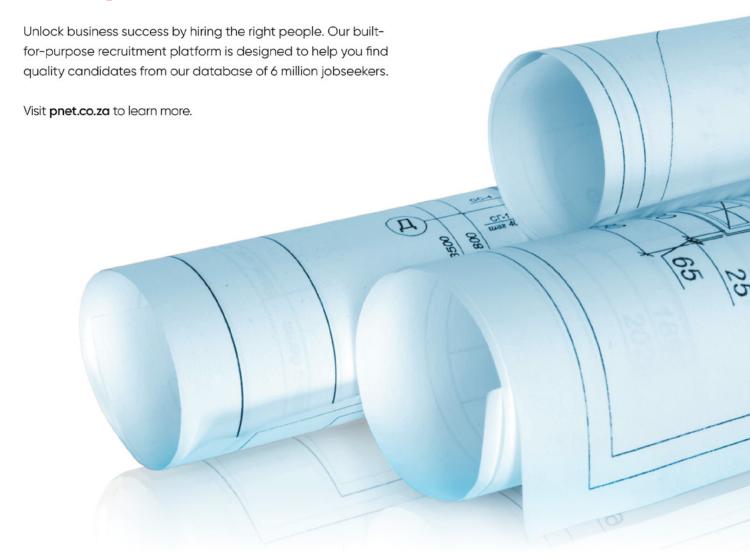
Eugene Herbert, CEO of MasterDrive.

can occur is not as powerful as feeling it for yourself. For this reason, MasterDrive regularly invites organisations to join the team to experience it for themselves.

Fleet owners and managers will leave with a better understanding of the challenges their drivers face as well as the vital importance of equipping drivers to significantly reduce their risk.

Blueprints don't plan the future of your business.

People do.







Deep foundation machines

- High availability and long service-life due to robust equipment technology
- Low emission and high efficiency thanks to intelligent drive systems
- Operating comfort through innovative control concept
- Matching working tools ensure excellent productivity
- Optimized construction processes thanks to comprehensive consultation