



NEW EQUIPMENT: Jonsson crushers and screens added to Pilot Crushtec lineup

PROXIMITY DETECTION SYSTEM: Booyco Electronics boosts zero-harm at mines

MATERIALS HANDLING: TCM Forklifts can handle rough terrains



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UNVEILING THE SYNERGY: ELECTRA MINING AFRICA AND LOCAL MANUFACTURING EXPO 2024

Every year Cape Town becomes a hub of activity during Mining Indaba. Move inland, and the picture isn't that much different, albeit for the biennial Electra Mining Africa. In the realm of industrial and mining expos, few events hold as much prestige and potential as Electra Mining Africa. This biennial event, renowned for its significant impact on the mining and industrial sectors, has long been a cornerstone for professionals seeking to network, explore, and innovate.

However, the upcoming 2024 edition promises to be even more transformative, thanks to the integration of the Local Southern African Manufacturing Expo (LSAM Expo). This strategic partnership highlights the immense value such expos bring to the capital equipment market and the broader manufacturing industry.

A platform for growth

Electra Mining Africa has historically been a hub for showcasing cutting-edge mining and industrial technologies. With the inclusion of the LSAM Expo, the event's scope expands significantly. The LSAM Expo will occupy Hall 10, serving as a focal point for Southern Africa's manufacturing prowess across various sectors, including industry, construction,

mining, agriculture, and power.

Charlene Hefer, Portfolio Director at Specialised Exhibitions, emphasised the growth potential inherent in this collaboration during the announcement of LSAM last year. She said: "With the inaugural expo having exceeded exhibitor and visitor expectations, next year's Local Southern African Manufacturing Expo is expected to grow exponentially at its new home alongside Electra Mining Africa." This statement underscores the complementary nature of the two events and their collective ability to catalyse growth in the manufacturing sector.

For the capital equipment market, the presence of the LSAM Expo alongside Electra Mining Africa is particularly significant. Capital equipment, which includes the machinery and tools essential for manufacturing and industrial processes, is a critical component of economic development. The expo will provide a platform for manufacturers to showcase their latest innovations and for buyers to explore a diverse array of products and services.

The partnership with the South African Capital Equipment Export Council (SACEEC) further bolsters the expo's relevance.

This collaboration ensures that the event not only highlights local manufacturing capabilities but also facilitates international trade and export opportunities. For decision-makers and buyers, the expo offers a unique opportunity to engage with industry leaders, discover new technologies, and forge strategic partnerships.

Economic sustainability

The potential of the local manufacturing sector to drive economic growth cannot be overstated. By providing a dedicated platform for local manufacturers, the LSAM Expo plays a crucial role in promoting sustainability within the industry. The expo aims to spotlight

the innovation and expertise present in Southern Africa, creating a ripple effect that can lead to increased investment, job creation, and technological advancement.

Hefer's insight into the role of the expo is particularly enlightening: "The local manufacturing sector has enormous potential to provide the very growth needed to strengthen the economy and the Local Southern African Manufacturing Expo is the platform from which this growth can be catapulted." This vision aligns perfectly with the broader goals of Electra Mining Africa, making the integration a natural and beneficial evolution.

Beyond the exhibition space, the LSAM Expo will feature a Seminar Theatre, where industry experts will share their insights through sessions covering trends and legislation. These sessions are designed to equip attendees with the knowledge needed to navigate the complexities of the modern manufacturing landscape. Additionally, planned industry conferences and interactive workshops will offer hands-on opportunities for skill development and technical training.

Such educational components are invaluable for fostering a culture of continuous improvement and innovation. They provide attendees with the tools and knowledge necessary to implement best practices and leverage new technologies, thereby enhancing the overall competitiveness of the local manufacturing sector.

The integration of the Local Southern African Manufacturing Expo with Electra Mining Africa 2024 is more than just a logistical alignment; it represents a strategic initiative to bolster the local manufacturing sector and, by extension, the capital equipment market. By providing a comprehensive platform for innovation, networking, and knowledge sharing, these expos serve as catalysts for economic growth and industrial advancement. 🌐

Adriaan Roets - EDITOR



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Only Enduron® HPGR comes with a 10-year bearing warranty. Not that you'll need it. After all, there hasn't been one premature bearing failure to date. Enduron® HPGR delivers unmatched grinding efficiency, even when processing the hardest rocks, boosting mineral recovery. Expect ≥95% equipment availability, so operators can rest assured production targets

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**WEST**

New CNG-Diesel dual fuel option on Isuzu trucks

Fuel consumption is the biggest operational cost in any truck fleet. To address this issue a Compressed Natural Gas - Diesel Dual Fuel (CNG-DDF) option is now available for 20 ISUZU models.

This places Isuzu trucks at the top of a volatile fuels market offering strategic fuel solutions for reliable, cost-effective, and consistent mobility.

Isuzu Motors South Africa (IMSAF) has been testing a fleet of CNG-DDF converted trucks during the past five years with proven reliability. CNG is an acronym for Compressed Natural Gas that consists of methane. CNG is typically used as a substitute for petrol and diesel in automotive applications.

The use of CNG has the following advantages according to Isuzu:

- Reduction in carbon footprint - cleaner fuel - Natural Gas Vehicles (NGVs) emit 20-25% less greenhouse gases and virtually no toxic pollutants.
- Reduction in particulates
- Reduction in engine noise thanks to natural gas' smoother combustion.
- Reduction in fuel consumption
- Reduction in fuel theft and adulteration
- Less engine carbon deposits which leads to longer engine life
- Improved engine oil quality due to reduction of carbon emissions.

The new trucks fitted with the CNG option still features the diesel cycle engine, which remains in standard execution with 100% fallback to diesel at any time.

By simply pressing a button, the truck switches between Dual Fuel mode (Diesel/ Gas mixture) and 100% Diesel mode.

Trucks automatically revert to 100% diesel mode when the natural gas cylinder is empty or when a fault is detected with the CNG system, and quick gas filling time compared to lengthy charging times for electric trucks saves additional time.

While new driver training is necessary for operators of the trucks, it's a small price to pay. The coastal price of diesel fuel is 21,91/litre, and a diesel tank of 400 litres costs nearly R8800 to fill.

The challenge for CNG is the distribution network. Municipalities are an ideal application from an environmental, fuel consumption, anti-theft, and centralised refilling viewpoint perspective for Isuzu. CNG is currently only available in the Gauteng region of South Africa. 🌟

Industry-leading analysis ensures optimal crane performance

Premature wheel wear, rail wear, structural failures, and other operational glitches in cranes often stem from misaligned crane geometry. Addressing these issues promptly is crucial to prevent major setbacks and costly downtimes. Konecranes, a leader in crane technology, offers a comprehensive solution through its CraneQ Geometric Survey and RailQ 3D Runway Survey, aimed at diagnosing and rectifying these problems effectively.

Ian Grobler, Sales Manager for Konecranes and Demag South Africa, underscores the significance of these surveys.

"The CraneQ Crane Geometric Survey and RailQ 3D Runway Survey are indispensable tools for verifying crane alignment and rail integrity," Grobler explains. "By pinpointing the root cause of performance issues, they enable precise corrective actions, thus enhancing operational efficiency."

Cranes operating with accurate alignment and squareness not only incur fewer repair costs but also boast higher reliability. The CraneQ Crane Geometric Survey meticulously assesses dimensional tolerances of crucial crane components, including wheels, guide rollers, end trucks, and girders. Unlike conventional surveying methods, CraneQ employs advanced techniques tailored for crane geometry analysis, ensuring unparalleled accuracy.

Moreover, Konecranes' specialised software and skilled survey technicians offer detailed geometric analyses along with actionable recommendations, minimizing downtime attributed to component wear.

RailQ 3D Runway Survey revolutionises runway inspection with its high-definition



surveying and point cloud data analysis. This innovative approach provides comprehensive insights into runway condition, including span, straightness, elevation, and rail-to-rail alignment. Recognising symptoms indicating the need for a survey becomes easier, from crane tracking issues to abnormal noises during bridge travel.

One of the primary advantages of RailQ 3D is its safety and efficiency. Utilising remotely operated data collection instruments, it ensures safer operations while gathering a wealth of data in minimal time, streamlining maintenance planning and execution.

Grobler emphasises the transformative impact of CraneQ and RailQ 3D assessments. "The precision of these analyses translates into immense cost savings, particularly when integrated into preventive maintenance schedules," he notes. "Reduced downtime significantly enhances production cycles, making it a win-win scenario for industries reliant on continuous operations."

All CraneQ and RailQ 3D Survey reports are conveniently accessible via the yourKonecranes customer portal, ensuring seamless access to critical insights for enhanced operational management. 🌟

Second-generation Mobicon 2HL series container handlers a success

Material handling specialists, BLT World, launched the second-generation model Mobicon 2HL series container handlers in Africa and the Indian Ocean Islands a year ago and feedback from customers in diverse sectors is positive.

Mobicon light-weight straddle carriers, key machines in BLT World's extensive range of container handling equipment, are designed for lifting containers and goods securely onto and off trucks and for moving loads around sites, to significantly reduce onsite congestion, making the yard a safer workplace.

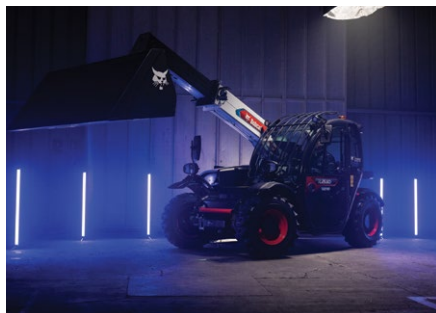
"The newest addition to the Mobicon range – which was originally launched in 2016 – is the second generation 2HL light-weight straddle carrier, with advanced

features for improved efficiencies, high manoeuvrability, greater safety on site and improved operator comfort," explains Ken Mouritzen from BLT World.

"The first generation 2HL Mobicon was favoured for its low axle weight, hydraulic lifting system and the machine's ability to be low enough to travel under awnings and into warehouses.

"The new model boasts advanced features, including a tighter turning circle for improved manoeuvrability, allowing for greater flexibility when operating in tight spaces and the ability to stack containers two high, one over one. The engine has now been positioned lower down, ensuring greater visibility for the operator when reversing and for precise placement of

Bobcat debuts electric telehandler concept at INTERMAT 2024



The Bobcat TL25.60e telehandler. Powered by liquid-cooled batteries, the Bobcat TL25.60e telehandler delivers rated operating and lift capacities equivalent to those offered by its diesel counterpart.

The Bobcat TL25.60e, still in development and not yet commercially available, has a rated operating capacity (ROC) of 2.5 tonnes, matching the performance offered by its diesel-powered equivalent. With three separated electric motors designed to maximise efficiency, a hydrostatic transmission to boost performance, a maximum speed of 25 km/h and the exact super-compact dimensions as the conventional Bobcat TL25.60 model, the cutting-edge electric concept delivers low noise levels, minimal operating costs and impressive versatility.

Serge Boyer, Product Manager for Telehandlers, Bobcat EMEA, said, "Just like its diesel-powered counterpart, the Bobcat TL25.60e has been built with versatility at its core. Thanks to its compact footprint, low noise levels and zero-emission operations, this concept telehandler is suitable for a diverse range of applications, including work on confined job sites and in city centres."

"At Bobcat, we are committed to innovative design, prioritising cutting-edge technology and operator wellbeing. Our integration of ergonomics and digitisation, exemplified by the transparent T-OLED screen, allows us to introduce customisable, interactive features without compromising our cabs' comfort and spacious design. We believe this seamless blend of digital solutions and operator-focused design has the potential to change the future of the construction equipment industry for the better," adds Vijay Nerva, Innovation Lead at Bobcat EMEA.

