



# MODERN QUARRYING

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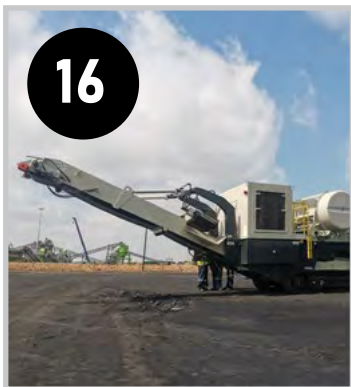


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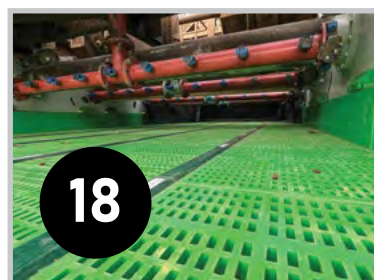


## MOBILITY AS A STRATEGIC ADVANTAGE FOR MINES AND QUARRIES

As mines, quarries and aggregate producers face rising costs, tighter margins, skills shortages and increasing pressure to improve safety and reduce their environmental impact, mobility is emerging as one of the most effective levers to improve operational resilience.

## REDEFINING SCREENING MEDIA ATTACHMENT SYSTEMS FOR FASTER, SAFER CHANGEOUT

Hand and finger injuries remain one of the most common safety concerns in mining, often occurring during physically demanding maintenance tasks. To help address this risk and remove potential safety hazards, Multotec has developed a range of hammer-less screening media attachment systems that significantly reduce the amount of hammer blows traditionally required when installing or removing screen media.



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# NEW GROWTH OPPORTUNITY FOR SA'S QUARRYING SECTOR

**S**outh Africa's 2026 national budget marks a cautiously optimistic chapter in the country's long-term economic journey. Finance Minister Enoch Godongwana's budget speech delivered to Parliament emphasised fiscal stability, prudence and a renewed focus on investment-led growth, a foundation that bodes well for industries tied to infrastructure and construction, including the often overlooked quarrying sector.

At its core, the 2026 budget reflects a turning point in South Africa's public finances. After years of rising debt, the government projects that the debt-to-GDP ratio will peak and begin to decline, while government revenues continue to exceed non-interest expenditures, generating a growing primary budget surplus. This signals to investors and businesses alike that South Africa is committed to responsible fiscal management without resorting to punitive tax increases.

For the quarrying industry - which supplies the raw materials

fundamental to roads, bridges, commercial developments and housing - this environment of fiscal steadiness and investment certainty is vital. Quarry operators thrive when demand for aggregates and industrial minerals is robust, and that demand is often linked to public investment in infrastructure and private sector construction activity.

One of the most consequential elements of the budget for quarrying is the government's firm commitment to infrastructure expenditure. Over the medium term, public investment is set to exceed R1-trillion, spread across transport systems, logistics corridors, energy networks and municipal infrastructure projects. These are exactly the kinds of capital works that require significant volumes of crushed stone, sand and other quarry products, creating sustained demand for quarrying activity and associated employment.

Moreover, the budget's emphasis on public-private partnerships (PPPs) to help deliver major

projects opens new avenues for private capital participation in infrastructure delivery. Quarry companies are well placed to benefit from this model - not only as suppliers of materials but as partners in integrated project value chains where local content and reliable supply are priorities.

Another positive takeaway is the withdrawal of planned tax increases that had been pencilled into earlier drafts of the budget. By relieving businesses of higher tax burdens and adjusting personal tax brackets for inflation, the government has signalled a more competitive tax environment for investment and consumption alike. While quarrying is not always at the forefront of fiscal policy discussions, tax certainty and relief help improve industry cash flows, support reinvestment and contribute to business confidence.

Fiscal stability also enhances the broader economic backdrop in which quarrying operates. With improved revenue collections - in part supported by mineral price gains - South Africa is in a better position to fund growth-promoting policies while strengthening its credit outlook.

It is true that the full impact of the budget will unfold over time, and challenges such as logistics bottlenecks and energy reliability remain unresolved in many regions. But the strategic alignment of fiscal discipline, infrastructure investment and market confidence contained in Budget 2026 creates a more supportive climate for sectors anchored to physical development - among them, the essential quarrying industry.

For an industry that sits at the intersection of economic growth and spatial transformation, the budget's priorities offer a rare confluence of stability, demand and participation that could unlock new opportunities for sustainable expansion.

