



LIEBHERR EXPANDS ITS ROUGH-TERRAIN CRANE RANGE WITH THE LRT 1130-2.1

WHEEL LOADERS: JCB keeps production going at plant

DEMOLITION TECHNOLOGY: Robots can unlock efficiency and ensure safety

INDUSTRY DIVERSITY: Encouraging women in the workshop

**COMPACTION
EQUIPMENT**

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PAGE 10



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THE FUTURE OF CONSTRUCTION AND EQUIPMENT IS NOW

In this edition of **Capital Equipment News**, we delve into the heart of the construction industry, exploring the latest developments, machinery, and technologies shaping the sector. While our regular features cover a spectrum of industry news, mining updates, and transport insights, the focal point of this issue revolves around the construction realm and the intricate connection between equipment and technology.

On page 14, we learn more about Much Asphalt's plant in Gqeberha. The plant produces asphalt using raw aggregates and bitumen supplied by quarries and fuel refineries. The company uses a JCB 436ZX Wheel Loader to load the aggregates into bins, contributing to the production of 1,000 tons daily.

The loader's features, such as power and breakout force, make it ideal for handling abrasive aggregate loads. Bell Equipment services the machine with an extended warranty of 6,000 hours or 36 months. A hard-working machine requires service, and the Maintenance Supervisor at Much Asphalt, Louis Blume, tells us about the Bell Equipment personnel that have ensured a long work life for their wheel loader.

The issue also contains news from Wacker Neuson. On page 10, the company introduces its soil and asphalt compactors range, including the RD series, RTx trench roller, and RC soil compactor range.

These rollers feature ergonomic designs, innovative attributes, and cutting-edge technology addressing efficiency, productivity, and operator safety and comfort. The article also discusses Wacker Neuson's plans to introduce a new range of compactors in 2024 and how the company prioritises customer satisfaction and offers professional technical and sales training to customers and dealers.

Materials handling is also explored on page 20. Goscor Lift Trucks (GLT) has rebranded its premier forklift brand, Doosan, with the iconic Bobcat livery, marking the historic return of Bobcat forklifts to the South African market.

The rebranding exercise is part of the global Doosan Bobcat rebrand strategy, with Doosan Bobcat taking the reins encompassing manufacturing facilities in Korea, China, and Germany.

Goscor Lift Trucks is positioning itself as a dynamic company with an extensive range of electric and diesel-powered forklifts and exceptional after-sales service.

Bobcat unveiled its fully rebranded portfolio at LogiMAT 2024, showcasing an impressive array of material handling products with unmistakable Bobcat branding, including diesel and electric forklifts, reach trucks, and various warehouse solutions.

We must explore construction by also looking at demolition and site-clearing, and on page 22, we see how the demolition industry is transforming with the integration of demolition robots and advanced automation solutions.

These technologies are enhancing safety, efficiency, and project outcomes. Demolition robots with end-of-arm tools

like breakers, crushers, drills, and buckets offer an agile and precise alternative to conventional methods. Autonomous Mobile Robots (AMRs) are emerging as groundbreaking automation solutions that navigate intricate environments without external guidance systems.

Jet Demolition, a leading player in the industry, emphasises the significance of automating demolition for safety, efficiency, and cost reduction. Safety remains the paramount concern for the company, and they are committed to completing projects safely, on time, and to international standards. Integrating demolition robots and advanced automation solutions drives the industry toward a safer, more efficient future.

In celebration of International Women's Month, Volvo Construction Equipment (Volvo CE) and its dealer partners are encouraging gender diversity in the traditionally male-dominated field of mechanics across Africa.

Volvo CE has set a bold target of having at least 35% female leaders and employees by 2024 and has initiated various programs to encourage women to consider careers in the construction equipment industry. Volvo CE acknowledges the industry's challenges, particularly the shortage of skilled labour, emphasising the importance of nurturing talent irrespective of gender.

Achieving a better gender balance in the construction equipment industry aligns with a broader societal goal and is recognised as a strategic business move. Read about the two South Africans changing these optics at Babcock workshops on page 24.

What is evident in this month's magazine is that the construction industry is undergoing a significant transformation, driven by advancements in machinery, technology, and a commitment to inclusivity.

Adriaan Roets - EDITOR



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A maximum lifting capacity of 130 tonnes, economical transport and safe crane operation. The crane features very high lifting capacities and the longest telescopic boom of any 2-axle rough terrain crane in the world. It also has the most economical transport dimensions of its performance class and can be transported on conventional low loaders anywhere.

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Mobile and crawler cranes





Maretha Gerber, the new President and Group CEO of Daimler Truck Southern Africa.

Maretha Gerber announced as the new CEO of DTSA

Maretha Gerber was announced as the new President and Group CEO of Daimler Truck Southern Africa (DTSA).

Gerber makes history by being the first female appointed in this role at DTSA. The announcement was made last month.

This transition follows the current President and Group CEO, Michael Dietz, taking on a new challenge as the President and CEO of Regional Centre Middle East and Africa. Gerber and Michael will start in their new roles, effective 1 April.

"We are delighted to welcome Maretha Gerber as the new President and Group CEO for DTSA and the second female on the Daimler Truck Overseas ExCom team. With her vast experience and excellent client rapport, we cannot think of anyone better for this position. Likewise, with his extensive knowledge and broad experience, we are pleased to have won Michael for the Regional Centre Middle East and Africa. We wish Maretha and Michael all the best in their new roles," says Andreas von Wallfeld, Head of Daimler Truck Overseas.

"I am honoured to be given this opportunity as President and Group CEO of Daimler Truck Southern Africa. I am excited to work with the experienced leadership team and talented employees at DTSA and to lead the company group to new heights. Together with our dealers and general distributors, we look forward to contributing to further growth and success and building a brighter future for all stakeholders," says Gerber about her new role.

"I would like to express my gratitude to Michael for his major contributions to the company and wish him all the success and fulfilment in the new chapter of his career," she concludes.

Bolt and Engineering celebrates 40 Years of Success

The Bolt and Engineering Distributors (BED) group reached a significant milestone in November 2023, celebrating 40 years of providing top-quality fasteners and equipment to the mining, agricultural, construction, and engineering sectors.

Founded in 1983, the company has thrived on personalised service, a human touch, and old-school business practices.

Mike Giltrow, CEO, founder, and entrepreneur Ernie Barnett, established BED in 1983. Their initial goal was to defy sceptics who believed the venture wouldn't last more than six months. The duo not only proved them wrong but built a company that stands strong four decades later. Giltrow emphasises the importance of passion, pride, and persistence that formed the foundation of BED's success. BED attributes its success to its people-centric approach. Giltrow highlights the role of internal teams, describing them as 'rainmakers' who contributed to the company's growth. The company encourages a culture where individuals are given opportunities to prove their capabilities, fostering an environment where everyone's unique contributions are valued.

The company expanded its operations over the years, establishing a Head office in Wadeville, a network of 9 branches, an export division, and two welding and cutting repair centres in Gauteng and the Western Cape. While maintaining its distinct character, each branch aligns closely with BED's ethos of customer service, accountability, and continuous improvement.

Diversification has been a critical strategy for BED, ensuring it is not reliant on a



Mike Giltrow, co-founder and CEO of the Bolt and Engineering Distributors Group.

specific sector. While mining remains crucial, the company has successfully ventured into agriculture and explored synergies in industries like automotive. By preserving and expanding its customer base, BED has managed to weather challenges and contribute to the company's longevity.

Learning from past challenges, Giltrow emphasises a proactive approach to issues, avoiding the term 'problem' and instead focusing on continuous improvement. He underscores the importance of safety nets to navigate uncertainties effectively.

Giltrow expresses pride in BED's positive impact on people's lives, customers, suppliers, and the broader community. The company's vision for the future is clear: continue excelling in what they've done well for 40 years but with a commitment to making those good things even better. As BED declares, "the good things never change," but the company is dedicated to ensuring they continuously improve and evolve. 🌱

How fuel increases will affect logistics

The CEO of the Road Freight Association, Gavin Kelly, has warned that the South African economy will likely face fuel price increases this month. Diesel prices are expected to rise by at least R1.40 for 500ppm and R1.50 for 50ppm, while 93 and 95 petrol are predicted to increase by at least R1.30 per litre.

The Central Energy Fund attributes these projections to surging international fuel prices, currently around \$82 per barrel. However, the strength of the Rand also plays a crucial role in the volatile pricing scenario. These increases pose significant challenges for road freight transporters, who rely heavily on diesel, as well as shorter haul/courier vehicles using petrol. Despite a gradual decrease from the highs of 2022 and 2023, fuel prices remain higher

than desired due to geopolitical issues and dwindling easily accessible oil products. Road freight companies are now grappling with the reality of adjusting their pricing to cover the escalating diesel costs, which is affecting their arrangements with clients.

Operational challenges arise from delayed payments for services rendered, with some transporters waiting up to three months for compensation after incurring expenses. As transport costs rise, transporters may need help securing guarantees for fuel purchases on credit as customers delay payments. This financial strain limits the ability to maintain day-to-day operations, considering the immediate need for fuel and other operational costs.

The cumulative effect of fuel price hikes extends beyond the transport sector,

Volvo Penta and Aiab Energy to expand collaboration into BESS solution



Jakob Sandwall, CEO Aiab Energy, Tomas Persson, Marketing and Sales Manager Aiab Energy, Marcus Olsén, Area Sales Manager Nordics Volvo Penta, and David Hamilton, Director Industrial Sales at Volvo Penta.

Aiab Energy has chosen Volvo Penta to provide an optimised BESS subsystem for its future BESS solutions.

Volvo Penta and Swedish backup power solutions company Aiab Energy are strengthening their collaboration to provide an integrated battery energy storage solution that meets the specific needs of Aiab Energy's customers while contributing to a more sustainable and resilient energy infrastructure.

Volvo Penta will supply Aiab Energy with a high-performance BESS subsystem comprising energy-dense battery systems with optimised C-rates tailored for industrial use, enabling rapid charging and discharging. These battery systems originate from Volvo Group's electrification platform and are used in heavy-duty applications such as electrified trucks, buses and construction equipment. The subsystem is aimed at securing a dependable and responsive power supply, aligning perfectly with the uptime and reliability demands of Aiab Energy's customers.

Aiab Energy, a noted Swedish backup

power solutions company with a robust Nordic supply chain, has been a valued Volvo Penta customer for nearly 40 years. This partnership centres on Volvo Penta's commitment to deliver efficient and high-performance D8, D13 and D16 power generation engines, tailored to meet Aiab Energy's needs.

BESS will play an increasingly pivotal role in modern society, offering sustainable and versatile means of storing energy from renewable sources such as solar or wind, enabling more efficient use of these resources and enhancing critical infrastructure.

"By investing in BESS technology, Aiab Energy is not only advancing its capabilities but will also contribute to a cleaner, more resilient energy future," says Jakob Sandwall, CEO of Aiab Energy.

"We've got a good history working with Volvo Penta, they are committed to supplying us and our customers with reliable and secure power solutions. Being part of the Volvo Group, Volvo Penta has access to a robust supply chain and excellent aftermarket support, which is essential in our commitment to our clients."

"As the energy landscape evolves, we remain dedicated to supporting our customers in navigating the energy transition," concludes Marcus Olsén, Volvo Penta Area Sales Manager for the Nordics.

"Our collaboration with Aiab Energy underscores our commitment to providing top-tier solutions and showing up as a trusted partner in helping our customers move towards a more sustainable power generation segment."

Volvo Penta and Aiab Energy will showcase a BESS prototype equipped with Volvo Penta's subsystem at Eliaden, from 28 to 30 May. 🌟

impacting retail and other industries. With roughly 85% of all goods in the country involving a road leg in their journey, consumers are likely to experience inflationary pressures. Fuel costs, constituting a significant portion of daily transport operating expenses, are expected to surpass 50%, affecting various industries.