In addition to the TL25.60e electric telehandler concept, Bobcat uses the Paris exhibition to launch its brand-new PG40 and PG50 generators. The manufacturer is also showcasing a range of other recently introduced product additions and innovations, such as its M-Series S630 and S650 Stage V skid-steer loaders, PA12.7v compressor, hydrotreated vegetable oil (HVO) biofuel-compatible units, its updated range of rotary telehandlers for markets in Europe, the Middle East and Africa (EMEA), and collision warning and avoidance system.

The Bobcat RogueX2 concept loader, which received its world premiere at CES 2024 in January of this year, is also making its European debut at INTERMAT 2024. This autonomous, all-electric machine has been built as a proving ground for technologies developed as part of Bobcat's innovation roadmap, accelerating the manufacturer's progress toward a smarter, more sustainable and connected future. 🌟

containers onto and off trucks."

The hydraulic lifting system has been designed to avoid swinging of the load and increase lifting efficiency and reliability.

With safety being paramount in all industries, Mobicon container handlers now feature a remote twist lock system, which means the operator does not need to leave the cabin to attach the container. Internal cameras assist in guiding the lock securely into place. The hydraulic lifting system requires minimal maintenance, providing low cost of ownership and maximum uptime.

The ground-level ergonomically designed cabin, with larger windows, improves operator comfort and safety.

Mobicon straddle carriers which operate efficiently indoors and outdoors in all weather conditions move loads efficiently around sites, and through warehouse doors, effectively taking the container to the stack

or the receiving point.

Other advantages include easy handling of ramps and speed bumps, faster container handling times and minimal damage to contents normally caused by long lift truck runs. These versatile container handlers increase operational efficiency and reduce demurrage costs for trucks waiting to be loaded and unloaded. 🌟



PX Equipment has extended Powerscreen coverage in West Africa



Luke Talbot, Managing Director at PX Equipment and Mark Ferguson, Regional Sales Manager, Powerscreen.

Powerscreen announced extended territory coverage for PX Equipment in West Africa.

In addition to Ghana, PX Equipment will now also cover the territories of Ivory Coast and Nigeria.

PX Equipment is a Ghanaian-based company with extensive experience in the crushing and screening industry. Along with providing Powerscreen equipment and genuine spare parts, the PX team of highly experienced service engineers provides full commissioning, maintenance, and aftersales support to Powerscreen customers.

Mark Ferguson, Regional Sales Manager at Powerscreen said; "Our strategic collaboration with PX Equipment is pivotal to the success of Powerscreen in Africa. We are delighted to be a part of their exciting growth story in West Africa and look forward to developing the Powerscreen brand further in these territories."

HD Hyundai Infracore announces global Launch of DEVELON Uptime Centre



The formation of the DEVELON Uptime Centre (DUC) is based on piloting of the company's Machine Monitoring Centre (MMC) that started in 2021 and officially opened as the DUC at the end of January 2024 with an expanded scope of work to include customer-oriented remote services as well as monitoring.

The main central location for the DUC has been established in Seoul in South Korea, with additional global offices, including one in Accra, Ghana.

Key services provided by DUC include Error Code Analysis, VR (Virtual Reality) Simulator, and AR (Augmented Reality) Guidance. These are facilitated with remote service functions through various digital technologies.

Astec Industries and Elite Crushers & Hydraulics enter dealer partnership

Reflecting Astec Industries' commitment to continuously improving its service to existing and potential customers around the world, including offering swift, seamless technical support in every region it operates in, the global equipment manufacturer has partnered with Elite Crushers & Hydraulics in Botswana.

The company has been appointed as Astec's dedicated agent in the country for all its Materials Solutions equipment. This includes Astec's premium range of crushers, screens, and feeders, as well as washing, classifying, and material handling solutions, modular plants, and rock breaker technology.

Elite Crushers & Hydraulics is a well-established supplier of equipment to the mining and quarrying industries in Botswana. According to director Thembelani Albert, the company's new dealer partnership with Astec Industries will ensure swift service and readily available spares for the end users of durable, high-quality Astec Industries machines in



The service, support and sales of high quality Astec Materials Solutions equipment like this will now be undertaken by the group's new dealer in Botswana, Elite Crushers & Hydraulics

the country. "It will enable customers to get immediate technical assistance from our highly qualified, trained, and knowledgeable in-country specialists, eliminate delays in getting spare parts shipped from Astec Industries' Johannesburg facility, and drive sales. We pride ourselves on our service. This is how we have built a loyal base of customers who trust us to keep their equipment operating optimally and to minimise downtime. Our partnership with Astec Industries is in line with our dedication to providing our customers with high-quality equipment and uncom-

promising support and service when they need it," he states.

Job creation, knowledge transfer, and skills development in Botswana are further benefits of the dealer partnership between Elite Crushers & Hydraulics and Astec Industries. "Our personnel in Botswana will receive regular training to ensure they are knowledgeable, skilled, and up-to-date on all the equipment in Astec's Materials Solutions division. We will also be growing our team to meet the expected increase in demand for Astec equipment, support, service, and spares," he says. 🌟

Sandvik launches upgraded 800i cone crusher range

Sandvik Rock Processing is introducing its upgraded 800i cone crusher series. A major talking point is the new ACS-c 5 automation and connectivity system, which integrates the capabilities of all of Sandvik's crusher modules and subsystems into a single automation system.

The upgraded Sandvik 800i cone crusher series is now available globally, effective March 1, 2024, confirms Nils-Peter Ahlqvist, Sales Support Manager, Africa & Latin America – Crushing Division at Sandvik Rock Processing.

"The Sandvik 800i cone crusher range's combination of high crushing forces, reliability and simplicity make it easier to operate, manage, maintain and service, resulting in productivity and uptime gains that are gamechangers for operational performance," says Ahlqvist.

The latest Sandvik 800i crushers with new ACS-c 5 combine simple, yet robust mechanical design with powerful user-friendly automation to better support diverse operational roles. The new role-based interaction functionality simplifies the work of operators, maintenance personnel and engineers by offering guidance, access to valuable data and tools for

proactive maintenance and optimisation.

The ACS-c 5 automation system guides the operator through alarms and recommended actions, streamlining the decision-making process during alerts and minimising the impact of potential issues.

"Maintenance personnel have access to an improved historical and operational data log, providing a comprehensive overview of the crusher's performance. The new automation system offers engineers more opportunities to monitor, analyse and optimise the crusher's performance," explains Adam Taylor, Business Line Manager Crushing Solutions – Africa at Sandvik Rock Processing.

With sustainability in mind, the upgraded Sandvik 800i crushers are designed to eliminate inefficiency in operating mines, as well as in greenfields operations. For example, in flowsheets including three-stage crushing and conventional grinding, these crushers assist SAG/AG circuits with pebble-crushing and optimise particle size distribution for lump ores and heap leach applications. The Sandvik 800i crushers are also suitable in high-pressure grinding roll (HPGR) circuits. They crush more and deliver finer particle sizes to the downstream processes.

The upgraded Sandvik 800i crushers



Four Sandvik CH840i cone crushers at a mine site.

are ready to be connected to the SAM by Sandvik cloud-based digital assistant. SAM collects information from all connected Sandvik equipment to provide a complete overview of the entire operation. Customers can look at the status of their connected equipment, communicate across teams, view alerts and notifications, pro-actively order spare parts, and much more.

"With the new SAM mobile app for iOS and Android, customers can have an overview of their crushing fleet, monitor equipment data and key parameters, receive alarms from the ACS system directly in their pocket and get recommended actions created to help them solve issues more quickly," concludes Ahlqvist. 🌟

Expect Kal Tire and Pitcrew AI at Electra Mining

Kal Tire's Mining Tire Group, a leader in mining tyre management service and supply, and Pitcrew AI, a pioneer in autonomous vehicle inspection systems, signed a Memorandum of Understanding (MOU) last week.

This solidifies the existing collaboration between the two organisations and designates Kal Tire's Mining Tire Group as Pitcrew AI's preferred global partner.

The agreement capitalises on Kal Tire's extensive customer network and will leverage its established presence in key mining regions to ensure widespread accessibility to Pitcrew AI's leading technology.

Dan Allan, senior vice president of Kal Tire's Mining Group said the team is excited about the future of the partnership.

"We have already forged a strong relationship with Pitcrew AI and this new partnership supports our unwavering commitment to innovation that delivers value to our customers worldwide and continues to enhance mining tyre management. We are thrilled to lock in our partnership and embark on the next phase of our journey with Pitcrew AI."

Tim Snell, CEO, Pitcrew AI, is enthusiastic about the collaboration and believes the partnership is poised to redefine industry processes and fast-track the journey to a more sustainable future in heavy vehicle



A Kal Tire service vehicle at a mine site.

tyre management.

"Our collaboration has already had a significant impact on mine sites across many countries, particularly in the sustainability space. As part of our commitment to customers and mining operation optimisation, we are both committed to delivering strong customer value in a way that promotes sustainability and drives positive change. This is a really exciting prospect and something we are proud to be a part of," says Snell.

With multiple systems deployed across Australia, Canada, Brazil, Chile and Colombia, the Kal Tire and Pitcrew teams are firmly embedded within the global mining industry

and seek to build upon current integrations.

"At a time when fleet planning teams need to make confident productivity and safety decisions quickly, this technology brings critical value - and we're excited about what this milestone will mean for both Kal Tire and Pitcrew AI," says Allan.

The alliance between the two companies will also be demonstrated at numerous exhibitions this year as Tim Snell will be a part of Kal Tire's presence at CIM Connect Expo in Vancouver (Canada), Electra Mining Africa in Johannesburg (South Africa) and MINExpo International in Las Vegas (United States of America). 🌐

Metso launches the first diesel-electric Lokotrack EC range units

Metso's Lokotrack EC range brings a new diesel-electric power line to the aggregates market. All the process functions of the range are electric, significantly reducing the use of hydraulic oil needed in the crushing operations. All Lokotrack EC range units can be powered with external electricity.

At its Lokolaunch event in Tampere, Finland, Metso launched the first two products of the new EC range. Lokotrack LT400J is a 68-ton mobile jaw crusher designed for the primary crushing of hard rock and recycled aggregates. Lokotrack LT350C is a 50-ton mobile cone crusher for secondary and tertiary crushing. To reach high capacity, LT350C is equipped with the new Nordberg HP350e cone crusher, while LT400J counts on the proven Nordberg C120 jaw crusher. Both units can be seamlessly combined with each other as well as with the Lokotrack mobile screens to produce high quality aggregates.

"When external electricity is available, the new electric power transmission provides high capacity with minimised operational cost and CO₂ emissions. When not available, the onboard diesel gensets allow maximum independent operation time. Also, auxiliary units, such as mobile screens and stackers, can be powered from the same gensets, which will further reduce the needed power to run the complete plant," says Jarmo Vuorenpää, Director, New Lokotrack Offering at Metso.

Lokotrack EC range has been developed using new, modular architecture, which reduces the number of components and provides scalable solutions that can be adapted for different applications and capacities.

"The new way to do product development enables a faster and more agile way to meet the changing customer needs. Furthermore, it enables more efficient support for the machines with less parts needed and easier upgrades of new features," says



The new diesel-electric power line from Metso.

Renaud Lapointe, Senior Vice President of Metso Products business line in the Aggregates business area.

All the components of the new EC range are designed and tested to perform in demanding conditions to reach maximum uptime for the customers. Safety and usability have been given special attention. The design of the LT400J and LT350C fulfills the latest safety standard while being easier to use than ever. With new digital tools, the units can be operated safely from the excavator and be quickly set from transport to operation. 🌐

The L 120 – 330 is a heavy-duty, primary and secondary crushing and screening processing plant that includes a primary jaw crusher, a secondary cone crusher and a finishing screen all on one chassis.