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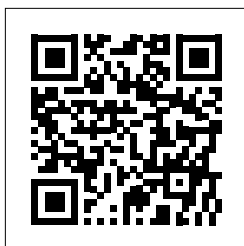
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# QUALITY AGGREGATES ARE THE FOUNDATION OF STRONG, DURABLE CONSTRUCTION

In the world of construction, the quality of materials directly determines the strength, durability and long term performance of any structure. Among these materials, aggregates - whether used in concrete, asphalt or base layers - play an essential role. Ensuring that aggregates are correctly sized and properly graded is not just a technicality - it is a vital factor in achieving structural integrity, performance consistency and compliance with design specifications.

**"A**ggregate grading is about more than just particle size," Amit Dawneerangen, Construction Materials Executive: Sales & Product Technical at leading construction materials supplier, AfriSam explains. "It determines how the material compacts, how concrete mixes perform and how well load bearing structures can handle stress over time."

When aggregates are incorrectly sized or poorly graded voids can occur within the mix, reducing density and compromising strength. This often leads to issues such as cracking, shrinkage and water ingress - all of which can shorten the lifespan of roads, buildings or infrastructure.

Conversely, well-graded aggregates create dense cohesive mixtures that enhance workability, reduce cement or binder demand, and ensure more uniform compaction and stability.

Beyond physical performance, consistent aggregate quality ensures that engineers and contractors can meet design standards and regulatory specifications. Projects designed around specific grading envelopes depend on accurate and repeatable aggregate properties to perform as intended.

However, achieving this level of precision requires technical expertise, process control and rigorous testing which is why working with a reputable quarry or construction materials supplier is critical. Trusted suppliers operate under strict quality management systems, implement regular laboratory testing and maintain



Amit Dawneerangen, Construction Materials Executive: Sales & Product Technical at AfriSam.



AfriSam carries out multiple process control tests as an integral part of its daily production operations to maintain consistent product quality.



Both coarse and fine aggregates used in concrete must comply with the requirements of SANS 1083.

calibrated crushing, screening and blending processes to ensure product consistency.

"Partnering with an established, credible supplier provides confidence that every load delivered meets specification," Dawneerangen adds. "It also means access to reliable technical advice and traceability - from the source rock right through to the final product."

Reputable suppliers invest heavily in quality assurance infrastructure, from advanced testing laboratories to on-site quality control technicians. Their focus extends beyond supply - they actively collaborate with engineers and contractors to ensure that the correct material is selected for each layer or mix design, reducing the risk of costly rework and ensuring long term performance.

In a market where quality, compliance and sustainability are non-negotiable, correct aggregate sizing and grading are the cornerstones of successful construction. "Working with a trusted technically capable supplier is therefore not just a purchasing decision - it is a quality assurance choice that safeguards the integrity and longevity of every project," Dawneerangen concludes.



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# ALCO-SAFE EARNS SANAS ACCREDITATION FOR BREATHALYSER CALIBRATION

In South Africa's safety-critical industries, a single breathalyser reading can carry serious consequences - from removing a worker from a site to defending a dismissal at the CCMA. Yet workplace alcohol testing operates in an environment with limited formal regulation, leaving employers exposed when results are challenged.

**A**gainst this backdrop, ALCO-Safe has reached a significant industry milestone, becoming the first privately owned laboratory in South Africa to achieve accreditation by the South African National Accreditation System (SANAS) for breathalyser calibration, and the only privately owned provider accredited to manage the full lifecycle of handheld breathalysers, from sales and servicing to calibration, under a single accredited framework.

This accreditation by SANAS marks a major shift, formally recognising the technical competence of ALCO-Safe's calibration laboratory and confirming that its breathalyser calibration and verification processes meet strict national and international standards for accuracy, consistency and traceability.

## Turning uncertainty into defensible certainty

In the absence of a prescribed national standard for workplace breathalyser testing, employers are often required to justify the credibility of their testing equipment after the fact, particularly during CCMA or Labour Court proceedings.

"Without an independent benchmark, employers can find themselves trying to prove the accuracy of their instruments every time a result is challenged," explains Rhys Evans, Managing Director at ALCO-Safe. "SANAS accreditation removes that uncertainty by confirming that our calibration procedures, documentation and accuracy calculations have already been independently

assessed and approved."

The accreditation process required ALCO-Safe to demonstrate not only the precision of its calibration instruments, but also the strength of its quality systems. Detailed procedures, traceable records and repeatable methods ensure calibration results remain consistent, regardless of which technician performs the work.

## Protecting safety programmes and labour outcomes

For organisations operating in mining, construction, transport, and manufacturing, the risks associated with inaccurate alcohol testing extend beyond compliance. Questionable results can undermine zero-tolerance policies, expose employers to costly disputes and weaken overall safety cultures.