Consumers can anticipate short-term rises in general transport costs, leading to increased prices of goods

and services. This domino effect, triggered by fuel price escalations, will likely have a widespread impact. The hope rests on international fuel price relief and a more robust recovery of the Rand against major currencies, providing some respite to consumers and businesses alike. The recent pause in the Reserve Bank's Repo Rate increase offers a reprieve, with optimism for a sustained softening in South Africa's fuel prices.



Gavin Kelly, CEO of the Road Freight Association.

New DEVELON Excavator Working on Murcia-Almería High Speed



Transformaciones y Embalses Parra, a company based in Almería, Spain, has just purchased a DEVELON DX300LC-7 30-tonne Stage V crawler excavator. This company belongs to the Parra Group, dedicated to constructing public works.

The Develon DX300LC-7 excavator has been excavating in irrigation reservoirs on large farms. It is currently working on the Murcia-Almería high-speed rail project. This work is expected to last two years, and the machine is used for eight hours daily. In total, the work has eight sections and one underground in Murcia. It is a multi-billion-euro project linking travellers and goods with the Pyrenees through the Mediterranean Corridor.

The DX300LC-7 crawler excavator carries out loading tasks, earthworks, trenching for road construction and slope profiling along the entire line length.

Five Potain cranes chosen for India's groundbreaking new airport



Indian construction giant Tata Projects is leading construction on the impressive new Noida International Airport on New Delhi's outskirts. To manage lifting work on the huge infrastructure development, the company purchased two Potain MCT 565 A topless tower cranes and rented three additional MCT 385 A tower cranes from Rental Partners.

Primed to become India's largest and most important airport, the Noida International Airport is set to transform the country's aviation infrastructure.

The Potain cranes are heading the construction of the main terminal building, which is scheduled for completion at the end of 2024. The MCT 565 A M25 models have a maximum capacity of 25 t and allow up to 80 m of jib.

In collaboration with Manitowoc's Lift Solutions, Tata extended this reach to an impressive 85 m, allowing for greater jobsite coverage. The capability of Manitowoc's Lift Solutions team to engineer this extension was a leading factor in Tata Project's decision to purchase the cranes.

Sustainable development at the forefront of SIDSSA symposium

Infrastructure South Africa (ISA) has officially partnered with the Association of African Exhibition Organisers (AAXO) and a collection of its members as implementation partners for the upcoming Sustainable Infrastructure Development Symposium (SIDSSA) 2024.

The SIDSSA occurs from 17 to 19 March at the Century City Conference Centre in Cape Town. It will bring together key stakeholders in South Africa and across the continent to drive infrastructure development. SIDSSA 2024 is a crucial platform for discussions and partnerships in the infrastructure investment landscape, focusing on accelerating economic recovery through strategic infrastructure plans.

Both at the Inaugural SIDSSA in 2020 and the follow-up in 2021, in his keynote, President Cyril Ramaphosa stressed the importance of the symposium in fostering partnerships that can expedite infrastructure delivery and grow the South African economy. This year, under the leadership of Minister Sihle Zikalala, the seminar aims to address regulatory and policy reforms, lift nascent sectors, explore innovative funding models, showcase the strength of the emerging pipeline, give a progress update since the gazette in 2020 and highlight opportunities for investing in infrastructure to benefit all stakeholders.

According to Ms Mameetse Masemola, Head of ISA – Acting, “Infrastructure investment plays a pivotal role in driving future growth for the South African economy. It not only enhances efficiency and productivity, but also creates jobs and helps bridge spatial disparities. We are committed to delivering a high-quality infrastructure pipeline to foster long-term growth and elevate living standards.”

As the voice of Africa’s event and exhibition industry, AAXO is dedicated to showcasing South Africa’s exceptional infrastructure and highlighting the country’s unique qualities.

AAXO members collaborating on SIDSSA 2024 include Energy Capital & Power (ECP), Blueberry Concepts and Exposure Marketing. This dynamic partnership will ensure a seamless and impactful event, making a significant contribution to sustainable infrastructure development in South Africa and neighbouring countries.

The group will work closely with ISA to deliver a top-notch gathering that showcases the growth potential of South Africa’s infrastructure sectors and provides a premium experience for all attendees. A team of specialised suppliers will also



Century City in Cape Town.

lend their expertise to enhance the event experience.

Devi Paulsen-Abbott, CEO of ECP, adds, “We are delighted to partner with ISA and AAXO in managing this event. By bringing together the best event organisers and suppliers, the symposium will be a resounding success and drive further investment into South Africa’s infrastructure development.” 🌐

MBSA’s reaction to this year’s budget speech

The country’s body of construction contractors, Master Builders South Africa (MBSA), welcomed Minister Godongwana’s budget speech on 21 February.

“We welcome the Minister’s budget speech, particularly concerning introducing fundamental and far-reaching reforms to infrastructure financing and delivery,” said MBSA President Musa Shangase.

Shangase confirmed that Master Builders South Africa remains concerned about the declining infrastructure spending in the country, and any measure aimed at addressing the decline is welcomed by the construction sector.

“We are very concerned when we see construction companies and firms shutting down their business because the country does not have enough infrastructure projects to keep these companies in competitive business. The recently

released Quarterly Labour Survey for Quarter 3 of 2023 paints a gloomy picture for the construction sector which has shed thousands of jobs in just one quarter. We believe that the allocated funds for infrastructure,” added Shangase. Master Builders South Africa, however, reiterates its position that the government needs to address all the inhibitors to the implementation of infrastructure spending, such as lack of state technical capacity to roll out the projects, delays in approving building plans, inability to deal with illegal construction site disruptions, non-payment of contractors and the load shedding to mention a few.

“As an industry body, we remain committed to working with the government to provide the required building skills for the country as that is at the core of what we do for our members and the country. We avail ourselves as an industry body to collaborate with the Minister and other relevant Ministers to ensure that infrastructure delivery is fast-tracked,” said Shangase. 🌐



Musa Shangase, president of MBSA.

SA's largest private renewable energy plant gets the green light

The construction of South Africa's largest pure private renewable energy plant, the three 110-megawatt (MW) Impofu wind farms in Kouga, Eastern Cape, is set to commence this month. Representing over a decade of planning, the project includes the longest privately permitted powerline in the country, spanning 116 kilometres, and will be operational by 2025.

Red Cap Energy, a prominent renewable energy developer, spearheaded the project and engaged with landowners in the region to position 57 turbines across 12 parcels of land. The development promises significant benefits for local landowners and agricultural output. Working closely with the community, Red Cap utilised local knowledge to ensure the smooth implementation of the project.

The turbines, constructed with locally made concrete towers, will contribute 330MW of renewable energy to Sasol South Africa's Secunda site. The power will be supplied to French-based industrial gas supplier Air Liquide, operating the



The wind Farm in Kouga, Eastern Cape.

largest oxygen production site globally. The R9-billion project, conducted in collaboration with multinational renewable energy corporation Enel Green Power, underwent extensive environmental impact assessments and public engagement.

Red Cap Energy faced challenges during development, including discovering a Marshall Eagle nest, necessitating adjustments to turbine placement to protect the endangered bird. The powerline's route was also modified to address objections from some landowners. The project's success is attributed to the critical relationships established with stakeholders, including patient and flexible landowners and environmental specialists, ensuring

responsible decisions.

Xolile Peter Lamani, Chairperson of the Reebok Rant Worker's Trust, expressed gratitude for the extra income generated by leasing land for the turbines. The additional revenue will support livestock health and help manage drought during the summer, providing farming expansion opportunities.

Red Cap Energy, recognised for its expertise in renewable energy development, has developed 191MW of installed wind power. With 1.5 gigawatts (GW) of wind power fully permitted and an additional 2GW in various stages of development, the company continues to contribute significantly to South Africa's renewable energy landscape. 🌞

Fast and sustainable asphalt paving

A section of the southern part of Berlin's orbital road needed renewing due to severe rut formation.

To rehabilitate this section of the busy urban highway to a high standard as quickly as possible while conserving resources, the contractor chose to use two InLine Pave paving trains from Vögele. These paved the surface and binder courses "hot on hot" and "hot to hot" in seamless succession. This increased the quality of the road surface and its resistance to deformation, saved time, cut costs, conserved valuable resources, and reduced the overall CO2 emissions.

The time window for rehabilitating this section of the highway was extremely tight: the entire section had to be renewed and reopened to traffic in just two days. So the paving team used two InLine Pave paving trains, each comprising three machines: in each train, a high-performance MT 3000-3i Offset material feeder received the material for the binder and surface courses and conveyed it directly to the material hopper or the transfer module of the following SUPER 2100-3i IP



With two InLine-Pave-paving trains from Vögele, the lead contractor rehabilitated a 4.2 km section of the southern part of Berlin's orbital road within two days.

paver at precisely timed intervals.

The modified Highway Class pavers laid down a 6 cm binder course and used the transfer module to pass the surface course material onto the respective SUPER 1900-3i following behind, which immediately paved the 2 cm surface course. To meet the tight schedule, the two paving trains worked in parallel on two lanes, each with a width of 7.5 m.

The InLine Pave method from Vögele was also a good choice regarding fulfilling the quality specifications. The thinner surface course and the high degree of pre-compaction contributed to the high

quality of the new road surface and outstanding resistance to deformation. The core component of the paving train, the SUPER 2100-3i IP paver for the binder course, was equipped with an AB 600 TP2 Plus extending screed.

With a tamper bar and two pulsed-flow hydraulic pressure bars, the extending screed achieves maximum compaction values of up to 98%. This allowed the paving team to compact the binder course to an extent that made it particularly resistant to deformation. It enabled the surface course pavers behind to pave over it while the layer was still hot. 🌞

The new Liebherr LRT 1130-2.1 is now the world's most powerful all-terrain crane on two axles.



LIEBHERR EXPANDS ITS ROUGH-TERRAIN CRANE RANGE WITH THE LRT 1130-2.1

Liebherr has launched the most powerful rough-terrain crane on two axles on the market. The LRT 1130-2.1 has a maximum lifting capacity of 130 tonnes and extends Liebherr's range of rough-terrain cranes at the top end of this segment.

Liebherr presents the 130-tonne rough-terrain crane under the slogan "The toughest in the roughest". The new LRT 1130-2.1 offers the highest lifting capacities and the longest telescopic boom of any 2-axle rough-terrain crane globally. It also has the most economical transport dimensions in its performance class.

Long telescopic boom

The essence of the LRT 1130-2.1 is maximum performance with economical mobility worldwide. The new Liebherr rough-terrain crane is the only 130-tonne crane on a 2-axle chassis.

At the same time, its telescopic boom is the longest in its class at 60 m. It consists of the pivot section and six telescopic sections and is extended and bolted automatically with the Liebherr TELEMATIK high-speed telescopic system.

A 10.8 m single folding jib or a 10.8–19 m double folding jib is available for the LRT 1130-2.1. It is mounted at angles of 0°, 20° or 40° or can be hydraulically tilted from 0° to 40°. With an additional 7 m lattice section as a telescopic extension, this new crane reaches hook heights of up to 85 m.

The folding jib is carried on the right-hand side of the boom. At the same time, a 2.9 m assembly jib can be attached to

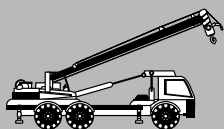
the left-hand side of the boom. A side-folding rooster sheave, operated in 2-line mode, rounds off the boom options.

Economical transport

Liebherr has designed the dimensions of the new LRT 1130-2.1 to transport it economically on low-loaders worldwide. Its width is 3.4 m, its height is 3.85 m, and its chassis length is 9.4 m. The transport weight is 48 t without ballast but with the folding jib and hook block. This can be reduced to 44.8 t. These values are unique in the class of powerful 2-axle all-terrain cranes. A permit-free standard transport vehicle is sufficient for the 20 t ballast and additional equipment. The counterweight comprises three ballast slabs attached to the slewing platform via self-assembly with ballasting rams.