JONSSON CRUSHERS AND SCREENS ADDED TO PILOT CRUSHTEC LINEUP

Pilot Crushtec International announced the introduction of a new line of premium mobile crushers and screens in southern Africa. The Jonsson range comprises tracked units, largely aimed at the premium high tonnage, heavy-duty segment of the crushing and screening market.



“The primary focus on crushing and screening has over the years allowed the company to develop a profound understanding of the crushing and screening sector, which uniquely positions them to forge long-lasting connections with their customers in southern Africa.”

Adam Benn, Director, Capital Sales, North EMEA, CEA and Southern Africa at Mets

P.J. Jonsson och Söner is a Swedish mobile crushing and screening plant provider that has traditionally operated in the Nordic Region. Established in 1953, initially trading in fur and eventually construction machinery and used crushing equipment, Jonsson started manufacturing wheeled crushers in 1984, before venturing into the tracked market in 1998. To date, the company has supplied more than 350 tracked machines and in excess of 400 wheeled units.



The L 150 mobile jaw crusher is powered by a 400kVA generator set or via mains operation and is equipped with a Nordberg C150 jaw crusher.



"Our partnership with Pilot Crushtec is aligned with our strategic focus to expand our global footprint. We are excited to partner with Pilot Crushtec, an established name in the crushing and screening market in southern Africa."

Mikael Delbrant, Sales and Marketing Director at Jonsson

Following the 2018 acquisition by Metso, Jonsson is on a drive to expand its business internationally, and southern Africa is one of the strategic markets. The brand will leverage Metso's existing eight year partnership with Pilot Crushtec to grow its footprint in the region.

"Our partnership with Pilot Crushtec is aligned with our strategic focus to expand our global footprint," explains Mikael Delbrant, Sales and Marketing Director at Jonsson during his visit to South Africa.

"We are excited to partner with Pilot Crushtec, an established name in the crushing and screening market in southern Africa."

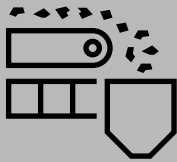
Focused business model

The same view is shared by Adam Benn, Director, Capital Sales, North EMEA, CEA and Southern Africa at Metso, who commends Pilot Crushtec's focused business model, which has a strategic dedication to crushing and screening. The concentrated focus and unprecedented commitment to a specific line of products has, over the past three decades, served as the cornerstone of Pilot Crushtec's success.

"Pilot Crushtec is unique in its own way," says Benn. "The primary focus on crushing and screening has over the years allowed the company to develop a profound understanding of the crushing and screening sector, which uniquely positions them to forge long-lasting connections with their customers in southern Africa."

Jonsson's range comprises tracked crushers and screens, unique double crushers and screens, feeders and conveyors.

"The Jonsson range is primarily focused on the premium, high tonnage, heavy-duty crushing segment and is ideally suited for demanding customers who appreciate high



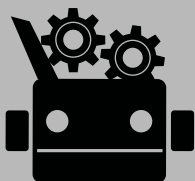
The Jonsson range includes tracked crushers and screens for high tonnage, heavy-duty crushing.



Jonsson started manufacturing wheeled crushers in 1984 and tracked crushers in 1998.



The Jonsson L 120-330 double crusher combines two crushers and a screen on one tracked chassis.

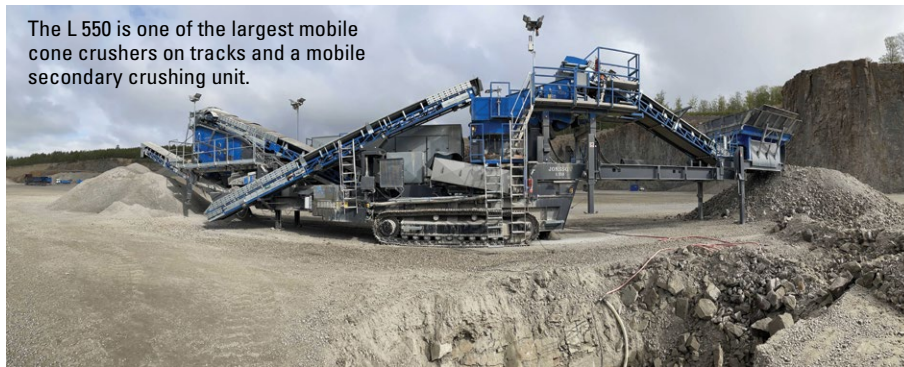


Pilot Crushtec will offer Jonsson heavy-duty jaw crushers, mobile cone crushers, and a mobile screen.

The L 400 is a mobile secondary crushing unit, as well as an adaptable third stage.



The L 550 is one of the largest mobile cone crushers on tracks and a mobile secondary crushing unit.



Pilot Crushtec is expanding its product lineup with the addition of Jonsson crushers and screens.

quality, high production and high operating efficiencies,” explains Timo Nakari, VP – Jonsson Business Line at Metso.

Double crushers

Pilot Crushtec will initially focus on selected products, particularly the tracked

double crusher concept as well as heavy-duty jaw crushers, cone crushers and screens, confirms Francois Marais, Sales & Marketing Director at Pilot Crushtec.

Marais says the focus is initially on products that complement the existing Metso offering. Key among them is the Jonsson L 120-330 double crusher, which combines the two Nordberg C120 and GP330 crushers and a screen on one compact tracked chassis – the only mobile unit of its kind available.

“The Jonsson L 120-330 double crusher is a gamechanger for the local market,” says Marais. “Where customers would traditionally need to mobilise and run three separate machines, we can now bring an entire plant on one compact chassis. This is a unique proposition for the market; instead of three engines to maintain and three machines to transport, now there is only one.”

The Jonsson L 120-330 double crusher, says Marais, will be a big benefit for mining contractors who, by their very nature, place value on ease of plant movement on and between sites. Once on site, they can mobilise and start production in a fraction of the time that it would take them to establish a traditional fixed plant.

In addition, Pilot Crushtec will offer two heavy duty Jonsson jaw crushers (L 150 and L 160), three large Jonsson mobile cone crushers (L 400, L550D and L 500D) and the Jonsson L 354 mobile screen. These models have been carefully selected to complement the existing Metso models.

“Of note is that the Jonsson range incorporates Metso crushers, a product that we are familiar with and have the expertise to service and support. With energy efficiency and sustainability in mind, dual-powered and fully electric variants are available,” concludes Marais. 🌱

PBS VEHICLES ARE PAVING THE WAY TO IMPROVE TRANSPORT AT MINES

As leaders in the mining industry, we are witnessing a significant change pushing us to improve transportation, safety, and environmental sustainability. Using Performance-Based Standards (PBS) vehicles is a big part of this change, stirring up essential discussions in our field. These vehicles are quickly gaining traction in the mining industry, as service providers increasingly acknowledge their benefits while effectively managing any challenges that may arise.

By John Kettlewell, COO of the mining division at Unitrans.



John Kettlewell serves as the COO of the mining division at Unitrans.

PBS vehicles bring a myriad of advantages to the mining sector. Customised designs tailored to specific operational requirements enable enhanced payload capacity, reducing the number of trips needed for transportation.

This translates into cost savings and minimises the environmental footprint associated with fuel consumption and emissions. This improved efficiency in transporting bulk materials contributes to a streamlined supply chain, ensuring timely deliveries and sustained production.

Safety is another cornerstone of PBS vehicles that offer enhanced features, such as advanced braking systems and stability controls, which are crucial in the often challenging terrain of mining operations.

These vehicles provide better stability and manoeuvrability with their advanced engineering and technology. The increased focus on safety standards aligns with the mining industry's

commitment to fostering a secure working environment.

Reduced wear and tear on roads due to fewer trips and better weight distribution further enhance overall safety in transportation.

However, as with any innovation, the technology must be carefully considered appropriate to the requirement. As PBS vehicles require a higher initial investment, one of the key challenges lies in the financial barrier it poses for adoption.

Long term benefits

This investment can be significant, potentially deterring some companies, notably smaller mining houses, from embracing the technology. The customisation and advanced features demand a higher upfront cost, making it crucial to balance the long-term benefits and immediate financial constraints, to ensure widespread adoption.

Another important consideration when opting for PBS vehicles is the necessity

for comprehensive training programmes for both drivers and maintenance staff.

The sophisticated technology and unique handling characteristics require a skilled workforce to operate and maintain these vehicles effectively. Failure to invest in proper training could lead to operational inefficiencies and compromise safety standards.

While adopting PBS vehicles involves both opportunities and challenges, it represents a pivotal step towards a more sustainable and efficient future for the industry.

Choosing supply chain service providers, like Unitrans, with a strong understanding of the mining sector is paramount. These providers can effectively navigate challenges and deliver tailored solutions to meet their clients' needs. By partnering with knowledgeable and experienced professionals, mining companies can ensure the successful integration of PBS vehicles and maximise the benefits they bring to the industry. 🌟

Booyco Electronics is one of the largest Proximity Detection Systems (PDS) suppliers in South Africa.



SAFETY TECHNOLOGY SUPPORTING DRIVE TO ZERO-HARM

In pursuing zero-harm in most mining environments, Booyco Electronics stands out as a market leader and one of the largest Proximity Detection Systems (PDS) suppliers in South Africa. Anton Lourens, the CEO of Booyco Electronics, emphasises the company's commitment to supporting the drive to zero-harm, outlining its role as a critical detection supplier in the broader Collision Prevention System (CPS) ecosystem, writes *Adriaan Roets*.



"The availability of information from deployed PDS systems is invaluable. Customers can manage and review their data through exception reports. These customisable reports can be used as an effective tool to improve their operational requirements."

Anton Lourens, CEO of Booyco Electronics

Since 2006, Booyco Electronics has played a pivotal role in PDS's deployment in South Africa while focusing on continuous improvement and development. According to Anton Lourens, CEO of Booyco Electronics, the advancements in PDS technology have significantly enhanced operational safety by warning both pedestrians and/or operators, when the PDS senses potential collision threats within their working environment. This includes detecting the presence of



Booyco Electronics is one of the largest Proximity Detection Systems (PDS) suppliers in South Africa.

QUICK TAKE

Booyco Electronics is a leading Proximity Detection Systems (PDS) supplier in South Africa, driving towards zero-harm in mining environments.

PDS technology enhances safety by warning pedestrians and operators of potential collision threats around heavy machinery.

Booyco's PDS solutions are customisable for different mining environments, including underground and surface operations like open pits and quarries.

Booyco Electronics has partnered with SafeGauge to offer products that eliminate live work, enhancing safety during hydraulic and live testing.

individuals or other vehicles around heavy machinery and providing a crucial layer of safety in mining operations where pedestrian-to-vehicle and vehicle-to-vehicle interactions could occur.

Central to the success of PDS is its ability to offer standalone and real-time detection of personnel and equipment. When connectivity infrastructure is available, this technology can be leveraged to meet operational requirements and provide locations services, that are also used to provide heat maps and potential hot spots.

The integration of PDS

"We are in the industry to support zero-harm," underscores Lourens.

Booyco Electronics is the market leader in safety technology and one of the biggest PDS supplier in South Africa through its number of deployments and well-established support infrastructure across South Africa.

This achievement is due to the ongoing development of improved PDS technology as a critical component of the more extensive CPS ecosystem. Within this ecosystem are various stakeholders, including the mining customer, PDS suppliers and TMM OEMs.



The Booyco PDS has become synonymous with ensuring safety on surface mining sites.

"In this space, PDS's are important in the drive for zero-harm in mining and construction environments since operators are warned when a person in close proximity around a machine or if there are other vehicles in a potentially harmful position," says Lourens.