"The real risk of using non-accredited calibration services is not just technical, it's operational and legal," Evans notes. "If a breathalyser result cannot be defended, employers may be forced to reinstate employees or settle cases, even when safety was genuinely at risk."

SANAS accreditation strengthens the legal defensibility of test results, giving employers confidence that alcohol testing outcomes will stand up to scrutiny when challenged.

## Making audits simpler and compliance stronger

The benefits of SANAS accreditation extend into day-to-day operations, particularly during audits and safety reviews. In heavily regulated sectors, employers are frequently required to demonstrate that their testing equipment meets recognised standards.

"When customers are audited, they can point directly to the



Rhys Evans, Managing Director at ALCO-Safe.

SANAS certificate of the laboratory that supplies and calibrates their breathalysers," Evans says. "That single document carries significant weight and removes the need for lengthy technical explanations or repeated verification requests."

The certification also reduces administrative burden by streamlining audit processes and minimising delays linked to calibration challenges.

## Setting a new benchmark for workplace alcohol testing

With this accreditation, ALCO-Safe has strengthened its position as a leader in breathalyser distribution, maintenance, and calibration in South Africa.

"This accreditation is about more than compliance," Evans concludes. "It's about trust, trust in the numbers, trust in the process and trust that employers are making decisions based on results that are accurate, fair and defensible."

By achieving SANAS accreditation, ALCO-Safe has not only reinforced its own standards but helped raise expectations for workplace alcohol testing across South Africa's safety-critical industries.



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# ELECTRA MINING AFRICA ADDS NEW OUTSIDE EXHIBIT AREA

South Africa's mining, power, electrical, automation, industrial, transport, and manufacturing sectors are the engine of the nation's economy. Together, they drive growth, create jobs, and turn raw materials into value-added products that fuel trade and exports.

**E**lectra Mining Africa brings all these industries together in one dynamic trade show, offering a platform for buyers, sellers, and decision-makers to connect, explore innovations, and forge partnerships. With in-person networking and cutting-edge exhibitor content, Electra Mining Africa is where industry collaboration meets business growth.

The biennial show is set to unveil several exciting additions in 2026, among them, a new outside exhibit area located in the Arena at the Expo Centre. According to Montgomery Group Africa portfolio director Charlene Hefer, the introduction of the new Orange Zone comes in direct response to exhibitor demand.

"The new Orange Zone provides the additional space needed to accommodate more companies that want to showcase their equipment and innovations outside," says Hefer. "There will be more original-equipment manufacturers than at previous shows and this level of representation will be of benefit to visitors interested in this particular sector as they are able to view, compare and evaluate the offerings all in one place. The Orange Zone complements the existing Red, Blue, Green, and



Yellow Zones, creating an even more dynamic outdoor showcase."

Exhibitors located in the outside exhibit areas will span the full mining and industrial equipment value chain - from global and local OEMs to leading component and service providers. Major OEMs such as South African heavy equipment manufacturer Bell Equipment, global mining and construction machinery OEM Komatsu, mining equipment and tools OEM Sandvik, drilling, global construction and mining OEM Sany, mining machinery OEM Eickhoff, specialist manufacturer/supplier OEM All Terrain Mining & Tunnelling Machinery, and



Montgomery Group Africa portfolio director, Charlene Hefer.

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are distributors, technology partners, and component and service suppliers such as Barloworld, Egelquip, GHM Machinery, Drilling Mining and Construction, Kappa Engineering, Alpin, and nVolve Solutions, which provide equipment support, automation technologies, parts, systems, and engineering services that enhance OEM performance and operational reliability. Together, this diverse mix ensures a comprehensive showcase of the mining and industrial ecosystem—from original

manufacture through to digital integration, distribution, maintenance, and operational excellence.

“The presence of these industry leaders will attract high-level buyers, engineers, and decision-makers seeking reliable, high-performance solutions, while also fostering partnerships, local manufacturing, and skills development,” notes Hefer.

With just under eight months to go until Electra Mining Africa 2026, the exhibition is already 98% sold,

demonstrating strong industry support for the show and confirming its proven track record as a driver of leads and sales.

Taking place in Nasrec, Johannesburg between 7-11 September 2026, Electra Mining Africa is a 6-in-1 Trade Show, incorporating Electra Mining Africa, Automation Expo, Elenex Africa, PowerEx, Transport Expo and the Local Southern African Manufacturing Expo. It is the largest show of its kind in Southern Africa, and one of the largest mining and industrial shows globally.