Safety first

High safety levels in every respect were the main priority for designing the new LRT 1130-2.1, which features an outrigger monitoring system as standard. The outrigger status on tires or supports is detected automatically and saved to the crane controller. The attachment of the ballast to the slewing platform and the installation of the optional double folding jib, including its angle adjustment system, are also recorded and monitored.



Liebherr's LRT 1130-2.1 is the most powerful 2-axle rough-terrain crane, featuring a 130-tonne lifting capacity and a record-breaking 60 m telescopic boom.



The crane is designed for economical transport with dimensions of 3.4m width, 3.85m height, and a chassis length of 9.4m, enabling worldwide low-loader transportation.



Safety is prioritised with standard features like outrigger monitoring, VarioBase® variable support base, and a wide crane cab for operator comfort.



The LRT 1130-2.1 boasts off-road capabilities with a 6-cylinder CUMMINS engine, complying with exhaust emission regulations.

The VarioBase® variable support base, developed by Liebherr and is standard equipment on all Liebherr LRT cranes, is essential to increasing safety. VarioBase® allows each crane outrigger to be extended to any length. The crane work is controlled by the load moment limiter within the LICCON controller, which calculates the maximum load capacities precisely for the current situation. This prevents accidents caused by human error during the assembly process and when hoisting loads. VarioBase® also offers greater flexibility on the construction site, higher lifting capacities and a more extensive working range. The most significant advantages are achieved in the areas directly above the outriggers.

Safety is also enhanced by providing greater comfort for the operating personnel. The new 130-tonne crane also features the wide crane cab that has already proven its worth on the other Liebherr LRT models. It can be tilted backwards for greater comfort when hoisting loads to great heights. Clear, self-explanatory controls make the crane easy to handle. They allow crane drivers to concentrate on the focus of their job, working with the crane and the load. Liebherr calls this concept KISS: "keep it simple and safe".

There are ladders, many handles and an electronically extending platform on the cab to ensure safe access to the crane. The new LRT crane features a wide range of storage boxes for extensive accessories, lifting tackle and support timbers as standard. There is also storage for the load hook.

Like the LRT 1090-2.1 and LRT 1100-2.1 cranes, the LRT 1130-2.1 also complies with a global, uniform safety standard and with globally valid regulations such as the US ASME B30.5 standard, the European EN 13000 standard and the Australian Standards (AS). The machines also include systems to prevent safety equipment being bypassed. Liebherr is a pioneer in the industry in this respect.

Off-road capability

The new LRT 1130-2.1 is designed for durability, off-road mobility and manoeuvrability. It is powered by a 6-cylinder CUMMINS combustion engine that complies with all applicable exhaust emission regulations. It can be operated without restrictions with hydrogenated vegetable oil (HVO). The engine develops 252 bhp (188 kW) and supplies a maximum torque of 1,186 Nm. A 6-speed powershift transmission from DANA and large 29.5 R 25 tires guarantee the required off-road capability. All-wheel and crab steering ensure easy handling and high manoeuvrability in constricted conditions. ⚙️



The newly upgraded Wacker Neuson RTxSC3 trench roller suitable for general trench work

UNVEILING COMPREHENSIVE SOLUTIONS FOR SOIL AND ASPHALT COMPACTION

Wacker Neuson's lineup, from the renowned RD series to the RTx trench roller and expansive RC soil compactor range, embodies the company's commitment to meeting customer and market demands.

Tailored for multiple markets across Sub-Saharan Africa, these robust and versatile rollers feature ergonomic designs, innovative attributes, and cutting-edge technology addressing efficiency, productivity, and operator safety and comfort.

"Incorporating a dual-vibration system, our diesel and petrol RD7 and RD10 walk-behind rollers stand out for exceptional performance in soil and asphalt compaction," says Stefan le Roux, Wacker Neuson Sales Manager for Sub-Saharan Africa.

"The dual on/off frequency vibration selector provides two vibration stages, enhancing safety and boosting productivity. The ergonomically arranged operator control elements are conveniently located on the guide handle, ensuring complete control without the need to move around the machine."

The RD10 for Africa

Reflecting on the positive evolution of the RD7 in the African market, Le Roux notes, "Relocating manufacturing and implementing a proactive buy-back program has been

pivotal. The redesigned RD7 from Germany, introduced in 2021, now holds a prominent position in the South African market, a testament to our commitment to customer satisfaction."

As Wacker Neuson aims to fortify its presence in the African market, the new RD10 takes centre stage.

John Ramshaw, Wacker Neuson South Africa's Key Account Manager: Agriculture, elaborates on the introduction, saying, "Hosting an event in Q2 2023 allowed us to gather feedback from customers and dealers, shaping the RD10 uniquely for Africa. Based on the RD7 design, the RD10 retains the best features while incorporating enhancements for optimal customer solutions."

Ramshaw highlights the RD10's suitability for users favouring a heavier roller with a wider drum. "The 750mm drum covers a broader area, accelerating work rate and productivity. Despite the wider drum, the compact design ensures easy operator manoeuvrability. Fully hydrostatic and operating without a gearbox or chains, the RD10 translates to fewer components, reduced wear and tear,



With the introduction of the new RD27 tandem models Wacker Neuson brings regular updates and improvements

and ultimately lower operating expenses (OPEX)."

Tandem models

With the new RD12 and RD27 tandem models, Wacker Neuson brings regular updates and improvements to their tandem ride-on roller range.

Ramshaw details, "The RD12 vibratory roller, with dual drum drive, efficiently compacts asphalt and granular subbase material. Articulated steering ensures excellent manoeuvrability, catering to various applications."

The Wacker Neuson RD12 Compact Tandem Roller boasts a weight class just over 1 ton, making it conveniently transportable while still packing a powerful punch.

Its versatility and wide range of applications, from laying fresh asphalt to compacting subbase materials or rolling turf, make it an ideal choice for retail and rental purposes. Particularly well-suited for the demands of the Sub-Saharan African market, it finds its stride in tasks such as parking lot and driveway construction, road repairs, and even nature trail development.

Moreover, its dual drum drive, featuring a front vibrating drum and a rear static drum, ensures efficiency and optimal compaction, resulting in a neatly compact package.

Steering masterfully

The articulated steering mechanism in the RD12 plays a pivotal role in enhancing its manoeuvrability, particularly in tight or confined spaces.

"Allowing the roller to articulate or pivot at a central point, rather than relying solely on traditional steering methods, provides a tighter turning radius and greater agility. This feature proves exceptionally beneficial in applications where precision and manoeuvrability are paramount, such as navigating obstacles like parked vehicles, trees, or other structures in parking lots, driveways, or nature trails," says Le Roux.

The articulated steering also features an oscillation function between the front and rear frames, facilitating smoother navigation on uneven terrain, ensuring consistent compaction results even in challenging environments.

Overall, this feature enhances operational efficiency and minimises the risk of damage to surrounding infrastructure or landscaping, making the RD12 a versatile and reliable choice for various construction and maintenance projects.

QUICK TAKE

Wacker Neuson's RD series, RTx trench roller, and RC soil compactors cater to multiple Sub-Sahara African markets, prioritizing efficiency, productivity, and safety.

Diesel and petrol RD7 and RD10 walk-behind rollers feature dual-vibration systems, providing exceptional performance in soil and asphalt compaction.

RD7's positive growth in South Africa results from manufacturing relocation and a proactive buy-back program.

The new RD10, based on RD7 design, suits users preferring a heavier roller with a wider drum.

TALKING POINT



"The dual on/off frequency vibration selector provides two vibration stages, enhancing safety and boosting productivity. The ergonomically-arranged operator control elements are conveniently located on the guide handle, ensuring complete control without the need to move around the machine."

Stefan le Roux, Wacker Neuson Sales Manager for Sub-Saharan Africa



Support for customers

"To support customers in improving their bottom line, we incorporate advanced technologies into our products," notes Le Roux. The soon-to-be-introduced EquipTrack, a digital solution recording operating data via Bluetooth, is expected to be popular with rental customers. Additionally, mixed reality Smart Glasses introduced in 2022 offer remote support for service technicians.

"Proper operation and effective maintenance are essential for optimal machine performance," emphasises Ramshaw. The Academy in Johannesburg provides professional technical and sales training, ensuring customers and dealer

partners stay updated on innovations.

"Equally important is the training of our personnel; knowing the machine inside out enables us to provide optimum solutions," he adds.

Wacker Neuson South Africa emphasises exemplary service and after-market support across Sub-Saharan Africa. "With a fill rate of over 80%, we prioritise getting products, parts, and spares to the market, expecting uptime," says Le Roux.

Le Roux also unveils plans for a new range of large RC119 and RC208 compactors in 2024. "With an extensive roller collection, state-of-the-art technology, exceptional training, and

outstanding service, Wacker Neuson embodies the commitment of having 'all it takes' for unparalleled success!"

Time to train

The Wacker Neuson Academy in Johannesburg provides a comprehensive range of sales and service training tailored to customers, dealer partners, and Wacker Neuson personnel.

Training programs are designed to cater to varying levels of expertise, from introductory sessions to advanced courses, covering all aspects of Wacker Neuson equipment, including unique selling points, crucial sales information, equipment operation, and servicing techniques.

"The academy offers hands-on training sessions for customers focusing on equipment operation, maintenance best practices, and safety protocols. Participants learn to effectively operate Wacker Neuson machines, troubleshoot issues, and perform routine maintenance tasks, enabling them to minimise downtime, enhance productivity, and reduce operating costs over the lifespan of their equipment," says Le Roux.

Dealer partners benefit from specialised training programs to bolster their product knowledge, sales techniques, and customer service skills. Moreover, our dealer partners undergo comprehensive training to proficiently service and maintain customers' equipment. These programs equip dealer personnel with an in-depth understanding of Wacker Neuson products and solutions, enabling them to provide expert guidance and support to customers, fostering stronger relationships, and driving business growth.

"Wacker Neuson personnel undergo comprehensive training encompassing sales, operation, and service aspects to ensure our team is thoroughly equipped and informed about all Wacker Neuson equipment. This training lets us provide our valued customers with expert service, advice, and more. The Academy offers specialised training programs for equipment servicing and maintenance personnel, including technicians and service engineers.

These programs delve into advanced topics such as diagnostics, troubleshooting, and repair procedures, empowering participants to proficiently address technical issues and uphold the reliability and performance of Wacker Neuson machines in the field. suits users preferring a heavier roller with a wider drum. 🌀

SOME POSITIVE NEWS FOR THE CONSTRUCTION INDUSTRY THIS YEAR

The construction industry in Sub-Saharan Africa and the Middle East and North Africa (MENA) region is looking forward to a busy and profitable 2024, with most players expecting an increase in revenue and projects.

This is according to an industry survey conducted by construction software company RIB Software in November 2023. The survey gathered 292 responses from industry players, with 75% in Sub-Saharan Africa and 25% in Middle East and North Africa.

The lion's share of responses was gleaned from the building (31%), civils (27%) and general contracting (17%) operations.

Most companies (87%) said they had recovered from the Covid-19 pandemic, citing rising input costs (51%), margin pressures (39%) and attracting and retaining qualified individuals (30%) as their three most significant challenges over the past 12 months.

RIB Vice President MEA, Peter Damhuis, says rising input costs can largely be attributed to supply chain disruptions following the pandemic and exacerbated by the turmoil in Ukraine and Gaza. "This has led to an increase in prices of key construction materials such as cement, diesel, and asphalt, affecting initial budgets and resulting in even thinner margins for the industry."

In the months ahead, industry players are looking forward to an increased order book pipeline (45%), increased private sector work (43%), sustainability (39%), worker productivity enhancements (37%) and government-led infrastructure spending (29%).

Projections for 2024 in terms of revenue and project pipeline are cautiously optimistic. Some 39% of respondents expect to increase their revenue by between 5% and 10%, while 27% expect increased revenue of 15% or more. Regarding project pipeline projections for 2024, 29% of respondents expect an increase of 15% or more, another 29% expect an increase of between 5% and 10% and 24% expect an increase of between 10% and 15%. This more favourable climate is echoed by economist Dr Roelof Botha, a compiler of the Afrimat Construction Index (ACI), pointing to the focus on renewable energy, the need to overcome logistical challenges, government spending on various projects ahead of the election, and sustained

growth in new capital formation as crucial drivers for the sector in South Africa.