To achieve this, Booyco Electronics utilises different technologies to prepare and offer more compliant and suitable fit-for-purpose solutions dependant on the specific operational requirements, and aligned to the identified significant risks.

"There's no single fit-all technology to establish an effective PDS solution across all mining operations. Depending on the application, different technologies are more suitable for specific environments, e.g. surface vs underground" explains Lourens.

Booyco Electronics' latest PDS solution considers and deploys multiple sensor technologies. The company is well-equipped to cater for different mining environments, including underground mining for both hard rock and coal, and surface operations such as open pits and quarries

"We've also done a few specialised deployments in port ore handling, in the forestry environment, processing plants and distribution centres," says Lourens. This has translated to Booyco Electronics being able to identify various ways to implement PDS that addresses significant risks and unique safety concerns.

PDS can be configured and deployed differently to meet the requirements of the specific equipment in use, e.g. haul truck vs wheeled loader.

The PDS interaction data can be analysed using the Booyco Electronics Asset Management System (BEAMS) Software Suite to create exception reports, identify operating patterns, heat maps with hot spots for potential incidents and unsafe behaviour of operators when overspeeding.

"When operators are cautioned that there is a threat to safety, such an event is recorded and the information can be downloaded into our BEAMS reporting system, allowing the data to be used as a change management tool. As such, the data can be used for user adoption in the deployment of PDS, and as a basis for traffic flow analysis, and to improve traffic management plans, especially in a surface operations environment," explains Lourens.

Meeting market requirements

The requirement of TMM equipment to be fitted with a PDS solution was promulgated in December 2022, where compliance requires an engineering control in that the TMM must be able to automatically retard and stop safely, as may be required, in the event that the operator does not take the necessary action.

From a safety perspective, PDS has an essential role in additionally providing data and information on how to keep its operational sites safe.

"The availability of information from deployed PDS systems is invaluable. Customers can manage and review their data through exception reports. These customisable reports can be used as an effective tool to improve their operational requirements," says Lourens.

This data is also essential as the basis to develop site specific digital twin simulations. Within the digital twin environment, myriad scenarios can be run to identify potential hot spots interactions of those on site, and also create models where pedestrian-to-vehicle and vehicle-to-vehicle interactions are minimised.

PDS in Africa

Booyco Electronics is experiencing increased numbers of enquiries about its safety products from SADC and other African countries. "South African expats that work in these countries and know our products, are reaching out to Booyco Electronics again for safety solutions and this is also driving our expansion into these countries."

For all deployments, Booyco Electronics works closely with all stakeholders to supply their PDS products and ensure technology is adopted, in a way where each deployment is installed and

The SafeGauge sensors are fitted to large equipment with quick couplers or magnets, and allow the necessary readings and measurements to be taken from a distance of up to 50 metres.



maintained correctly – leading to desired improved safety outcomes.

“The change management process is one of the biggest challenges in doing a customer’s PDS deployment and implementation.. Out of the successful deployments, user adoption has been a critical factor. It’s easy to buy systems and have an engineer install them, but when the user doesn’t understand the purpose of a safety system and value add, we could hit a non-acceptance wall.”

To circumnavigate this, Booyco Electronics underlines and emphasises the overall value of a CPS with buy-in from all stakeholders.

“The capability landscape of our industry has transformed over the past decade due to rapid advancements in sensing technologies. However, managing these changes ultimately comes down to people’s adoption. We guide our customers throughout the change management process so that they understand PDS, and view CPS not just as a legislative requirement but also as a valuable technology. We help them understand how this technology works, its capabilities and what they would experience operationally so they can confidently adopt it.”

SafeGauge as an additional measure

Last year, Booyco Electronics announced

its partnership to distribute the SafeGauge product range in Southern Africa. “We’re excited about our onboarding of the SafeGauge product range. It fits Booyco Electronics’ strategy of creating safer and more productive working environments. Booyco is a supplier of electronic safety equipment, so the partnership fits like a glove.”

While SafeGauge is a standalone product, separate from PDS, it fits Booyco Electronics’ purpose and core values.

Lourens believes that by including the SafeGauge products in the company’s portfolio, these safety solutions will add in the drive towards zero harm because it Eliminates Live Work (ELW) for artisans in the hydraulic and live testing environment allowing artisans to stand away from big hydraulic installations while performing live testing.

Lourens says that there has been a noticeable drive globally to eliminate live work.

“We believe there is a massive opportunity for SafeGauge, not just in mining but at plants and construction equipment, where there is immense hydraulic pressure and the possibility of a failed hydraulic pipe or failure of a hydraulic fitting.”

A proud moment for Lourens is that

customers who have tested SafeGauge locally have been enthralled by its capabilities and potential in South Africa. Capital equipment suppliers and mines are enquiring about the product, and it is heartening when a safety technology crosses over to make a real difference for our customers.

“SafeGauge is, at its core, developed by a tradesman to create a safe environment where someone can get their job done. This person can measure live hydraulic pressures digitally, away from a machine. There is no need for an analogue dial or a mechanical dial to locally see machine pressures. It’s removing the individual from a high-risk situation,” says Lourens.

The utilisation of Safe Gauge also comes with a direct financial benefit and return on investment.

“The time to do the work, maintenance, and perform checks is now much quicker. There’s a digital report feedback and multiple test points that can be performed simultaneously.”

“It optimises the entire testing procedure, and SafeGauge has become one of our key focus areas in the immediate future because we believe in the safety value-add it offers. We view it as a dedicated offering within our sales infrastructure that broadens the scope to customers and other industries to assist in reaching zero-harm.” 🌟



The combination of manufacturing machines at the Delmas manufacturing facility allows the facility to have a 42kg per minute polyethylene pouring capacity.

FLSMIDTH'S HUB FOR VIBRATING SCREEN MANUFACTURING

The FLSmidth manufacturing facility in Delmas is a critical income driver, particularly in manufacturing vibrating screens and consumables for the local South African and Sub-Saharan markets. This unique facility has emerged as a pivotal manufacturing hub within the FLSmidth group and as a beacon of innovation and efficiency in producing operating equipment for local and international markets, writes *Adriaan Roets*

"The Delmas facility is one of the global manufacturing facilities in the group, and we man-

ufacture a wide range of consumables, spare parts, and products," explains Warren Walker, General Manager at the FLSmidth Delmas facility.

"In 2017, we received approval

to build Phase Two of this facility, a testament to our commitment to continuous improvement and innovation. At that point, we relocated all the older polyurethane machines from our previous Edenvale facility. We are now adding a next-generation three-component MDI polyurethane machine to the Delmas facility," adds Walker, highlighting FLSmidth's dedication to staying at the forefront of technology and manufacturing excellence.

The combination of manufacturing machines allows the facility to manufacture screen media, and the manufacturing output is high thanks to the facility's 42kg per minute polyurethane pouring capacity.

The Delmas facility is a crucial part of

"We manufacture a wide range of vibrating screens for various types of screening applications. Our small and medium-duty screens are usually single decks equipped with a drive beam and two vibrator motors, making them ideal for medium-duty applications."

Warren Walker, General Manager at the FLSmidth Delmas facility





Polyurethane panels are fettled after curing at the FLSmidth Delmas manufacturing facility.

FLSmidth's global manufacturing network. It caters to the needs of the Sub-Saharan Africa, Middle East, and South Asia markets, underscoring its commitment to these regions.

"This is to support spare parts, consumables, screen panels and anywhere where there aren't manufacturing capabilities for capital screens," says Walker.

The Delmas manufacturing facility is strategically located in South Africa. It offers a complete screening solutions package that is locally manufactured. This central location is a significant customer advantage, ensuring easy accessibility and convenience, and potentially reducing inventory costs.

"Many of our end-users don't keep as much inventory anymore, so being close to our core customer base, we can manufacture made-to-order components and not have to keep a large inventory," Walker highlights.

Manufacturing locally circumvents supply chain issues at ports in the South African context, as the product can move to clients from the facility to neighbouring countries and provinces in South Africa.

"Clients aren't affected by global shipping delays and still gain premium products," Walker points out.

Panel manufacturing

Screening panels manufactured at the Delmas facility include the FLSmidth LUDODECK system, which has end users in South Africa, Mozambique, and Zambia.

"We also export our LUDODECK panels for the global market," says Walker.

The panels are designed with a bigger open area than standard polyurethane modular panels, which increases the amount of material that passes through each screen.

Panels are a commoditised product, and research and development for screen panels are essential for FLSmidth.

"There's always price sensitivity involved with producing panels, and we also use the open cast method to manufacture panels. By using open cast instead of injection moulds, we end up with a 30% higher service life of panels, but it's more expensive to produce. However, to remain competitive, we do research and development into different polymers and production techniques, which is critical for us to remain competitive," says Walker.

According to Walker, they are constantly looking at implementing new technology in manufacturing.

"For instance, the latest-generation manufacturing machine at the facility is auto-calibrating, and we can pull quality control records straight from it."

As a result, the facility, thanks to open casting, yields panels that last longer and

QUICK TAKE

FLSmidth's Delmas facility manufactures vibrating screens and consumables, serving South African and Sub-Saharan markets with innovative and efficient equipment.

The facility features advanced technology, including a next-generation MDI polyurethane machine, enhancing its manufacturing capabilities and output.

FLSmidth has developed a new material, FLS86, for screen panels, which lasts 2-3 times longer than current polyurethane materials, promoting sustainability.

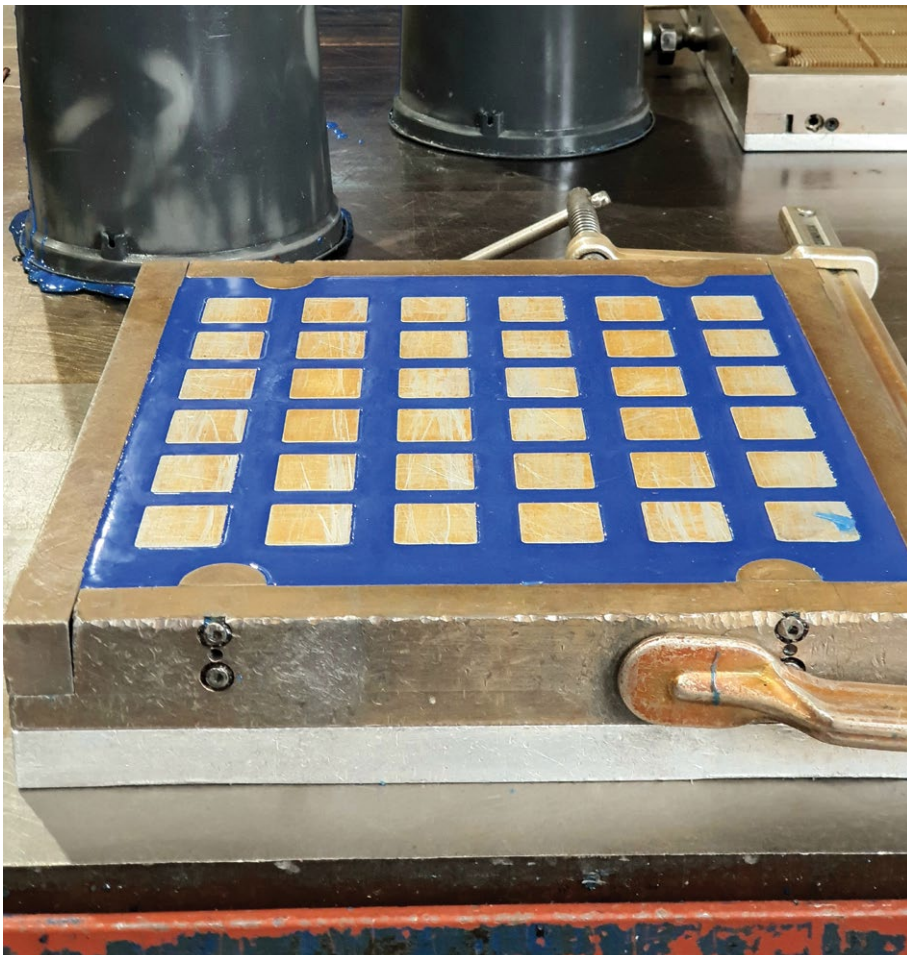
Delmas facility's commitment to sustainability includes a 300-kilowatt solar system, aiming to be net-zero by 2030 and supporting local recycling initiatives.

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At the site, there's a CNC vertical machining centre, which allows the facility to produce its own aluminium mould inserts to produce polyurethane screen media.



One of the Polyurethane panels after it was cast in an aluminium mould.

are expertly manufactured – which adds to clients not having to keep large stockpiles.

"We look at maximising the open areas on our panels, and we do many trials globally for different materials, where look at aperture configuration to optimise screening efficiency," says Walker.

At the site, there's a CNC vertical machining centre, which allows the facility to produce its own aluminium mould inserts to produce polyurethane screen media.

"If we need a mould that we don't have, we can manufacture new moulds to meet specific requirements," adds Walker.

New materials

FLSmidth has developed a new proprietary material called FLS86, which can last two to three times longer than the polyurethane material currently available for the manufacture of polyurethane panels.

The company's global research and development efforts have focused on creating materials that can improve the service life of screen panels and reduce wastage.

Using the new material will require the panels to be disposed of less frequently, thus supporting sustainability. According to Walker, the reject rate for new panels is low, resulting in a low scrap rate at the facility.

Screen media production

Two main ingredients are used in current screen media production at the Delmas facility: a prepolymer and a curative. The materials supplier tests each component, each with its own batch certificate.

A panel is cast using these two components under controlled conditions at the material supplier. The test panel is then sent to the in-house laboratory, where it is subjected to a complete set of mechanical tests to confirm that its properties conform to specification.

To ensure that no problems arise during the production process, a sample is cast at the start of each shift. This sample is subjected to the same curing process and returned to the lab for another mechanical test.

This ensures that the material is free of any problems. Once the panels have been cured and tested for hardness, they are subjected to visual quality assurance to ensure they meet the required standards.

Vibrating screens

"We manufacture a wide range of vibrating screens for various types of screening applications. Our small and medium-duty screens are usually single decks equipped with a drive beam and two vibrator motors, making them ideal for medium-duty applications," explains Walker.

In addition to these, the facility also produces heavy-duty vibrating screens, such as the FLSmidth BRU Vibrating Screens.

"These screens are designed to be 30 to 40% heavier than our competitor screens, with a typical design lifespan of up to 10 years. They are made for heavy-duty applications and can handle a variety of minerals, with a significant installed base for platinum processing," adds Walker.

The Delmas facility also caters to coal screening with legacy equipment and significant installed bases for phosphate,



Open cast pouring is used at the FLSmidth Delmas manufacturing facility to manufacture panels.

copper, and platinum in Sub-Saharan Africa and the Middle East.

"Our premium screens are mainly for export, while we provide plant screens and primary sizing screens for local installation bases in Mozambique. We offer full support

for our screens with spare parts, wear parts, and specialised site services available," says Walker.

Sustainability drive

Moreover, the Delmas manufacturing

facility's commitment to sustainability is evident through its ongoing initiatives, which allow for the manufacture of vibrating screens and consumables while reducing environmental harm.

Installing a 300-kilowatt solar system underscores the facility's dedication to reducing electricity costs. The facility aims to enhance operational efficiency by harnessing renewable energy sources, thus contributing to a greener future.

"We have a mission to be net-zero by 2030," says Walker, and much work is being done around the Delmas complex to achieve this. The second solar energy phase is already in the works, and the aim is for the facility to eventually be removed from the grid.

The facility uses little water, has planted many trees and has a garden that doesn't require constant watering.

The facility also uses local recycling services, adding to the development of Delmas-based small businesses.

Of course, with advanced manufacturing, there's little capital loss through faulty manufacturing, which drives sustainability causes higher. End customers receive longer-life capital equipment and consumables from the facility, lessening environmental harm at client sites. 🌱

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BBE'S VUMA HUB SOFTWARE TOOL PROMOTES A SAFE WORKING ENVIRONMENT

BBE, a specialist company in mine ventilation and refrigeration, has launched its VUMA HUB software package, offering a safe and user-friendly system to streamline ventilation and occupational hygiene reporting functions. VUMA HUB can be utilised in both underground and opencast mine operations across various disciplines, writes Adriaan Roets.

VUMA HUB is a state-of-the-art software system specifically developed for mines. It uses approved industry standards, stores information digitally, and provides customised data analysis to promote safe and healthy working environments.

"Measured environmental conditions are logged and stored in HUB. This information is constantly analysed using specified legal criteria supplied by both the mines and the Department of Mineral Resources and Energy (DMRE), and will automatically flag unsafe working envi-

ronments or conditions," explains Christo Visagie, Director at BBE.

HUB is an internally developed software tool based on BBE's expertise and experience in mining environments.

"Our developers are employed internally and are highly experienced and qualified in software development. They also work closely with our in-house ventilation and occupational hygiene consultants. Bringing these two skills together is part of the extra effort we put into the system to ensure it is designed correctly," says Visagie. "HUB algorithms based on multi-commodity industry standards, and guidelines set out by the DMRE, are used as design criteria and legal limits. These are programmed into the software and used to flag certain scenarios."

Successful proof of concept

Visagie notes that BBE completed a proof-of-concept project at one of South Africa's major mining companies, where it was deployed at one of their shafts. Following the successful completion of this project, HUB was rolled out at three of the company's shafts where it is currently in operation.

"We recently rolled out the latest update to the system, and it is in daily operation and running successfully. If

A key benefit of using HUB is that the system enables industry standards to be used throughout the mining company's various shafts or mining operations.

Ultimately, it's one set of standards that are implemented, which all companies are familiar with. This minimises the need for training and maintenance of ventilation and occupational hygiene systems.

Christo Visagie, Director at BBE





with tightly controlled security measures, including antivirus, VPN, and domain user-protected access control.

The data housed in the database undergoes encoded serialisation during data transfer from the client application to the server. Any identifiable information saved on the server is stored in an encrypted format.

No readable personal data is stored in the data centre. The software itself controls login and access via a secure data credential provider custom-developed for the VUMA HUB software. Furthermore, certain features within the software are only accessible to users with specific user rights/roles assignments.

If a user account does not have a specific right/role, any features associated with that right/role are not available or accessible by that user. Data integrity and backup are among VUMA HUB's highest priorities.

Could you elaborate on integrating industry standards and legal criteria into the software and how these are updated over time to reflect any changes or advancements?

For the South African mining market, the basic ventilation reporting standards are guided by the requirements of the DMRE, with final configuration as required by the client.

This includes design criteria for specific ventilation conditions surveyed, as an example. A legal tracker shown on VUMA HUB's dashboard will automatically update survey legal requirements and frequency of reporting based on severity levels configured in the software.

Environmental conditions, such as Wet Bulb (WB) temperatures and toxin or noise exposure limits, can be flagged as surveyed data are captured. BBE's global exposure and experience across all commodities ensure and drive advancements in safety and the way ventilation and occupational hygiene are maintained and reported on.

Can you discuss specific instances where the VUMA HUB software has identified and resolved potential safety issues, highlighting its effectiveness in practice?

In our experience, valuable information is often lost, or responses to findings are delayed due to the approvals process or the distribution of tasks. Using VUMA HUB as a connected and live system, abnormalities and potentially unsafe conditions are flagged as information is captured.

As information gets captured by an observer, it shows conditions or parameters outside the allowable range in real-time.

we encounter any issues or uncover new requirements, we promptly develop updates that are passed along to the client," says Visagie. "A key benefit of using HUB is that the system enables industry standards to be used throughout the mining company's various shafts or mining operations. Ultimately, it's one set of standards that are implemented, which all companies are familiar with. This minimises the need for training and maintenance of ventilation and occupational hygiene systems."

Following this success, Visagie answered additional questions regarding HUB and its applications locally.

Can you provide more detail on how the VUMA HUB software specifically addresses the unique challenges of ensuring safe and healthy working environments in South Africa?

HUB software was specifically developed for mines and uses approved industry standards. It stores information digitally and provides customised data analysis to promote a safe and healthy working environment.

Measured environmental conditions are logged and stored in HUB. This information is constantly analysed using specified legal criteria supplied by both the mines and the Department of Minerals Resources

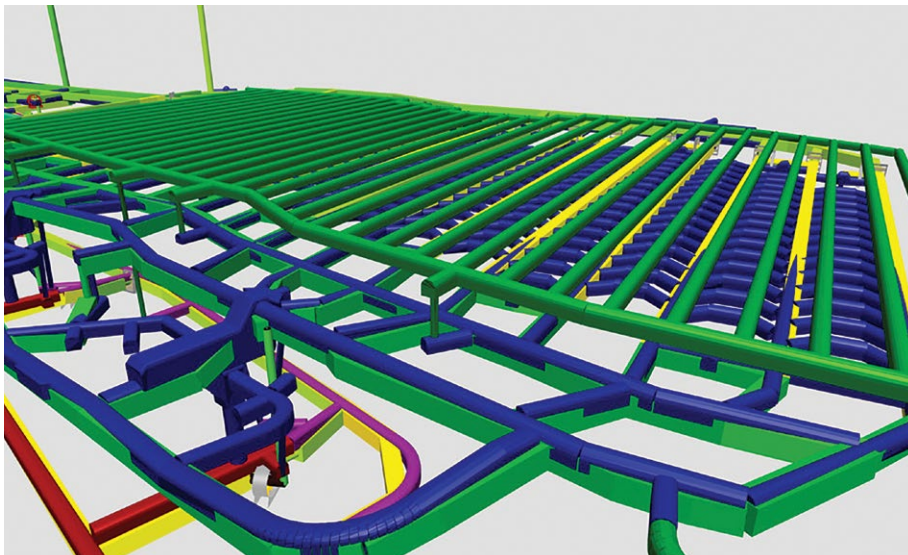
and Energy (DMRE), and will automatically flag unsafe working environments or conditions. When conditions are flagged, the information is passed through the workflow, and the issue is attended to by ventilation and refrigeration engineers. The information remains client-owned and is securely stored to ensure that the data cannot be tampered with.

Given its versatile capabilities, could VUMA HUB be used in surface or opencast operations as well?

HUB can be used in underground as well as opencast mine operations across a variety of disciplines. It was originally developed for mining, ventilation, and occupational hygiene sections specifically in its current form but is a reporting and data analysis system at its core. HUB can be used for any type of reporting and can communicate with third-party systems to be used as a complete reporting system with custom dashboards and external notifications if required.

How does the VUMA HUB software ensure data security and integrity, considering the sensitive nature of the information it handles?

The VUMA HUB software was developed from inception with various layers of security in mind. The VUMA HUB data centre is installed on a secure server



The information grades the severity of the conditions and issues a warning or STOP order for the workplace.

This information is shown on the software dashboard and emailed to the team as defined in the workflow of the organisation. Everything that is captured is reported on. Notifications are logged and traceable to the specific area or workplace. Any related actions are listed and need to be corrected or acknowledged during the next inspection.

What measures are in place to ensure that mining companies using the VUMA HUB software receive adequate support and training to maximise its benefits?

The software is ever-evolving, and additional features are added to streamline the user experience while reducing the time required to manage big data.

BBE works closely with clients during the onboarding process, assisting with updates and maintenance of the system, not

only the software. Hands-on training is routinely offered as a refresher, promoting Q&A in an open group. This also allows new users to gain from existing user feedback and knowledge sharing.