The rising price and demand for oil could see some Middle Eastern countries benefit from future oil and gas construction projects, with construction expected to increase steadily in Qatar, UAE / Dubai, Bahrain, and Kuwait in the years ahead and beyond.

In 2024, 53% of industry players will focus on digital transformation as a critical strategic initiative, while 50% intend to implement LEAN construction principles, 44% will look at expanding their business offerings, and 38% intend to expand their geographical reach.

Damhuis says RIB welcomes the focus on digital transformation, the construction software company's area of expertise.

"The construction industry is notorious for being somewhat behind the curve when it comes to digital transformation. A well-thought-out digital transformation strategy can help construction companies improve their margins and ensure they meet budget and time deadlines."

When choosing construction software, respondents will be prioritising functionality (31%), ease of use (32%) and cost (13%) in 2024. Notably, 52% of respondents say their companies will spend more on IT in 2024 than in 2023, and 30% say their spending will be the same as in 2023. The technologies they intend to focus on in the year ahead will be estimating and planning software (37%), cloud and real-time collaboration (26%) and project management software (10%).

When asked whether they would be exploring ISO19650 standards and compliance with the standard ISO, 38% of respondents affirmed they would be. In addition, 52% of respondents said they expected the number of projects involving Building Information Modelling (BIM) to increase.

When asked about the most significant risk factors relating to their businesses the year ahead, 76% of respondents cited rising costs due to global unrest as the most significant risk factor, followed by fuel prices (51%) and construction mafia (50%).



Peter Damhuis, RIB Vice President MEA.

Interestingly, only 0,02% of respondents in the MENA region said the construction mafia represented a risk. In comparison, 48% of respondents in the SSA region cited it as a significant risk to their operations.

Only 42% of respondents have carbon reduction strategies in place, with 41% saying that progress in the carbon reduction space remained the same as in the previous year and 26% saying more progress was made over the past 12 months.

Damhuis says that overall, the industry outlook is positive for 2024.

"This is encouraging, especially for Sub-Saharan Africa where the industry has faced significant challenges such as the construction mafia, rising costs, a dearth of talent and projects not coming to fruition quickly enough." 🌟



Working on a concrete base, the JCB 436ZX Wheel Loader's bucket is fitted with a half-farrow cutting edge.

JCB WHEEL LOADER KEEPS PRODUCTION GOING AT MUCH ASPHALT GQEBERHA

The 'just in time' concept is often used in industry as a cost-saving method to cut down on keeping a large inventory, but in the asphalt industry, it is the norm that demands that all components from raw materials to mechanical tools create a synergy without which there would be no product to sell.

Asphalt is made when mixing raw aggregates supplied by quarries with bitumen, a by-product of the fuel refining industry. At the Much Asphalt plant in Gqeberha (formerly Port Elizabeth), the company's Maintenance Supervisor of some 34 years, Louis Blume, tells us more: "We're a major supplier of asphalt to SANRAL (the South African National Roads Agency SOC Limited), a host of district and local municipalities, private contractors, and even smaller customers like plumbers who all work with asphalt in one way or another. We have ten different mixes that we make up and these each contain different sizes of dry aggregates that we receive from various quarries in our area. The different aggregates are stockpiled in separate concrete compartments."

Moving raw product

The other raw product, bitumen, is obtained from fuel refineries where it is pumped into road tankers at 120°C and then kept hot during transit to arrive at Much

Asphalt's plant in Gqeberha at a temperature of around 150°C to maintain and improve its viscosity.

"We receive our orders for the following day's delivery during the afternoon and then plan our production," Blume adds.

"We use a wheel loader to load the bins with the various aggregates from where the exact amounts are weighed to be mixed with the hot bitumen."

Loading made easy

The machine is a JCB 436ZX Wheel Loader with a standard 2,6 cubic metre bucket. Much Asphalt delivered it in May 2022 after their previous loader was moved to another branch.

"Having the new JCB 436ZX Wheel Loader has boosted our confidence to keep delivering the quality product that we're known for, as given the tight timeframes we work to we simply cannot afford to have equipment go down in our production cycles," Blume explains.

"Our JCB Wheel Loader would normally be active for



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Working on a concrete base, the JCB 436ZX Wheel Loader's bucket is fitted with a halfarrow cutting edge.



"We chose the JCB 436ZX Wheel Loader after lengthy consultations with Bell Equipment's Sales Representative in our area, Tom Swartz, who advised us on the similarity of the machine's features and capabilities compared to our previous model," Blume adds.

"These criteria included its power, breakout force and bucket size, and we're well pleased with our eventual choice."

The JCB 436ZX Wheel Loader boasts a Cummins 685,9 engine that produces 132kW of gross power and 786Nm of torque at 1,300 rpm. Its breakout force of 147kN allows it to handle the dry but abrasive aggregate loads it feeds into the asphalt plant easily. The operator enjoys good visibility from the ROPS/FOPS certified cab, where air conditioning and a reverse camera help keep his attention on working efficiently and safely. An automatic reverse fan and turbo pre-cleaner care for the engine's health.

Long work life

Much Asphalt's new JCB 436ZX Wheel Loader had just passed the 1,000-hour mark when we saw it. The machine was bought with an extended warranty of 6,000 hours or 36 months on its wet drivetrain and a Bell Care Package to the same limits. It will see mechanics from Bell Equipment, the official South African distributor for JCB equipment, service the machine.

"Our city Gqeberha, is not known as the 'windy city' for nothing and due to the swirling and penetrating dust we experience when working with the aggregates on windy days, we've asked Bell Equipment to schedule intermittent services at 250 and 750 hours as well, which we're happy to pay for," Blume says.

"As we're intent on running this JCB 436ZX Wheel Loader to high hours, experience has taught us that preventative maintenance is key in achieving this."

Louis has high praise for Bell Equipment's personnel in the local Gqeberha branch. "We've had the pleasure of having Bell service our previous loader, and I quite frankly won't work with any other equipment supplier as the levels of service and care we get from these chaps is off the scale," says Blume.

"Gert Nelson, the Branch Manager, to Tom Swartz in sales and not forgetting the mechanics, Daniel van der Walt and Kenneth Meiring, who will always give us a call after doing a service or repair to find out whether everything was to our satisfaction."

"All these gentlemen are great ambassadors for the Bell and JCB brands," he says. 🌟



The JCB 436ZX loads vital aggregates for asphalt at Much Asphalt Gqeberha, serving clients from national agencies.



With a 2.6 cubic meter bucket, the JCB 436ZX efficiently loads 1,000 tons of dry aggregates daily.



Operating up to 19 hours in a 24-hour cycle, the JCB Wheel Loader maintains reliable performance.



The JCB 436ZX features a Cummins 685.9 engine, 132kW power, 786Nm torque, and a 147kN breakout force.

QUICK TAKE

around 10 hours in a regular day shift but when we're under pressure and work extended shifts, that number could increase to anything between 13 to 19 hours in a 24-hour cycle."

Louis adds that during a typical day shift, their JCB 436ZX Wheel Loader would load 1,000 tons of dry aggregates into the bins and has other duties, like stockpiling the aggregates delivered to ensure more effortless loading. Working on a concrete base, the JCB 436ZX Wheel Loader's bucket is fitted with a half-arrow cutting edge.

CUSTOM BUILT JETTING TRUCKS TO HELP PREVENT FLOODING

Severe flooding events in South Africa's coastal regions over the past few years have highlighted the importance of maintaining infrastructure to deal with excess rainfall.

KwaZulu-Natal municipal services recently commissioned over 50 truck-mounted jetting units to boost its capacity to clear stormwater drains and sewer systems in the province.

Werner Pumps, the South African manufacturer of high-pressure jetting and vacuum equipment, is building the municipality's custom units and handing over five vehicles each month.

Sebastian Werner, MD of Werner Pumps, explains that these units are a vital tool for both clearing stormwater drains and sewers after a flooding event, and for ongoing maintenance.

"If stormwater drains are not cleared effectively and regularly, the debris build-up can lead to underground seepage of water, which in turn can cause other major infrastructure issues like sinkholes. If sewers become blocked, it can also lead to seepage and have serious health implications if sewerage overflows onto roads and into other public spaces," says Werner.

Local production

Werner Pumps manufactures all its jetting and vacuum equipment locally and works with various chassis manufacturers, depending on which chassis each customer prefers to have their units mounted on.

"As a local company, we are also able to identify and meet the particular needs of this market," explains Werner.

"Our units are designed to function well in the South African environment and are extremely tough."

Werner Pumps has also been able to accommodate the municipality's request that the units include crew cabs so that entire teams can travel on them along their maintenance routes. "This helps save costs, time and labour," says Werner.

The order came about after Werner Pumps had initially delivered a smaller quantity of units. When the municipality's teams experienced the quality and



Sebastian Werner, MD of Werner Pumps

effectiveness of the equipment first-hand, it increased the total order quantity.

Customisation

The truck-mounted jetting units can be used for drain blasting, pipeline cleaning, and stormwater and sewer cleaning.

"In terms of customisation, they can be either PTO-driven or donkey engine-driven, and we can make our tanks out of various materials.

They come in 6,000l, 10,000l and 15,000l sizes and we have many options for side-mounted accessories and hose

reel options. This means that customers can get units explicitly designed around their context," says Werner.

Werner Pumps supplies a wide range of accessories for all of its units, including low-water inlet switches, high-pressure jetting hoses (20m, 30m or 50m), high-pressure guns with lances, nozzle holders and fan nozzles.

"We do our best to meet all our customers' high-pressure jetting and vacuuming needs and can advise on how best to service particular application," Werner says. 🌟

HOW TO ENSURE RELIABLE RESULTS WHEN TESTING FOR DRUGS

Drug testing is a critical pillar of workplace safety and productivity. Among the various methods available, urine detection and saliva testing are two prevalent approaches.

By Rhys Evans, Managing Director at ALCO-Safe

However, the central question that emerges in their application is their susceptibility to manipulation. Saliva testing is often favoured as tamper-resistant, while urine testing offers a longer detection window, making it suitable for detecting substance use over a more extended period despite being vulnerable to interference.

Each testing type has its advantages and disadvantages, however, and companies seeking to keep their workplaces free from drugs should be aware of both to determine the suitability of each following their testing objectives and minimise the risk of interference to ensure the integrity of their testing processes.

Saliva testing vs. urine testing

The difference in the substances detected by saliva and urine tests points to their distinctive roles in workplace testing. Saliva testing generally targets the primary compound used, which provides insight into recent drug use by the individual within the last 6-36 hours, depending on the drug type. In contrast, urine testing focuses on metabolites, the byproducts generated as the liver breaks down drugs. This fundamental difference results in saliva tests offering a window into recent usage, while urine tests may detect substances from days ago.

Test cheating

However, urine tests can be more susceptible to adulteration and substitution, opening the door to various cheating tactics. Urine substitution, sample dilution, and masking agents threaten the integrity of urine testing. To safeguard the reliability of urine tests, companies can implement specific measures:

- **Direct observation:** Collect urine samples under close supervision to deter tampering.
- **Random testing:** Conduct surprise tests regularly to disrupt any plans for cheating.
- **Temperature control:** Monitor

sample temperature immediately after collection to ensure freshness.

- **Creatinine and specific urine gravity checks:** Screen for low creatinine and specific gravity levels, which can indicate dilution or adulteration.
- **Employee awareness education:** Foster a drug-free workplace by educating employees on the consequences of cheating, along with the dangers of substance abuse.