Self-help tips are included in the system, with guided wizards able to walk a user through the process of capturing data per report type. We also offer the option to assist our clients with SLA contracts to ensure the information is up-to-date. The VUMA team is available to support client queries remotely.

Are there any plans to further expand the capabilities of the VUMA HUB software beyond its current functionalities, and if so, what areas are being considered for enhancement?

VUMA HUB forms part of the VUMA ecosystem, which includes VUMA Network, our ventilation simulation and engineering software, and VUMA Live, ventilation SCADA and control software.

We are building on the integration of these systems to allow ventilation departments to holistically manage their ventilation system using designed, historical, and real-time data to ensure safe and efficient working conditions. Occupational hygiene management and reporting will be our next addition to this suite of products. 🌐

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WEIR MINERALS AFRICA INTRODUCES ITS MODULAR WHEELED PLANT CONCEPT

With the newly introduced Weir Modular Wheeled Plant (WMWP) concept from Weir Minerals Africa, crushing contractors in Africa can now move and transport their crushing and screening plants from one site to another with ease, boosting productivity and reducing costs.



Weir Minerals Africa introduces its modular wheeled plant concept; a Trio TC51 cone crusher with conveyor and cone surge hopper for processing.



The mobile plant offers flexibility without the need for maintenance or components like diesel engines and tracks.



Tiisetso Masekwameng, General Manager – Crushing and Screening Products at Weir Minerals Africa.

According to Tiisetso Masekwameng, General Manager – Crushing and Screening Products at Weir Minerals Africa, the WMWP range has always formed part of the Trio® crushing and screening offering and makes use of Weir Minerals' Trio® crushers, screens and material handling solutions. However, the solution has been completely redesigned to suit new market dynamics.

These plants, she adds, have been deployed across the world in sand and aggregates applications by customers who require the flexibility of a mobile plant without the need for additional maintenance obligations of components such as diesel engines and tracks.

"The concept fits the bill for the construction market, especially crushing contractors seeking to easily relocate

their plants to infrastructure hotspots," she says.

"Equally, the WMWP is ideally suited for the mining sector, particularly where customers require short term solutions to help boost production rates during commodity upswings, without constructing a new static plant over a longer lead time."

Multiple configurations

The plants are available in various configurations, starting from primary crushing solutions comprising a hopper, a vibrating grizzly feeder and a jaw crusher, to secondary crushing and screening stations consisting of a vibrating screen and a cone crusher. These solutions can be combined using simple mobile conveyors to configure a plant that can produce aggregates for

various end-user requirements.

Weir Minerals uses equipment that is within the dimensions and weights that can be accommodated on a multi-axle trailer, in line with legal road limits. Machines selected generally allow for the construction of plants in the 50 to 350 tonnes per hour (tph) range.

"One of the major benefits of our wheeled plant concept is that it eliminates the complexity of having a diesel engine and tracks on the mobile unit itself, which requires additional maintenance over and above the crushers and screens themselves," says Masekwameng.

"Wheeled plants can also be transported on the highway depending on the size and road regulations within the customer's jurisdiction. That means customers only need to hook the plant to the back of a truck and off they go." 🌟

Criterion Equipment's 10 Ton TCM forklift trucks are designed for dependable operation in tough mining conditions.



TOUGH MACHINES FOR MINING ENVIRONMENTS

Criterion Equipment's robust TCM forklift trucks – with capacities from 2.5 tonnes to 20 tonnes – are gaining popularity as dependable workhorses in tough conditions, including harsh mining applications.

"Mining operations are complex and demanding environments, where advanced equipment enhances productivity, efficiency, and safety. Forklift trucks are among the critical tools and technologies that contribute to the success of materials handling operations – from carrying heavy metal pipes, drums of chemicals, and raw

materials, to handling large engineering components for maintenance," says Brenton Kemp, Managing Director of Criterion Equipment, exclusive distributors of TCM forklift trucks in Southern Africa.

"Robust TCM forklift trucks have been engineered for flexibility, manoeuvrability, and heavy lifting capabilities, playing a crucial role in streamlining processes and ensuring the smooth functioning of mining operations. Forklift trucks also enhance

safety by reducing manual handling tasks and minimising the risk of accidents associated with heavy lifting."

Applications in mining

"What's important for the mining industry is the selection of the correct forklift to efficiently move awkward, heavy materials and equipment around vast mining sites and to be able to operate safely in tight spaces and on rugged terrain. Although these machines all look similar, every brand, size, and type of forklift truck has different features for performance, safety, maintenance requirements, and service life.

"During forklift selection, it is also critical – particularly in the mining industry – to consider harsh, dusty operating conditions and to be sure the machine is able to cope efficiently and safely on arduous terrain. It is also important for remote mines to have the assurance of a dependable maintenance and repair service and the quick supply of OEM-approved forklift parts."



During forklift selection, it is also critical – particularly in the mining industry – to consider harsh, dusty operating conditions and to be sure the machine is able to cope efficiently and safely on arduous terrain.

Brenton Kemp, Managing Director of Criterion Equipment



practices within the mining sector highlights the importance of integrating innovative solutions into mining operations.

Criterion Equipment's 4-wheel electric counterbalance TCM FB-IX series – known for reduced operating costs, greater controllability, low noise, and modern ergonomics – has been engineered for high productivity and safe operation. Of particular importance are impressive energy-saving features that improve productivity by ensuring low electric consumption and allowing longer working hours per charge.

Criterion Equipment recently delivered a number of new TCM 10-tonne and 7-tonne diesel-powered forklifts to local mines and mining supply companies. These versatile and durable machines have been engineered to operate efficiently and safely in all weather conditions, over rough terrain, and in tight spaces. TCM units also ensure easy handling, greater stability, cost-efficient operation, low maintenance requirements, and extended service life, even in harsh, dusty conditions.

Versatile with attachments

One of the key advantages of TCM forklift trucks is versatility. These machines can be customised with a variety of attachments to suit specific mining tasks, such as lifting, loading, and stacking various types of materials.

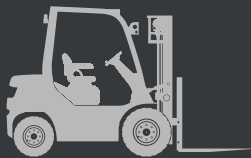
Optional attachments for safely handling palletised goods, bulk materials, or oversized equipment include fork extension sleeves, fork positioners, load grabs, and rotating forks.

Criterion Equipment's service includes a national field services facility, which provides assistance during breakdowns, the repair and maintenance of machines, and maintenance contracts.

The company's national workshops are also able to completely refurbish an existing machine according to OEM specifications. The company's extensive range – available from a national branch and a distributor network – comprises all models of TCM forklift trucks, covering most forklift classes.

These include electric counterbalance trucks, reach trucks, powered pallet trucks, as well as Internal Combustion (IC) counterbalance trucks.

TCM forklift trucks ensure reliable operation and low maintenance requirements in all sectors, including mining, general engineering, manufacturing, warehousing, shipping, agriculture, and construction. 🌟



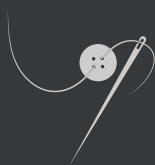
TCM forklift trucks, with capacities from 2.5 to 20 tonnes, are popular for their robustness in harsh mining conditions.



Criterion Equipment's TCM forklifts enhance safety by reducing manual handling tasks and minimising the risk of accidents.



Eco-friendly electric TCM forklifts reduce carbon emissions, lower noise levels, and improve energy efficiency, supporting sustainability in mining.



TCM forklifts can be customised with attachments like fork extension sleeves and load grabs for specific mining tasks.

QUICK TAKE

Expert consultations

Criterion Equipment's team of experts offers an on-site consultation service to the mining sector, advising on which machine is best suited for each specific task, to ensure the highest levels of productivity and safety on site.

The company has supplied many units recently to mines throughout Africa, which operate in busy mining areas and in surrounding stores and maintenance facilities. Although the majority of these

forklift trucks are diesel-powered, there is a growing demand for battery-powered forklifts for use in stores and warehouses.

Forklift technology

Advances in forklift technology – particularly in eco-friendly electric models – contribute to sustainability efforts by reducing harmful carbon emissions, lowering noise levels, enhancing energy efficiency, and minimising environmental impact. The emphasis on eco-friendly



The ISO-Reliability Partners office.



ENHANCING EFFICIENCY WITH THE SAL ELITE SINGLE-POINT LUBRICATOR

In the fast-paced machinery landscape, reliable and efficient lubrication is paramount for smooth operations and extended equipment lifespan. To address this need, ISO-Reliability Partners has introduced the SAL Elite single-point lubricator, a robust solution designed to revolutionise automatic lubrication in various industrial sectors, writes *Adriaan Roets*.

At the heart of the SAL Elite system is its ability to provide consistent and precise lubrication to critical machine components, effectively reducing friction, wear, and premature component failure.

Manufactured in Germany, the SAL Elite is compact, robust, and highly versatile. It features an electro-mechanical drive with replaceable lube cups available in capacities of 60g, 120g, and 250g. Its versatility is evidenced in its ability to be mounted directly or remotely, catering to diverse application needs.

The unit is installed directly at the lubrication point on the machinery, such as a bearing, chain, or gear.

The system uses an electro-mechanical drive to release lubricant, which is gradually preset according to the application

requirements. Lubricant flows through a feed line or tube to reach the lubrication point.

"The SAL Elite single-point lubricator is ideally suited for automated equipment lubrication in confined spaces or high, hard-to-reach locations on any industrial equipment. The product has found great success in mining applications and for Process Plant and Steel production operations," says Craig FitzGerald, CEO of ISO-Reliability Partners.

Features and benefits

The SAL Elite offers adjustable dispensing intervals ranging from a single month to a full year, empowering users to tailor lubricant release frequencies according to specific requirements.

"Automated lubrication allows the user to set the exact amount of lubricant to be

dispensed over a particular period. Settings are based on bearing size and rotational speed. The SAL Elite lubricator provides metered dispensing over one to 12 months," explains FitzGerald.

Moreover, the system's compatibility with various lubricant types, from greases to oils, ensures versatility across manufacturing, mining, automotive, and food processing industries.

It excels in lubricating critical components such as conveyor systems, pumps, electric motors, and fans, particularly in hard-to-reach or rotating machinery environments.

Some advantages of the SAL Elite are a reduction of friction, wear, and premature component failure.

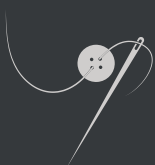
"The single-point lubricator solves many maintenance-related issues around reliable lubrication. The basic rules of grease lubrication are the 5 Rs: the right product,



The SAL Elite single-point lubricator reduces friction, wear, and premature component failure with precise lubrication.



It features an electro-mechanical drive and replaceable lube cups in 60g, 120g, and 250g capacities.



Adjustable dispensing intervals range from one month to a full year, tailored to specific lubrication needs.



Visual indicators with green, amber, and red LEDs simplify operational monitoring and maintenance.

gas or spring-driven lubricators," he adds.

Visual indicators

The system's intuitive indicators simplify monitoring and maintenance processes. For operational status, green LEDs flash amber for lubricant refill alerts, and red signals indicate maintenance needs. This visual feedback mechanism enables quick identification of operational issues, facilitating timely interventions to prevent disruptions.

"The SAL Elite provides a straightforward visual interpretation of the unit's operational state. Flashing LED lights can be viewed from over 100 m away, making inspection quick and simple," says FitzGerald.

Versatile uses

The system effectively addresses common challenges faced across various industries. For instance, the SAL Elite's automated lubrication capabilities prove invaluable in the construction sector, where equipment often operates in confined spaces or high, hard-to-reach locations.

Likewise, in mining applications, the system has demonstrated notable success in process plants and steel production operations, where reliable lubrication is crucial for optimising equipment performance and minimising maintenance-related downtime.