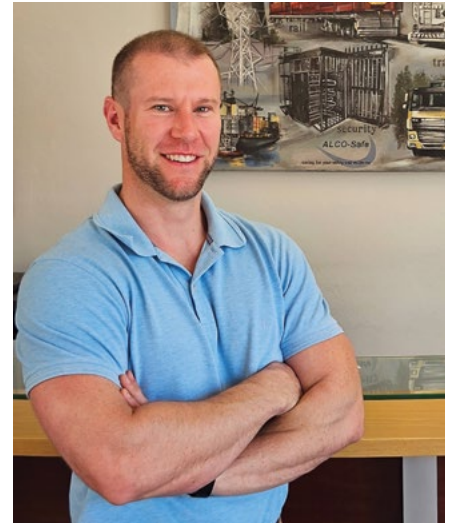
There is no one-size-fits-all approach to selecting a drug testing method. The choice between saliva and urine testing depends on the specific requirements of the testing scenario. Saliva testing is advantageous for scenarios where detecting recent consumption and speed of results at scale are important. In contrast, urine testing remains relevant for specific situations demanding broader detection, such as known drug users being tested to prevent repeat offences.

The uncomfortable realities of urine testing

The primary differences between saliva and urine testing methods come down to the testing procedure. Urine testing necessitates an awkward scenario, in which the operator must overcome the discomfort of invading another individual's personal space. The discomfort that usually arises from watching someone provide a urine sample, presents a vulnerability, and can offer the test subject the few seconds necessary to substitute or tamper with the sample they are providing. Saliva testing, on the other hand, eliminates this awkwardness by allowing a person to swab inside their mouth, making it a less intrusive process.

Common tactics to thwart urine tests

Individuals employ various tactics to cheat urine tests, with substitution being a prevalent method. This involves using someone else's urine, often stored in a balloon or condom, to replace their own during testing. Adulteration, on the other hand, involves adding substances



Rhys Evans, Managing Director at ALCO-Safe.

to neutralise or dilute the sample, such as chlorine. Detecting these tampering attempts relies heavily on monitoring the temperature, as the urine should ideally match the body's natural temperature range.

While random drug testing is often advocated as a potent deterrent against cheating, its effectiveness hinges on consistency. Regular, smaller-scale tests maintain the deterrent effect by keeping the possibility of being selected for testing fresh in employees' minds. This approach proves more effective than sporadic, large-scale testing, which may lose its impact over time.

Safety without compromise

Ultimately, the reality of drug testing in the workplace presents a nuanced dilemma in which each method has its merits and vulnerabilities. Companies can better navigate the ambiguity with a clear understanding of their goals, the nature of the testing scenario, and the strengths and limitations of each testing method. In doing so, they can shield their drug testing protocols from compromise and contribute to safer and more productive workplaces.

Partnering with accredited suppliers of testing equipment is a strategic move to enhance the reliability of drug tests, particularly in urine testing. Experienced suppliers offer tests with built-in features such as temperature strips and adulteration checks. Additionally, they provide essential competency training to ensure proper test administration and interpretation, while focusing on assisting companies to address the limitations of their chosen testing methods. Choosing the right supplier can make all the difference in obtaining accurate and trustworthy results. 🌟

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 data-driven 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.

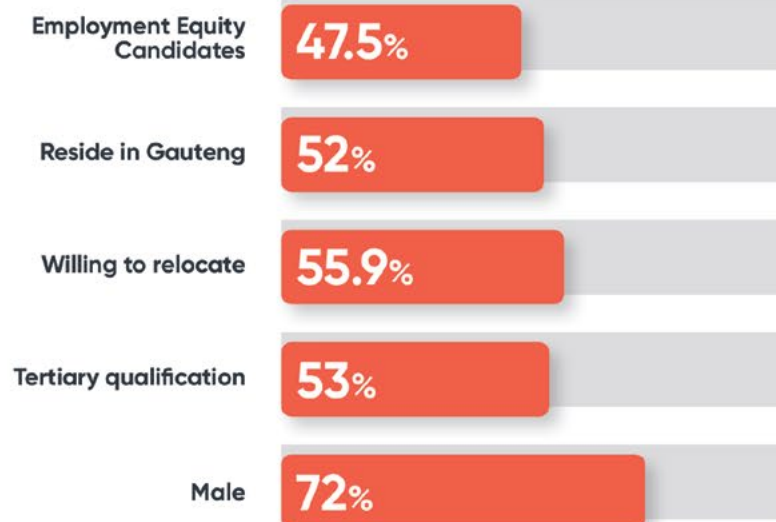
This is higher than the **average tenure** in South Africa across all sectors (**2 years and 4 months**).

2

YEARS
AND

11

MONTHS



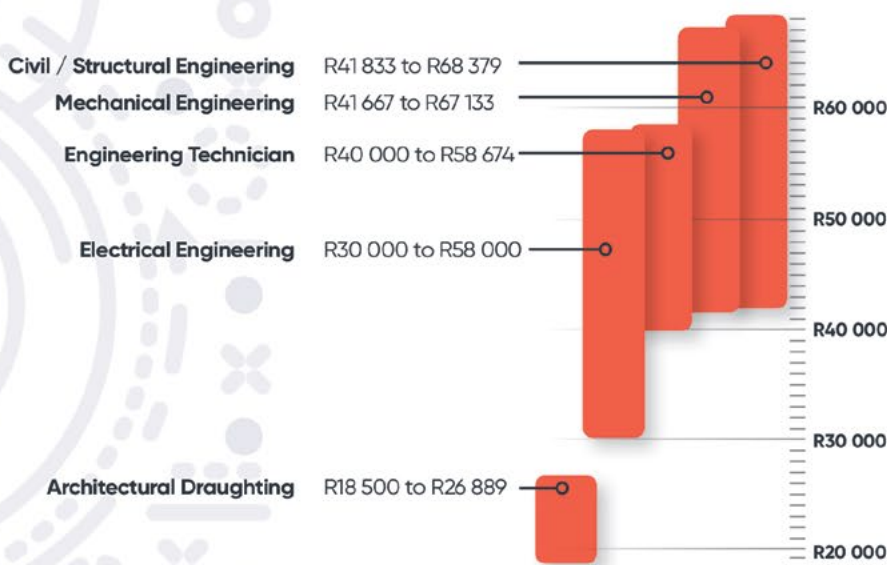
53% of candidates in this sector have a tertiary qualification; 55.9% of candidates are willing to relocate, with 52% currently residing in Gauteng; and 53% are employment equity candidates. 72% of candidates are male.

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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-on-year decrease in salary offerings for Architectural Draughting professionals (between -8% and -11%).



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GLT introduced the new branded Bobcat forklifts this year.

BOBCAT'S RESURGENCE IN SOUTHERN AFRICA

Goscor Lift Trucks (GLT) brought back the iconic Bobcat forklifts to the Southern African market in a groundbreaking move. This strategic revival comes as part of the global Doosan Bobcat rebrand strategy, marking a historic moment for Bobcat enthusiasts in the region.

Bobcat forklifts boast a rich legacy that dates back to 1968 when the first forklift rolled off the production line in South Korea under the Daewoo brand.

A significant chapter unfolded in 2005 when Doosan acquired the company, paving the way for the formation of Doosan Industrial Vehicle (DIV) in 2011. Fast forward to 2021, and Doosan Bobcat took the reins, encompassing manufacturing facilities in Incheon (Korea), Yanta (China), and Lűbber (Germany), with operations spanning over 90 countries.

Goscor Lift Trucks, an integral member of the Goscor Group since 1984, takes pride in rebranding its premier forklift brand, Doosan, which will now proudly don the iconic Bobcat livery. This marks a rebranding exercise and a historic return of Bobcat forklifts to the South African stage.

Low cost of ownership

As Goscor Lift Trucks positions itself as a dynamic forklift company, Patrick Barber, GLT Business Development Director, emphasises the extensive range of electric and diesel-powered forklifts and exceptional after-sales

service that has defined GLT over the years.

"GLT is a leading supplier in the South African materials handling industry," Barber affirms, highlighting their commitment to comprehensive warehousing solutions with the lowest total cost of ownership.

The rebranding of forklifts is a concept introduced previously for GLT. With Patrick Barber's two-decade-long involvement, including converting Daewoo forklifts to the Doosan brand in 2005, GLT brings a wealth of experience. GLT underwent its corporate rebranding earlier this year, aligning with the Goscor Group's vision of enhancing customer uptime across various industries.

Doosan Bobcat (DIV) forklifts will proudly carry the well-known Bobcat colours, with the rebrand in effect since the start of 2024. This signifies a strategic alignment with the global brand, making Goscor Lift Trucks an integral part of the renowned Bobcat family.

Showcase at LogiMAT 2024

Simultaneously, on the global stage, Bobcat unveiled its fully rebranded



"Recognised for its extensive range of electric and diesel-powered forklifts, along with exceptional after-sales service, GLT has established itself as a dynamic forklift company offering comprehensive warehousing solutions with the lowest total cost of ownership."

Patrick Barber, GLT Business Development Director



Goscor Lift Trucks reintroduced the legendary Bobcat forklifts to Southern Africa, aligning with the global Doosan Bobcat rebrand strategy, marking a historic moment.



Bobcat forklifts, with a history dating back to 1968, became part of Doosan Industrial Vehicle in 2005. By 2021, Doosan Bobcat operated in over 90 countries.



Goscor Lift Trucks positions itself as a dynamic forklift company, emphasising a commitment to comprehensive warehousing solutions with the lowest total cost of ownership.



Bobcat unveiled its fully rebranded material handling lineup at LogiMAT 2024, showcasing an extensive range of diesel and electric forklifts, reach trucks, and warehouse solutions.



portfolio at LogiMAT 2024. This marks the first showcasing of an extensive lineup of material handling products since the integration of Doosan Industrial Vehicle under the Bobcat brand.

CEO and Vice Chairman of Doosan

Bobcat, Scott Park, expresses, "Through our unwavering commitment to innovation and excellence, we have significantly broadened our product portfolio to empower customers to accomplish more." This echoes the essence of

Bobcat's renowned compact machines in construction, agriculture, landscaping, and global demolition.

LogiMAT highlights

The LogiMAT 2024 showcase will feature an impressive array of material handling products with unmistakable Bobcat branding. Diesel and electric forklifts reach trucks, and warehouse equipment will be displayed, reflecting Bobcat's expanded range of solutions.

Among the stars of the LogiMAT display are the diesel forklifts D160S-9 and D50SC-9, showcasing lifting capacities from 2 to 16 tons. Electric forklifts like B25NS and B20X-7 Plus, with lifting capacities from 1.2 to 10 tons, will also take centre stage. The lineup extends to reach trucks and various warehouse solutions, including pedestrian pallet trucks, ride-on pallet trucks, double stackers, and pallet stackers.

This extensive range signifies Bobcat's commitment to providing solutions that inspire and empower customers to conquer their most demanding challenges. 🌟



UNLOCKING EFFICIENCY AND ENSURING SAFETY IN DEMOLITION

In the dynamic landscape of the demolition industry, a remarkable transformation is underway, ushered in by the advent of demolition robots and cutting-edge automation solutions. These technological innovations redefine demolition and significantly enhance safety, efficiency, and project outcomes.

Demolition robots, the avant-garde professional service robots, are redefining how we approach the end-of-life phase of structures. Equipped with an array of end-of-arm tools like breakers, crushers, drills, and buckets, these mobile robots navigate confined spaces, offering a nimble and precise

alternative to conventional methods.

However, there are challenges with remote demolition technologies. While remote-control units provide an effective solution in specific scenarios, they come with compromises in precision and reactivity. Bester emphasises that understanding a structure's behaviour is crucial for the team's

safety, making remote demolition a restricted practice.

Demolition robots, resembling compact excavators sans the cab, occupy a substantial 90% share of the construction robot market. This efficient and commercially viable innovation marks a departure from traditional, labour-intensive practices.

"This type of technology is used specifically where there is a risk of soil subsidence during sinkhole remediation. The machine operator can control the machine from a distance. However, there is a definite compromise on precision and reactivity," says Kate Bester, Contracts and Project Manager at Jet Demolition.

Navigating the Future

In tandem with demolition robots, Autonomous Mobile Robots (AMRs) are emerging as groundbreaking automation solutions. Distinct from Automated Guided Vehicles (AGVs), AMRs showcase unparalleled autonomy and adaptability. They navigate intricate environments, circumventing obstacles without external guidance systems. Bester underscores the significance of automating demolition for safety, efficiency, and cost reduction. While the initial capital expenditure is considerable, the long-term return on investment and positive impact on health and safety make robotic automation an invaluable asset for demolition and construction companies.



"This type of technology is used specifically where there is a risk of soil subsidence during sinkhole remediation. The machine operator can control the machine from a distance. However, there is a definite compromise on precision and reactivity."

Kate Bester, Contracts and Project Manager at Jet Demolition

Jet Demolition's Approach

Safety remains the paramount concern for Jet Demolition, a leading player in the industry since 1994. Their commitment is reflected in methods and resources and in embracing automation technologies that ensure workers' well-being. The company's focus on completing projects safely, on time, and to international standards remains unwavering.

While Jet Demolition is proficient in various demolition techniques, a preference for mechanical applications aligns with international best practices, emphasizing the separation of workers from potential risks.

The company boasts an extensive equipment fleet meticulously maintained by an in-house team of mechanics. This commitment ensures readiness, efficiency, and top-notch performance for every project.

"Our main concern is for the safety of people. Our methods, resources, and approach align exactly to serve this purpose. We have been in business since 1994 and have kept our focus on the main objective of completing a project safely, on time, and to international standards," says Bester.

In conclusion, integrating demolition robots and advanced automation solutions is steering the demolition industry toward a safer, more efficient future.

Jet Demolition's embrace of these technologies underscores a commitment to innovation and a dedication to the core values of safety and excellence that have defined the company for nearly three decades. As the industry evolves, human expertise and robotic precision synergy promise to shape a new era in demolition practices. 🌟

QUICK TAKE



Professional service robots designed for demolishing end-of-life buildings, using various end-of-arm tools like breakers, crushers, drills, or buckets to break through materials.



Remote-controlled units, like those used by Jet Demolition, show global advancements applied locally.



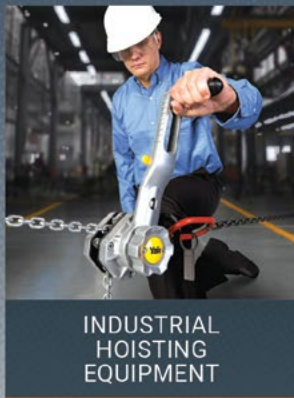
While remote-controlled techniques are crucial for safety in specific scenarios, limitations compromise precision and reactivity.



Despite high initial capital expenditure, the long-term return on investment and improved safety outweighs the costs.

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Students at one of the Ghabbour vocational schools in Egypt.



VOLVO CE ENCOURAGES MORE WOMEN TO JOIN HEAVY INDUSTRY

In a move toward gender diversity, Volvo Construction Equipment (Volvo CE) and its dealer partners are catalysing a shift in the traditionally male-dominated field of mechanics across Africa. This not only opens new avenues for women but also enriches the aftermarket service experience for customers.

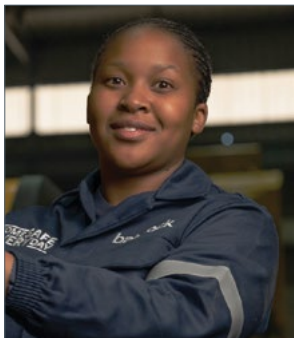
Volvo CE's vision to "build the world we want to live in" extends beyond sustainability and connectivity—it embodies a resolute commitment to achieving gender equality. Setting a bold target of having at least 35% female leaders and employees by 2024, Volvo CE initiated various programs to encourage women, particularly young women, to consider careers in the construction equipment industry.

The impact is not only evident within Volvo CE but also resonates among its network of dealer partners.

Empowering education

The Ghabbour Foundation for Development, an initiative by GB Auto, Volvo CE's Egyptian dealer Ghabbour, is playing a pivotal role in narrowing the gender gap in vocational education. Among the 1,000 students currently enrolled in three vocational schools,





"After high school, a friend suggested diesel mechanics to me. The more I researched, the more fascinated I became with machines. I decided to give it a shot, and guess what? I found it to be perfect! I absolutely love being a diesel mechanic!"

Lonah Jonson, Babcock Diesel Mechanic

150 are female.

Aleya Serageldin, Executive Director for the Ghabbour Foundation, emphasises the commitment to promoting women's roles in traditionally male-dominated sectors, specifically encouraging participation in the commercial vehicle specialization program.

Dina, a third-year student specialising in commercial vehicle maintenance, shares her journey, expressing a passion for the field and a vision for higher education and entrepreneurship. Her story reflects the foundation's dedication to empowering women in typically male-centric vocations.

Women in the workshop

Babcock, Volvo CE's dealer partner in Southern Africa, showcases a vibrant team of female mechanics. Thando, a 26-year-old mechanic at Babcock, started her journey through an apprenticeship program in 2019.

"My fascination with mechanics

started at a young age when I helped fix my father's taxis," she says.

"On my journey, I met an amazing neighbour who taught me that mechanics is about more than just cars. His help sparked a strong interest in me. I've had incredible mentors guiding me."

According to Thando she joins training sessions on Saturdays where the group will simulate faults and solve problems.

"Day-to-day, I handle various tasks like stripping engines and overhauling transmissions and brakes. I'm also the designated driver on site. I manage the loading and off-loading of machines from transport. I'm licensed to operate everything from forklifts to rigid trucks. Right now, I'm focused on advancing my career. I'm studying instrumentation at Unisa. It helps me stay up to date with improvements in engine management, emissions, control, telematics, and other related topics," she adds.

Another female on the Babcock team

in South Africa is Lonah Johnson. She started working at a Babcock workshop in 2018.

"After high school, a friend suggested diesel mechanics to me. The more I researched, the more fascinated I became with machines. I decided to give it a shot, and guess what? I found it to be perfect! I absolutely love being a diesel mechanic!" she says.

She's proud to be in a workshop with six other women.

"We support and encourage each other every day. It's amazing to see this progress. To all the girls out there who dream of pursuing a career in mechanics, don't let anyone tell you that you can't do it. Gender should never limit your potential. Embrace your passion, work hard, and believe in yourself. You can achieve anything," she says.

The growth continues

The move towards achieving a better gender balance in the construction equipment industry aligns with a broader societal goal and is recognised as a strategic business move.

Volvo CE acknowledges the industry's challenges, particularly the shortage of skilled labor, emphasizing the importance of nurturing talent irrespective of gender.

Christophe Lagandre, Head of Market Area Africa at Volvo CE, underlines the business benefits, stating that gender balance is not only a societal responsibility but also essential for delivering the best support for customers. 🌱



DETAILING CLIMATE-NEUTRAL ROAD CONSTRUCTION

Machine manufacturers and construction companies around the globe are currently searching for ways to achieve the goal of climate-neutral construction. The challenge here is to successively reduce CO2 and other harmful greenhouse emissions around the world to zero over the coming decades. Dr Günter Hähn, CEO of Wirtgen GmbH and Dr Markus Bach, Project Lead Sustainability for Wirtgen Group, look at how this can be achieved.

In the road construction sector, this transformation is inextricably linked to improving and further developing production and working processes.

In the future, machines and construction materials will also be assessed based on the climate-harmful emissions arising from their production and use.

However, the focus should not be on individual machines but on the entire process leading up to the finished product – a road.

Road construction targets

In 2015, the United Nations adopted the Agenda 2030. With the agenda, the global community aims to enable people on all continents to live a life in dignity and conserve vital natural resources sustainably. Economic, ecological, and

social aspects all play a critical role. Governments around the world, civil society, and private enterprises are called upon to contribute to the realisation of the Sustainable Development Goals set out in Agenda 2030.

Above and beyond such demands, the construction industry already faces specific on-site requirements for using non-fossil fuels or deploying machines with local zero emissions – for instance, in the Nordic nations. In light of this and their obligations to future generations, many leading players in the construction sector and numerous small and mid-size companies are setting their own goals to mitigate climate change.

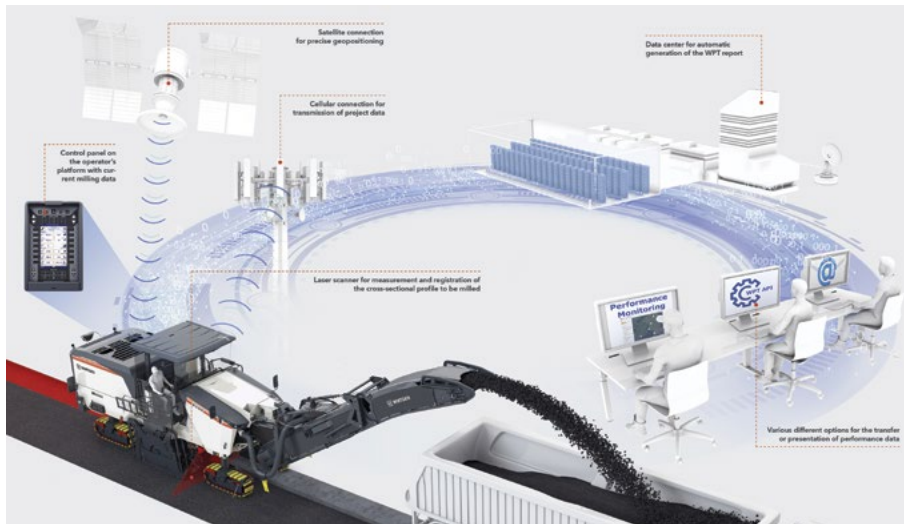
As a leading manufacturer of road construction machines, the Wirtgen Group has also set concrete goals for its realisation over several steps. For example,

Wirtgen, Vögele, Hamm, and Kleemann will increase the availability of machines powered by hybrid or fully electric drive systems by 2026.

In addition, all Wirtgen Group product brands, including Benninghoven, will offer machines and plants that can be operated with non-fossil or climate-neutral fuels. Last but not least, the digitalisation of machines will significantly contribute to process optimisation and, in turn, lead to further reduced harmful emissions.

Holistic approach

To realise the most significant possible reduction of overall emissions, the efforts of all players along the road construction process chain must be focused on the same. The key question is: "How can we construct or rehabilitate roads with



The WPT for cold milling machines calculates and records how many cubic meters of asphalt have been milled. It can also, for instance, provide information on fuel consumption during a specific construction project.



A schematic of the cold recycling process: In this method for road rehabilitation, the construction materials are recycled on the spot. As the asphalt does not need to be heated, substantially less energy is required. (Source: Wirtgen Group).



Benninghoven plant with a hot gas generator for asphalt production from up to 100% milled material.

minimal or zero climate-harmful emissions?"

To answer this question, the emissions from not individual machines or plants but rather the emissions of projects as a whole should be considered. In the same way, a vehicle's fuel consumption is measured in kilometres per litre, machine performance should be measured in units of work done – for example, per cubic meter of pavement material removed or per ton of asphalt paved.

All factors must be considered on construction sites to enable considerations based on kilometres of road constructed or rehabilitated. Such considerations indicate which construction method, materials, and machines are the climate-friendliest for each project.

Smart assistance systems

Today, machines from Wirtgen, Vögele, Hamm, and Kleemann, equipped with engines that fulfil the requirements of US EPA Tier 4f, respectively EU Stage V exhaust emission standards, can also be operated with alternative fuels.

They are approved for use with alternative paraffinic fuels such as HVO (Hydrotreated Vegetable Oils – fuels based on vegetable oils or animal fats) or XtL fuels (X-to-Liquid – synthetic fuels based on solid, liquid, or gaseous energy resources). There are already corresponding solutions for asphalt mixing plants from Benninghoven. These can be fuelled with wood dust or BtL (Biomass-to-liquid-liquid fuels derived from biomass).