"ISO-Reliability takes a hands-on approach with our customers to ensure skills and knowledge transfer with all our class-leading industrial solutions. We put the power into the customers' hands and provide ongoing training and specialist attention," says FitzGerald, describing how they assist in addressing client-specific needs when installing these units.

The SAL Elite system is versatile, widening its use across various industries.

"The single-point lubricator can be installed directly to the point of lubrication. In cases where falling objects may be a concern, the unit can be installed up to 2m away. To minimise the possibility of vibration, the lubricator can be supplied with a vibration cup designed to absorb vibration without any effect on the lubricator itself," concludes FitzGerald. 🌀

applied at the right place, using the right amount at the right time, and having the right attitude towards maintenance," says FitzGerald.

According to him, the SAL Elite lubricator solves the 5 Rs of lubrication, something which is impossible with time-based manual lubrication maintenance. The lubricator ensures that the right amount of lubrication is provided continually, thereby eliminating insufficient or inconsistent lubrication.

Enhanced efficiency

The SAL Elite system can improve overall equipment reliability and operational efficiency by automating critical maintenance. By eliminating manual lubrication tasks, technicians can focus on other essential duties while the system ensures continuous and precise lubrication, thereby reducing downtime and extending component life.

"Lubrication best practices always recommend that the lubricant be selected according to OEM recommendation, application type, and environmental conditions such as heat, dust, or water. The SAL Elite can be used with greases up to NGLI 2 and, with a throttle and brush, can be used for thin lubricating oils for chain and sliding applications," says FitzGerald.

He underscores that most bearings or lubrication points near rotating equipment, in confined spaces or at heights, are often never lubricated due to the risk or danger to maintenance employees.

"This equipment is often sacrificed for safety concerns. The SAL Elite single-point lubricator solves most lubrication challenges. Most importantly, the drive mechanism is electro-mechanical, meaning that the SAL Elite is battery operated and the drive unit does not place constant pressure on the bearing, as is the case with





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FAW reaches 30-year milestone in SA

Since establishing its presence in South Africa in 1994, FAW Trucks SA has solidified its position as a trusted partner for businesses nationwide.

"Reaching this 30-year milestone is a testament to FAW Trucks SA's resilience, adaptability, and commitment to excellence. Our journey in the South African market has been one of continuous growth, driven by our unwavering focus on delivering cutting-edge commercial vehicle solutions that meet the evolving needs of our customers," says Jian Yang, CEO of FAW Trucks SA.

Among its standout accomplishments is the construction of a cutting-edge manufacturing plant in Coega, Port Elizabeth. This 30,000 m² facility, built at R600 million, is one of the largest investments by a Chinese company in the country.

FAW Trucks SA's Coega plant marked milestones in 2021 and 2022. In April 2021, the 7,000th locally assembled vehicle rolled out. The following year, the 10,000th unit came off the line.

The company also celebrated success with its Flagship JH6 28.500FT model that

was launched in 2021. This model also hit record sales in 2023 with the 1000th JH6 unit being sold.

These accomplishments show FAW Trucks SA's commitment to quality, innovation, and customer needs, while growing the local automotive industry.

Furthermore, FAW Trucks SA took the top spot in the Heavy Commercial Vehicle (HCV) segment of the local market for the first time in the first quarter of 2021, solidifying its position as a market leader in the industry.

With an extensive dealer network, service centres, highly trained personnel, and a steady supply of parts, FAW Trucks SA has consistently provided unparalleled support and peace of mind to its customers across the nation. FAW Trucks SA has solidified its nationwide presence, underpinned by an extensive dealer network, service centres, highly trained personnel, and a robust supply of parts. This strategic positioning has enabled the brand to deliver unrivalled support and assurance to its customers across the country.

"As we look ahead, FAW Trucks SA remains steadfastly focused on our trajectory towards continued growth and success," adds Yang.

"We are poised to forge full steam ahead,



A FAW JH6 model on the road in South Africa.

exploring new horizons and expanding our footprint in the commercial vehicle sector while maintaining our commitment to delivering innovative, reliable, and cost-effective transportation solutions."

As one of the only commercial OEMs with a full range of product offering from small to extra-heavy, FAW Trucks SA is well-positioned to lead the way in shaping the future of commercial transportation in South Africa and beyond. As the brand enters its fourth decade in the local market, it reaffirms its unwavering commitment to excellence, customer satisfaction, and driving industry advancements. 🌟

State-of-the-art technology to enhance last-mile fuel delivery

Leading supplier in bulk tanker fuel transportation and supply chain solutions, Unitrans, is optimising supply chains by leveraging cutting-edge technology to enhance last-mile fuel delivery to forecourts.

Unitrans has invested in safe and cost-effective solutions to ensure fuel is delivered promptly and efficiently to the correct destination under optimal conditions - all while adhering rigorously to stringent regulations and legislation.

"Operating over 1 000 tankers and facilitating the transportation of more than 4 billion litres of fuel annually, Unitrans operates with state-of-the-art technology," says Edwin Hewitt, Unitrans CEO. "The company leverages technology to address the numerous challenges faced during last-mile deliveries to forecourts. These include vehicles navigating tight spaces with complex cargo, inaccurate tank measurements, product contamination, skill deficiencies, and ongoing labour-intensive manual procedures."

Delivering innovation

In fuel supply chains, there is no room for error. Unitrans has implemented Bartec, an

electric control and metering system designed for fuel tankers, to enhance efficiency and minimise errors. "This innovative system features electronic barriers that prevent overloading and incorrect discharge into forecourt tanks. Moreover, it optimises flow and load rates, leading to quicker turn-around times for vehicles, that in turn drives down cost," says Martin Loubser, Executive for Specialised Bulk at www.unitransafrica.com.

Additionally, the company has implemented a multi-hose loading system for efficient loading and discharge of products. At gantries, two hoses are used for simultaneously loading diesel and petrol into compartments in a single tanker, improving loading times from 90 minutes to only 30 minutes. At the forecourt, the introduction of three discharge pipes has significantly reduced offloading time from 120 minutes to 45 minutes.

Furthermore, implementing various "sign-on glass" technologies across its bulk fuel operations has improved communication and efficiency. These are simple, easy-to-use technologies that replace the paperwork associated with Proof of Delivery (POD) processes. SMS notifications provide real-time



updates on loading progress, departure, and arrival times and capture delivery confirmations and recipient signatures. Moreover, immediate electronic transmission after delivery has expedited customer invoicing. These technological solutions have streamlined the order-to-cash cycle, reducing it by up to two days.

"Enhancing customer satisfaction and boosting margins for transporters in a challenging fuel economy demands a sustained commitment to innovation and efficiency. Our company is pro-actively utilising mechanical and electronic technologies, both in our vehicles and at the forecourt. By collaborating closely with key partners, we are improving last-mile logistics through streamlined operations and enhanced service delivery," concludes Loubser. 🌟

Foundation receives three converted Sprinter Inkanyezi buses

Mercedes-Benz South Africa is empowering learner education through three Sprinter Inkanyezi vehicles that were donated to the Ruta Sechaba Foundation.

Ruta Sechaba Foundation is a non-profit organisation dedicated to empowering South Africa's brightest young minds by providing opportunities to pupils that deliver academic and sporting excellence, despite their socio-economic circumstances.

The donation of Sprinter Inkanyezi vehicles will enable learners to get to school and extra-curricular activities, helping to improve their attendance and academic performance.

Mercedes-Benz South Africa, in its commitment to providing quality transportation as well as its focus on education, made the decision to donate the vehicles to Ruta Sechaba Foundation an easy one.

The Sprinters donated to the Ruta Sechaba Foundation has been converted into 23-seater school buses by a Mercedes-Benz approved Van Partner. The school bus



The three donated Sprinter Vans that were converted for scholar transport.

conversion was specifically designed in collaboration with South African schools to prioritise the safety and well-being of school children during their journeys on the road.

The converted school buses include specific safety features aimed at younger travelers:

- Building on the already robust safety features of the base vehicle, this school bus conversion incorporates reinforced internal structures, specifically aimed at protecting school-aged children in critical situations like rollovers.
- Bright red 3-point belts allow the driver and co-driver to easily confirm that everyone is buckled up.
- Anti-slip flooring minimises the risk of falls and injuries, especially for children.
- A reverse beeper and rear parking sensors aid the driver during manoeuvres, preventing accidental collisions.
- Flame-retardant felt throughout slows ignition, limits fire spread and reduces harmful fumes in case of emergencies. 🌟

Isuzu Trucks celebrates 60 years of local operations

For six decades, Isuzu Trucks has been a driving force in South Africa's commercial vehicle industry, providing reliable, durable, and innovative solutions to businesses across the nation. This year marks a significant milestone as the company celebrates its 60th anniversary of local operations.

Since its establishment in 1964, Isuzu Trucks has been synonymous with quality and performance. The introduction of the iconic Isuzu Elfin TKG 10 petrol-engine 1.5 ton truck marked the beginning of a legacy that has shaped the transportation industry for generations.

Throughout its history, Isuzu Trucks has continually raised the bar, introducing groundbreaking technologies and pioneering advancements that have redefined excellence in commercial vehicles. The company has consistently pushed the boundaries of innovation to deliver vehicles that exceed expectations.

Isuzu Trucks has been a leader in the cab-over-chassis market in the medium- and heavy commercial vehicle segments for 11 consecutive years, a testament to the reliability and durability of its trucks.

A line-up of Isuzu Trucks which has become one of South Africa's trusted transport solutions.



A key pillar of Isuzu Trucks' success lies in its commitment to technological advancement and environmental sustainability. As part of its 5-step alternative propulsion journey towards full Carbon Neutral New Energy Vehicles, the company has introduced Diesel Dual Fuel as an option on 20 of its truck models, providing customers with a more sustainable and efficient transporta-

tion solution. Additionally, the recently introduced NPR 400 Compressed Natural Gas model further expands the range of environmentally friendly vehicles offered by Isuzu Trucks.

As Isuzu Trucks celebrates 60 years of operations in South Africa, it looks forward to continuing its legacy of excellence and innovation in the commercial vehicle industry. 🌟

Hamm launches compactors with automatic compaction

With the 20 t and 25 t HC 200i C VA and HC 250i C VA models, Hamm is now offering a range of compactors that enable automatic compaction to a specified target value in earthworks.

The models are initially available in markets with EU Stage V / EPA Tier 4f exhaust emission standards, further markets will follow in due course. The abbreviation 'VA' stands for Variable Amplitude. An essential element of this technology from Hamm is the equally new, parameter-independent Smart Compaction Value (SCV).

With the Smart Compaction product family, Hamm has developed a range of solutions for smart and simple compaction.

A further development that automates and simplifies compaction in earthworks and simultaneously improves quality and cost-efficiency has now been implemented in the new HC series models with VA drums. Following the successful launch of Smart Compact for asphalt construction at Bauma 2022, Hamm

is now offering a corresponding solution for earthworks.

Operators can quickly and easily learn how automatic compaction works, as all the compactor driver has to do in daily operations on the construction site is choose between an automatic mode and a manual mode. While the amplitude is automatically regulated by the machine control system in automatic mode, manual mode allows the compactor driver to choose any one of five preset amplitudes.

The function is operated via the already familiar Easy Drive display. In addition, a compaction target value in MN/m² based on typical load bearing capacity values can be specified before the start of compaction. In automatic mode, the compaction process is then controlled by Smart Compact

The new Hamm compactor models.



until the specified target value has been achieved.