The first battery-powered solutions are now available, including the new mini pavers from Vögele and compact rollers from Hamm.

These machines have sufficient battery capacity for a typical working day and deliver identical performance to their diesel-powered counterparts.

Kleemann has been offering crushers with direct electric drive systems for processing primary resources and recycling materials for quite some time. These enable local zero emissions by connecting to an external electric power supply.

Digitalisation

Regardless of the measures employed, having a transparent and verifiable system for determining and assessing emissions is essential. This is where the tremendous opportunities offered by digitalisation can play a decisive role. These days, for example, telematics systems can already register machines' fuel consumption.

For Wirtgen Group product brands alone, the number of machines fitted with such systems is aimed to rise to 42,000 by 2030. This will allow the documentation of such parameters under real-world operating conditions and offer a much more realistic picture than predefined test cycles.

First, systems for documenting the actual work performed are now also available. These include the Wirtgen Performance Tracker (WPT) for cold milling machines and wheeled recyclers/soil stabilisers (see Information Box). With such digital solutions, it will be possible to document consumption figures "per work done" – i.e., on a construction site or project basis. 🌱

Engen remains committed to African development

Engen, a company committed to positively impacting the world, recently participated in the 'Investing in Africa' Mining Indaba.

The event had around 8,000 attendees from 104 countries and 60 government representatives. This year's Indaba theme was "Embracing the power of positive disruption: A bold new future for African mining" reflecting the mining industry's focus on positive change and sustainability.

Engen's exhibitions stand at the event displayed their commitment to providing excellent service and uplifting communities. Their stand highlighted their world-class manufacturing facilities and market-leading supply chain across the continent. They engaged with around 350 visitors, including both large established mining houses and junior miners.

Engen's head of Lubricants, Sharveen Maharaj, stated that the company has made impressive strides in sustainability, as well as various enterprise development and social upliftment initiatives. The event highlighted



Engen exhibited under the banner of Always Moving (because mines are always moving) at Mining Indaba 2024.

Engen's localisation initiatives, showcasing their investment in Enterprise Development through a partnership with Resegofetse Business Solutions, a local woman-owned SMME that has seen over 400% growth in business since partnering with Engen. In addition, Engen has secured premises and a

new vehicle for the business.

Engen's presence at the Mining Indaba was well-received by the broader mining community, and it will go a long way in entrenching the company as a progressive energy and solutions partner for a sustainable future. 🌱

Man-on-site services at mines

FUCHS Lubricants South Africa has offered its man-on-site service to mining clients for over 30 years.

The company provides essential services to keep mining operations running smoothly. Its skilled service personnel are responsible for on-site services, maintenance, shutdowns, and extended services for mining equipment. The company has 39 technicians and service personnel based at key locations such as Swakopmund, Mokopane, Springbok, Kuruman, Emalahleni, and Johannesburg.

The mining industry depends on its equipment having proper lubrication to function effectively and avoid any downtime. FUCHS is committed to assisting clients to optimise their operations and employs the latest technology to monitor lubrication systems, providing real-time alerts via SMS when issues arise.

A major advantage of having personnel on-site is the close connection with clients. FUCHS strongly emphasises building relationships with end customers and the various personnel within mining companies, from the ground to the management level. The company's commitment to service excellence is further exemplified in its involvement in major projects, such as the complete rebuild of a dragline, a massive seven-month undertaking.

Apart from providing essential on-site services, FUCHS has also developed a



FUCHS personnel are responsible for on-site services, maintenance, shutdowns, and extended services for mining equipment.

reporting tool called MOS (man-on-site) for trend analysis on specific components, offering valuable data for clients' maintenance planning. To stay at the forefront of technology and trends, the service team undergoes continuous training and works closely with the systems department to design and install new systems.

While many of their services are under contract, FUCHS remains flexible and adaptable to meet clients' specific needs. It employs the latest technology to monitor lubrication systems, providing real-time

alerts via SMS when issues arise.

With a growing focus on sustainability and cost-saving in the mining industry, FUCHS is committed to assisting clients to optimise their operations. While FUCHS does not manufacture its own lubrication systems specifically, it standardises on recognised OEMs to supply customers and use these components in its own systems. Another benefit is that FUCHS can supply lubrication containers, making it easier to service vehicles and equipment on-site. 🌱

SANY showcase extensive mining solutions

SANY attended the 30th annual Investing in African Mining Indaba where the group debuted at the event last year.

This year SANY quadrupled its stand size to present its technologically advanced and sustainable products and services to the mining industry.

General Manager, Samuel Zhang, as well as the Chinese and South African executive team, attended the event last month to interact with visitors and other attending companies.

"We are excited to present our mining solutions to professionals who gather from worldwide to attend a single event. Our first attendance allowed us to interact with potential clients and the competition, all of whom have the same passion: mining interests in Africa. SANY looks forward to continuing to bolster its presence at the conference," said Zhang.

The investment at Mining Indaba showed SANY's commitment to serving its clients in Africa. SANY Southern



The Sany office in Rustenburg, one of the hubs supplying equipment to the mining industry.

Africa alone has more than 3,000 units of equipment operating in the region, serving clients in South Africa, Zambia, Mozambique, Zimbabwe, and more.

SANY's footprint in South Africa comprises its head office in Boksburg, Johannesburg, and other branches in Middelburg, Rustenburg and Richards Bay. 🌐

Kito L5 lever hoists are a hit in South Africa

Becker Mining South Africa celebrated a record-breaking year in 2023, reporting exceptional sales of Kito electrical and manual hoists, explicitly focusing on the success of Kito L5 lever hoists.

Despite industry challenges like the Covid-19 pandemic, power supply issues, currency depreciation, and ongoing strikes, Becker Mining achieved its highest Kito sales numbers, driven by increased demand for reliable and safe lifting equipment, especially in the mining sector.

Rick Jacobs, Senior General Manager for Consumables, attributes this success to Kito's robust design and high safety standards. The Kito range, manufactured in Japan with stringent quality specifications, finds applications in various industries, including mining, construction, shipbuilding, food processing, manufacturing, chemical plants, and the wind power sector.

The demand for Kito L5 lever hoists, notable growth is observed, designed for efficiency and safety. The integrated overload limiter in the L5 series activates in case of excessive lifting overload, preventing injury and damage. Advantages include reduced size and weight, ease of operation in confined spaces, and improved safety features.

The L5 series comprises seven hoists with capacities ranging from 0.8 T to 9 T and a standard lift of 1.5 m. Kito hoists are



The Kito Lever Block with Overload Limiter.

constructed from high-grade alloy steel, incorporating nickel-coated Grade 100 load chains for corrosion resistance. Improved hook latch design ensures tight engagement for operator safety.

Additional enhancements include a reinforced lever handle, cap nuts for gear case and brake cover protection, and Kito's original free chain adjusting mechanism. The mechanical brake system features two dry, asbestos-free pads for

enhanced safety.

Becker Mining also offers a full range of Kito accessories, including universal trolleys for smooth traversing and positioning. Regular testing at Becker Mining SA's workshops or certified repair centres is recommended to maintain hoists in optimal condition. The success of Kito sales signifies a growing demand for dependable and secure lifting solutions across diverse industries. 🌐

Seabourne now offers overnight road services

Seabourne Logistics is revolutionising the logistics landscape with its innovative ONR (overnight road service), setting new industry standards for swift and reliable deliveries in South Africa. Catering to the demands of a rapidly growing clientele, this service allows businesses to gain a competitive edge in the fast-paced market.

Gary Harris, Director at Seabourne Logistics ZA, attributes the success of their overnight road service to a commitment to quality, reliability, and cost-effectiveness. Seabourne takes this responsibility seriously, recognising the critical role of timely and budget-friendly deliveries in clients' success.

The overnight road service offers significant advantages, with cost-effectiveness being a primary benefit, providing potential savings of up to 50% compared to airfreight services. It also excels in cargo handling, offering more space and flexibility than airlines. This flexibility is precious for transporting hazardous materials and liquids, subject to stricter airborne regulations.

Seabourne has strategically positioned

distribution hubs and fulfilment centres nationwide, expanding the service's reach and optimising transportation networks. The company has invested significantly in the service's development, ensuring high standards through measures such as equipping linehaul vehicles with long-range tanks and anti-fatigue cameras operated by a double crew, monitored by a 24-hour control room.

The fleet comprises Iveco Turbo Daily 50C 70 vehicles with reinforced heavy-duty tow bars and 1.5-ton trailers, operated within their warranty period to ensure reliability. Regular bumper-to-bumper service checks contribute to the fleet's dependable performance. The vehicles and trailers boast dimensions and features that enhance their robustness, making them suitable for transporting various goods.

Seabourne's ONR service holds particular value in industries like automotive, where the quick movement of parts is crucial. It offers convenience and flexibility, allowing multiple deliveries in a single trip to remote locations often excluded from next-day delivery services.

As part of its commitment to expansion and improvement, Seabourne Logistics will move to a new facility in November, dou-



The overnight road service offers significant advantages, with cost-effectiveness being a primary benefit, providing potential savings of up to 50% compared to airfreight services.

bling its warehouse space. This move aims to enhance their reach and maintain their commitment to excellent personal service. With a focus on cost-effectiveness, Seabourne continues to evolve its ONR service to meet the changing needs of businesses in a dynamic market. 🌟

Hino SA on track to reach sustainability goals

Hino South Africa is making substantial progress in addressing environmental challenges at its manufacturing plant in Prospecton, near Durban, focusing on greening its electricity supply and decreasing the amount of waste going to landfills.

"Hino South Africa, like all the other Hino factories and distributors worldwide, is committed to assisting Hino Motors Limited in its Environmental Challenge 2050, where the target is carbon neutrality," commented Anton Falck, Vice President of Hino SA.

"We have already taken substantial steps to lower the carbon footprint of our products and our manufacturing facility in Prospecton". "This year will see us double the energy output from our solar roof panel project, as well as targeting to divert 81% of factory waste from landfills," explained Falck.

"Currently, the roof panels provide 600 kWp. A further 800 kWp will be added by the middle of the year as a further 6 600 m² of roofing is covered with solar panels. This will bring the total energy output to 1 400 kWp. Roof repairs and strengthening of the support structure are already in progress, with the installation of panels, inverters, and cables due to commence

in April. Construction will occur at night to prevent any impact on manufacturing operations during the day," he added.

Hino SA is aiming to become a zero-waste-to-landfill manufacturing facility. Hino SA's factory waste in 2021 amounted to 31.67 tons, and 72% was diverted from going to landfills. In 2022, 77% of the 28.84 tons of waste was diverted, and last year, the amount of garbage decreased to 20.88 tons, with 71% diverted from landfills. As mentioned earlier, this year, the target is to divert 81% of waste from going to landfills.

Waste segregation takes place at the source, and then there are various methods of disposing of it so it does not go to landfills. Dry, hazardous waste is disposed of through incineration. In contrast, food waste from the canteen is recycled using a biological method – the Bugology Treatment – which involves feeding waste food to maggots, specifically the excellent Black Soldier, which converts it to compost in a nine-hour cycle.

The World Wildlife Fund (WWF) estimates that 32 million tons of food waste is sent to landfills in South Africa each year. The adverse effects on the environment and the country are massive. Harmful methane emissions, soil/water/air

contamination, and disease spread are all linked to food waste being dumped. Hino SA's use of the Bugology Treatment is one of the most effective ways of countering these occurrences.

"We are focusing on reducing our waste to landfills, with the aim of the Hino plant becoming Toyota SA's first Zero Waste to Landfill facility," added Falck.

"Packaging materials used by the automotive industry have changed dramatically over the years, and there is no longer much use of wooden packing cases, which were used for imported components in the old days. Less wood is now used, and there is the growing use of returnable containers, which are both cost-saving and environmentally beneficial," explained Falck.

Plastic part protectors and strapping are separated for reuse or recycling. One of the avenues used is USE-IT, which has constructed a waste beneficiation centre in Hammarsdale, KwaZulu-Natal, where Mondi collects, compacts, and recycled cardboard boxes.

"I am satisfied with our rate of progress towards Hino's environmental goals and pleased by the commitment shown by our team members to meet our ever-stiffer targets." 🌟

A discussion on all the trends and opportunities at this year's Automechanika JHB

The Automechanika Johannesburg CEO Breakfast on January 25 in Centurion featured three impactful presentations by industry experts, offering valuable insights into the South African automotive sector.

Paul-Roux de Kock, Chief Analytics Officer at Lightstone, emphasised the influence of population movement on planning and highlighted affordability as a crucial factor in consumer behaviour. De Kock suggested encouraging motor manufacturers to establish a local presence to enhance cost-effectiveness.

Dex Machida, Auto Sector Lead for Southern Africa at KPMG, presented findings from the Global Automotive Executive Survey, indicating a rising trend in electric vehicles (EVs). Machida stressed the importance of prioritising vehicle exports for the sustainability of the local manufacturing industry and underscored the role of digital technology, especially AI, in enhancing customer experience.

Craig Parker, Research Director: Africa at Frost & Sullivan, highlighted the shift towards alternative energy sources for vehicles, particularly in EVs and green hydrogen fuel cell-based propulsion systems. Parker noted the growing momentum of fuel cell technology in vehicles, especially in Japan. He pointed out South Africa's potential to become a hub for battery manufacturing due to its viable natural resources.

Parker also discussed exciting opportunities in second-life battery applications, envisioning South Africa as a global centre for recycling. The CEO breakfast attracted senior executives from various sectors, showcasing Automechanika Johannesburg's



Attendees at the CEO breakfast in preparation for this year's Automechanika JHB.

commitment to innovative thinking.

The event embodied its slogan, "Real Business: No Fluff."

Automechanika Johannesburg, a pioneer in innovative events, will host its 2024 edition from November 19-21 at the JHB Expo Centre, fostering connections between suppliers, manufacturers, and essential buyers. 🌟

Volvo Trucks announce South Africa's top dealers

Last month Volvo Trucks South Africa announced its top performing dealers of 2023.

Mega Dealer of the Year honours went to Volvo Trucks & Buses Johannesburg, while the company's Harrismith dealer claimed the top spot in the Medium Dealer of the Year category. Volvo Trucks & Buses Beaufort West was named the Small Dealer of the Year.

Other award winners included the best dealer performances in uptime, measured against various KPIs, and their commitment and ability to quickly repair customers' vehicles at breakdown. In the Customer Satisfaction category, one of Volvo Trucks' core values, the winners achieved the best combined CSI ratings in service and parts.

These prestigious awards were just some of the accolades presented to the Volvo Trucks network, which consists of 19 dealerships across South Africa.

"We constantly measure, evaluate and analyse the various disciplines within each dealership, from administration to parts, service, finance and health and safety, to ensure that we deliver only the best possible service to our customers," said Waldemar Christensen, Managing Director of Volvo Trucks South Africa.

"We are driven by passion, performance, and our people, with quality always at the forefront of what we do to go beyond the expected and leave nothing to chance."

In 2024, Volvo Trucks South Africa is also celebrating its 24th anniversary in the country. The company has an assembly plant in Durban, Kwa-Zulu-Natal, and currently employs around 900 people at various sites nationwide.

"Every day, we work with some of the sharpest and most creative brains in our industry to bring South African customers the best solutions for their businesses," said Christensen.

"We are passionate about what we do, and we thrive on teamwork. We are united by a culture of care, inclusiveness, and empowerment, where each one of us - regardless of gender, race, age, abilities, or background - can give their very best."

Volvo Trucks's employees are also constantly trained and developed to support customers' businesses as they evolve and adapt to the ever-changing local operating and business conditions.

Volvo Group Southern Africa has a dedicated Competence Development Centre that provide ongoing opportunities to learn and grow across all disciplines,



Medium Dealer of the Year Volvo Trucks & Buses Harrismith.

including technician training, sales and management development.

In keeping with the latest trends and developments, training includes Volvo Trucks' new energy vehicles like Battery Electric Vehicles, Liquefied Natural Gas and other sustainable transport solutions.

"South Africa has a unique transportation landscape, and for the past 24 years, it has been a privilege for Volvo Trucks to establish and grow its business here. We are committed to our people, our customers and the industry as a whole, and believe in the future of this wonderful country," said Christensen. "We will continue to help impact local communities positively and lastingly, creating opportunities for sustainable growth and development." 🌟

EFFICIENT UPTIME RECOVERS THE COST OF LITHIUM-ION IN EQUIPMENT

The less time it takes to charge a forklift battery, and the longer the charge lasts, the more significant the contribution to efficiency and productivity on the warehouse or distribution centre floor. Hence, according to industry experts, the lithium-ion battery is stealing the march on its cheaper cousin, the lead-acid battery.

By Duan Tredoux, brand manager at 600SA for the Industrial Power business unit.

While forklifts are the mainstay of industry, it is also vital that they do not contribute to greenhouse gas emissions, are cost-effective and help make the business efficient.

Electric forklifts which use batteries are fast replacing yesteryear's diesel- and gas-powered forklifts.

While forklifts powered by diesel engines are relatively cheaper to operate and the fuel is readily available, they are not environmentally friendly because of fuel emissions. There are stringent laws on carbon emissions, and diesel fumes are no longer permitted in food-handling businesses. Using liquid petroleum gas engines is less economical and means holding a ready supply of gas canisters on site.

Electric forklifts have largely replaced diesel and gas-driven forklifts. Some electric forklifts use the more expensive lithium-ion battery, and others use the lead-acid battery.

Lithium-ion forklift batteries are more energy-efficient and charge faster than lead-acid batteries, saving customers time and money.

While the lead battery has a charging efficiency rating of 65%, the lithium-ion battery has an energy efficiency of about 95 to 96%, returning at least 30% greater efficiency. This is a ratio between the energy used to charge the battery and stored energy, indicating the loss during charge. With lithium-ion batteries, operators can enjoy longer run times and zero declines in performance as the battery discharges.

The lithium-ion battery also takes less time to charge. The battery can be charged to 50% in 60 minutes with a fast charger, unlike a lead-acid battery that needs to charge for eight hours. Also, no cool-down period is required with the lithium-ion battery, like is necessary on a lead-acid battery. This means you can use a single lithium-ion battery for multiple shifts.



Duan Tredoux is the brand manager at 600SA for the Industrial Power business unit.

Surprisingly, South Africa is one of the countries that has most aggressively adopted lithium-ion batteries, especially in the forklift market. Lithium-ion batteries dominate 65% to 70% of our market, compared with lead-acid batteries, because of less maintenance, lower costs, environmental sustainability, and overall worker satisfaction.

At 600SA's Industrial Power business unit, the company's battery chargers can be programmed to charge either lithium-ion or lead-acid batteries.

If customers buy one of their chargers for a lead-acid battery and then decide to change to lithium-ion batteries three years later, there is no need to invest in a new charger. The company reprogramme the charger to charge lithium-ion batteries.

Unlike lead-acid batteries, lithium-ion batteries lend themselves to opportunity charging when an operator takes advantage of any downtime to charge a forklift battery. That means the forklifts are plugged into chargers when operators are on breaks, lunch, or changing shifts, as opposed to the time-consuming swapping of batteries that must happen



with lead-acid batteries. Also, lithium-ion forklift batteries don't require traditional maintenance like watering or equalising.

While a lithium-ion battery costs more, the return on investment offsets the initial investment. While a lead-acid battery will give between four and five years of service, depending on how it is maintained, the lithium-ion battery could give up to eight to ten years of trouble-free service.

One of the most crucial components of a lithium-ion battery is the internal Battery Management System (BMS). This control system controls and protects the battery cells during performance and from damage, preventing potential faults.

Because the BMS tracks temperature, charging status, and battery usage and stores the data, extracting that data yields insights into the warehouse operations. Understanding forklift battery data can help managers make informed decisions about reducing the total battery costs in their fleets.

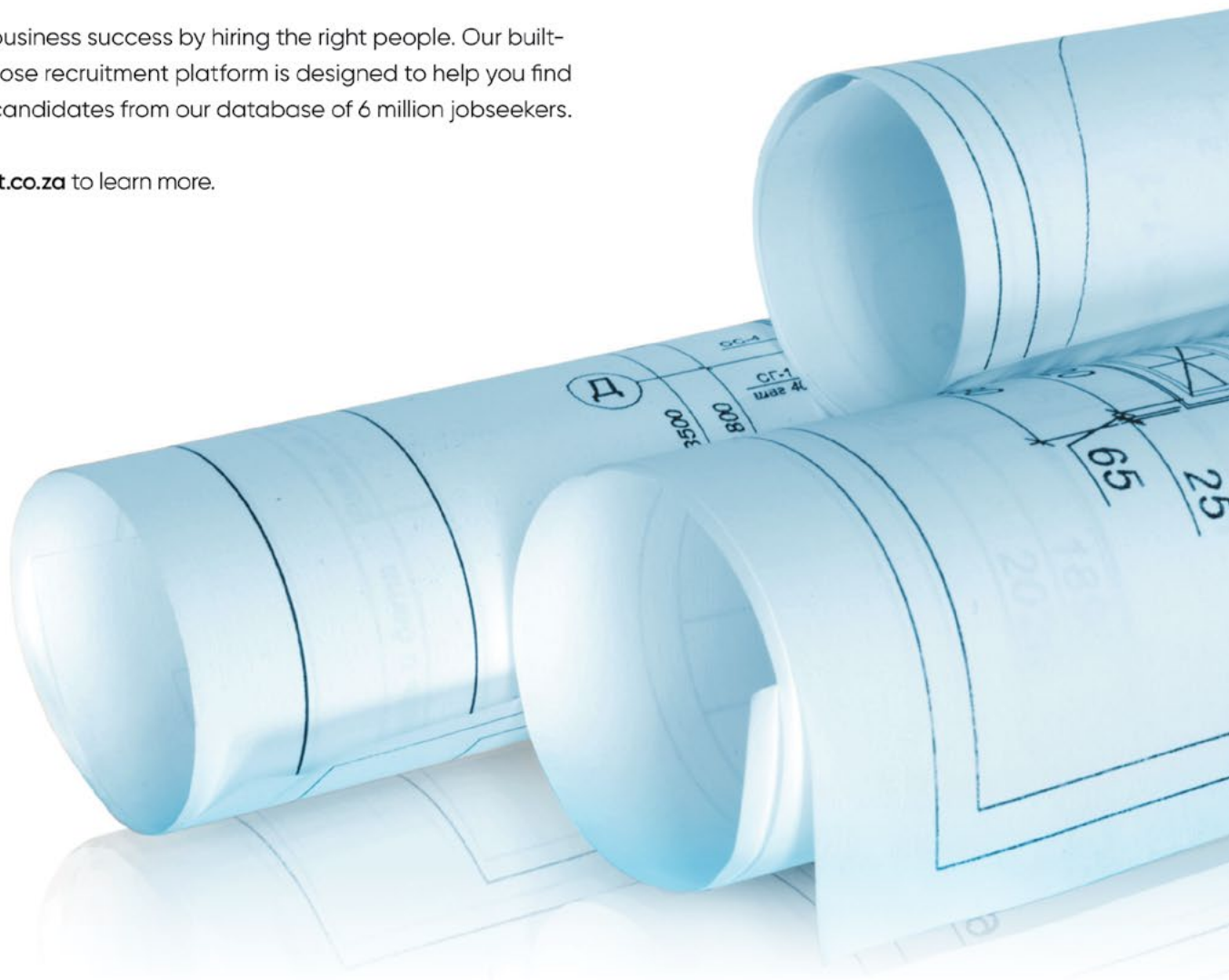
Also, the BMS can help remotely monitor most problems and fix them without sending a technician to the site. This reduces the downtime for the customer. ⚙️

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