The decisive factor here is the also newly developed Smart Compaction compaction value (SCV). The measurement is carried out by the Smart Compaction meter (SCM). The compaction value is also independent from key influencing factors, for example the travel speed, the direction of travel or the frequency, which leads to high comparability of the measured values, even when using compactors of different weight classes. 🌟

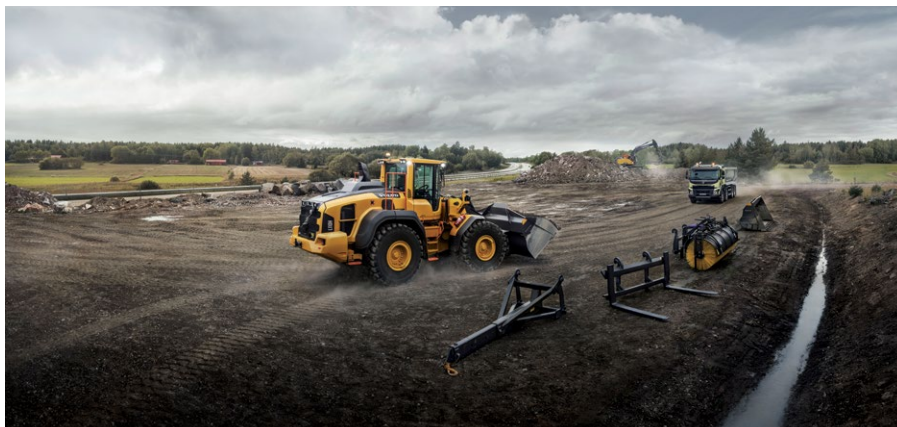
Volvo CE's H-generation wheel loaders can cut ownership costs

Replacing F and Gz models, the H-generation L110H and L120H wheel loaders bring with them a host of improvements that boost productivity by 12%, fuel efficiency by 28% – and enhance operator performance.

Suited for rehandling, agriculture, waste handling, log handling, and more, the 20-ton L110H and L120H are among the most versatile of machines. With their 5-6-ton lifting capacity, they feature the latest technology, including a new Volvo engine and electronic platform, as well as an optimized transmission and hydraulics system. The comprehensive package of upgrades over the models they replace combines to deliver a lower total cost of ownership, made possible thanks to productivity increases of up to 12% and an impressive increase in fuel efficiency – up to 28%. The new machines are also easier to operate and easier to maintain.

Volvo's Torque Parallel linkage has always delivered high breakout torque and excellent parallel movement throughout the lifting range. Added to that, the new H-generation machines now have a higher tipping load – over 6% depending on the model. Thanks to a higher pin than on the outgoing Gz model, they can also tip higher, for example into taller-bodied trucks or in storage areas.

The new engines deliver at least 5% more power, while other options include an



The new generation wheel loaders on site.

automatic engine shutdown facility, which reduces fuel consumption when idling beyond a set time, and a delayed engine shutdown feature, which allows the turbo-charger to cool, thereby reducing wear.

The L110H and L120H offer grouped service points and unrestricted access to vital components. The engine hood opens electronically, while the tilting cab is operated hydraulically – to either a 30° or 70° angle, and the cooler installation slides out. Wear indicators placed by the wheels make it easy to check the condition of the brakes. The engine now features an electric pump for priming the fuel system, making the procedure quicker and more convenient than with a manual pump.

A feature also found on the L60H, L70,

L90H, and L350H is now being introduced as standard on the L110/120H – a lock-out-tagout. Known by its acronym 'LOTO', this feature makes it easier to lock the battery disconnect switch in the OFF position – thereby preventing any unwelcome energy release when conducting maintenance work.

For extended service intervals, the axles, transmission, hydraulic tank, and fuel tank have replaceable breather filters – located remotely – to prevent them from dirt and moisture contamination. The brakes are outboard mounted, and the oil circulation cools the front and rear axles. The rear axle cradles contain greased-for-life bushings and bearings, and so are maintenance-free. 🌟

Management change for Wacker Neuson South- and Sub-Saharan Africa

After more than seven years, Dennis Vietze, the Managing Director of Wacker Neuson South and Sub-Saharan Africa, is set to bid farewell to the country to take over the helm of Wacker Neuson Australia and New Zealand. His new role will become effective on 1 October.

Since commencing his position in Africa in 2017, Vietze has driven the impressive transformation of Wacker Neuson South and Sub-Saharan Africa.

Under his leadership, coupled with the dedication of his team, steadfast dealer partners, and unwavering customer loyalty, the company has achieved great success. Notably, turnover doubled from 2020 to 2023, reflecting a period of sustained growth.

The baton of leadership will be passed to Stefan le Roux, the current Sales Manager of Wacker Neuson South and Sub-Saharan Africa. Le Roux, who has been instrumental in achieving remarkable sales successes in the region, is poised to lead Wacker Neuson South and Sub-Saharan Africa to new heights.

Speaking on the transition, Alexander Greschner, Chief Sales Officer of the Wacker Neuson Group, stated, "We are

happy to appoint Vietze, a seasoned colleague with extensive intercultural experience, to lead Wacker Neuson Australia & New Zealand. We are confident in Le Roux's ability to steer Wacker Neuson South and Sub-Saharan Africa towards continued success, given his deep-rooted expertise in the agricultural and construction sectors."

Central to Vietze's tenure were strategic initiatives that have reshaped the landscape of the construction and agricultural sectors.

A robust dealer expansion strategy has significantly widened the company's African footprint, bringing innovative solutions closer to customers. Moreover, the introduction of the new Spanish brand, ENAR, under the Wacker Neuson umbrella, and pioneering digital innovations, such as Smart Glasses, have positioned Wacker Neuson as a trailblazer in the industry. Recognising the burgeoning potential of the agricultural sector, Vietze spearheaded efforts to harness its strength, resulting in a balanced turnover split of 50% construction and 50% agriculture. This strategic pivot underscores Vietze's astute



Dennis Vietze, the outgoing Managing Director of Wacker Neuson South and Sub-Saharan Africa with Stefan le Roux, the current Sales Manager of Wacker Neuson South and Sub-Saharan Africa.

understanding of market dynamics and his commitment to driving sustainable growth.

Until the official changeover, Vietze remains with Wacker Neuson South and Sub-Saharan Africa, transitioning leadership to Le Roux. Together, they will ensure that business continues as usual and that the company continues to excel, even in changing times. 🌱

First look at Develon's unique electric wheeled excavator concept

After its debut at Intermat 2024, the 14W-EREV electric concept vehicle from Develon, formerly Doosan Construction Equipment, is now viewed as the most advanced, state-of-the-art machine of its kind. This electric wheeled excavator is designed with a regenerating drive system (eDrive), advanced swing system (eSwing) and eWorking systems to ensure maximum efficiency with zero emissions.

The 14W-EREV is intended to excel in urban environments, offering a compact and very versatile design. The 14W-EREV combines this with enhanced visibility, increased stability and mobility to ensure increase safety on urban sites and in challenging conditions.

Built with a streamlined design, the 14W-EREV maximises peripheral vision over long distances for optimum safety and security. Offering the driver a full 360° of line of sight around the machine, the 14W-EREV can easily detect obstacles from any angle and in any urban environment. Equipped with an Around View Monitor (AVM), the 14W-EREV provides a full-screen projection of the machine's journey and surroundings.



The 14W-EREV electric concept.

The 14W-EREV offers an independent electric pump motor, which helps to maximize hydraulic flow for attachments and provides a high flow for applications such as tiltrotators and articulated front pieces. In addition, the 14W-EREV offers a boom swing capability ideal for use in either tight spaces or buildings due to the working envelope being below 4 m.

Improved battery charging technology allows the machine to be quickly charged up to 80% in 1.5 hours for the main

battery. The battery pack has a capacity of 120 kWh, which allows 3 hours of driving and is therefore the ideal solution for zero emission areas.

Develon offers, as an option, the choice between a 55 kW diesel engine, for a hybrid solution, or a second additional 120 kW battery pack, which will add 3 hours of additional autonomy. The optional diesel engine helps users to deal with infrastructure issues on site, where there is no possibility of recharging. 🌱

FORKLIFTS EVOLVED WITH SUPPLY CHAIN OVER THE LAST DECADE

Forklifts have made a considerable impact on the material handling space since industrial production scaled up drastically between the 17th and 18th centuries. Consequently, there was a need for faster, safer, and more efficient mechanisms for moving materials.

By Jozua Coetzee, Eazi Access Business Development Manager: Sales & After Sales

Manufacturers are constantly trying to improve designs for better safety, efficiency, and cost reduction. The materials handling industry has been experiencing significant advancements in automation over the last few years.

Automated guided vehicles (AGVs), robotic arms, and conveyor systems are increasingly integrated into warehouses and factories to streamline processes. These technologies are reducing labour costs, improving efficiency, and enhancing safety.

Moreover, the emergence of artificial intelligence and machine learning is enabling more sophisticated automation, with systems capable of autonomous decision-making and adapting to changing conditions. The ongoing development of Industry 4.0 principles is further driving the adoption of automation in materials handling, promising a future where smart factories and warehouses operate seamlessly.

In our roadmap towards a smart future, decarbonization is increasingly playing a crucial role in the forklift industry as companies seek to reduce their carbon footprint and meet sustainability goals. Several key factors illustrate this, as discussed in the following paragraphs.

Electric forklift adoption

There's a growing shift towards electric forklifts, which produce zero emissions at the point of use. These forklifts are powered by batteries, making them more environmentally friendly compared to traditional internal combustion engine forklifts running on fossil fuels. Electric forklifts are also quieter and have lower operating costs in the long run.

Hydrogen fuel cells

Hydrogen fuel cell-powered forklifts have gained attention as a decarbonization solution. They offer the advantage of quick refuelling and longer operating hours compared to battery-powered forklifts, improving efficiencies. Companies are exploring



Jozua Coetzee, Eazi Access Business Development Manager: Sales & After Sales.

hydrogen infrastructure and investing in fuel cell technology to reduce emissions.

Sustainability goals

Many companies are setting ambitious sustainability targets, which include reducing greenhouse gas emissions. Switching to cleaner forklift technologies aligns with these goals and contributes to a greener supply chain.

Regulatory compliance

In regions with strict emission regulations, such as the European Union, forklift operators are incentivized to transition to low or zero-emission equipment. Compliance with these regulations is driving the adoption of cleaner forklift technologies.

Innovations in battery technology

Ongoing advancements in battery technology, including lithium-ion batteries, are increasing the efficiency and range of electric forklifts, making them more attractive to businesses seeking to decarbonize.

In summary, decarbonisation is pushing

the forklift industry toward cleaner and more sustainable technologies, including electric and hydrogen fuel cell-powered forklifts. This transition not only reduces carbon emissions but also aligns with broader sustainability initiatives and regulatory requirements.

Eazi Access is Africa's market leader in work-at-height and material-handling solutions. Its comprehensive offering includes rental, sales, servicing, and training across a range of industries and applications.

We have partnered with global trusted OEM brands such as Linde Material Handling, one of the world's largest manufacturers of forklift trucks and warehouse equipment, specialising in industrial trucks, fleet management, driver assistance systems and service offerings.

The products of this premium brand allows us to bring in complementary ranges that enable Eazi Access to be a full solutions partner to our customers, supporting their equipment needs and sustainability goals. This is backed by our 23 branches across South Africa and sub-Saharan Africa. 🌍

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ELECTRICITY + CONTROL



Accessible on multiple platforms

POPULAR FOR ALL THE RIGHT REASONS

COMFORT MADE EASY

A redesigned cab provides significantly more space, whilst a new HVAC system with fully adjustable vents creates a comfortable operating environment.



Look no further than JCB's updated range of 3CX Backhoe Loaders featuring a new Easyshift transmission with improved efficiency in the hydraulics and a complete cab makeover.

THEY'RE THE WORLD'S MOST POPULAR BACKHOES WITH GOOD REASON.

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