“We are really excited about Electra Mining Africa 2026,” says Hefer. “The 2024 event was the biggest ever show since the inaugural edition in 1972, hosting 950 exhibitors across 6 exhibition halls and 4 outside exhibit areas, with almost 40 000 visitors attending. Now, with the addition of the Orange Zone, a new SAIMechE Career and Skills Hub, and other exciting initiatives, Electra Mining Africa 2026 is set to be even bigger”. ●



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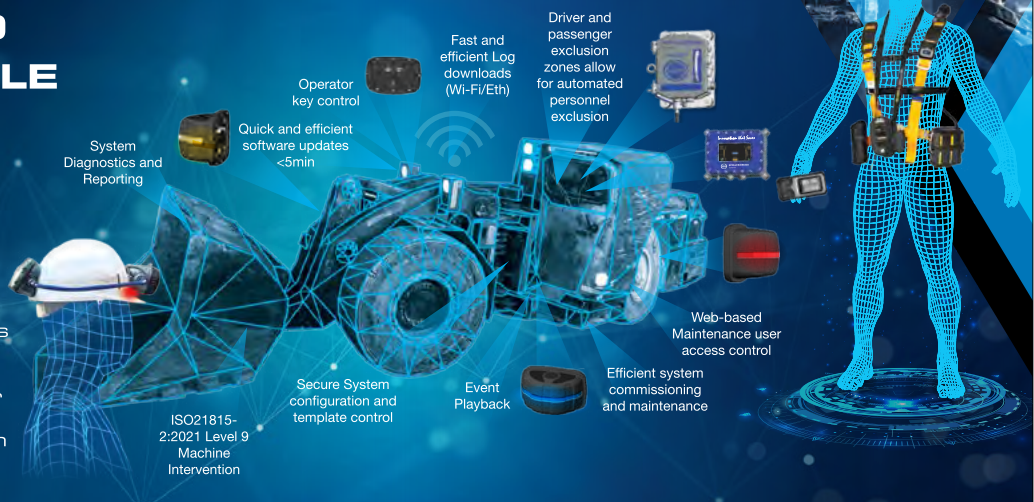
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# COLLABORATION AT THE CORE OF MINING GROWTH

The Investing in African Mining Indaba 2026 brought together key players to engage on the subjects most relevant to the future of the mining industry in Africa. Among other critical areas of discussion – from energy security to modernising the industry to Africa's strategic positioning – two key themes carried through the conversations: the need to prioritise inclusive local growth for sustainable economic development, and the role of collaboration in unlocking capital and ensuring shared benefit. **By Shamiso Chideme (Head of Clients, Tshikululu Social Investments) and Richard Pfaff (Head of Social Impact, Tshikululu Social Investments)**

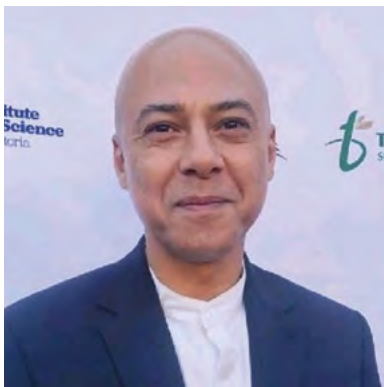
**N**ot only is each of these an important area of exploration, but they are interconnected.

Collaboration is fundamental to the achievement of inclusive local growth.

Inclusive local economic development is necessary for the sustainability of mining communities and the wider economy. Conditions in many mining communities make it clear that efforts to develop



Shamiso Chideme (Head of Clients, Tshikululu Social Investments).



Richard Pfaff (Head of Social Impact, Tshikululu Social Investments).

local economies and create positive social impact are falling short: unemployment remains a dominant community pressure point, and energy and water insecurity, infrastructure backlogs and weak spatial planning are ongoing constraints. Jobs are not being created at the levels needed for the growth of local economies that are meaningfully independent from the mining value chain.

The Indaba recognised that transformative approaches are needed to achieve change. Community participation and provincial investment promotion, together with an enhanced understanding of domestic beneficiation, all form part of ensuring that mining drives domestic economic development. However, none of this can be accomplished in isolation. Reliance on discrete funding levers such as social and labour plan (SLP) commitments, corporate social investment (CSI) and other socio-economic development (SED) funds creates a fragmented and short-term approach to solving complex, long-term problems. Fragmentation is not effective: collaboration between business, government, civil society and communities is the only way to create change.

Collaboration has become a buzzword in social investment, but we need to move beyond talking about it and work together to coordinate resources. In our experience as Tshikululu, we have found a strong appetite among social investors to move from compliance-driven, siloed interventions towards a deliberate,

collaborative approach.

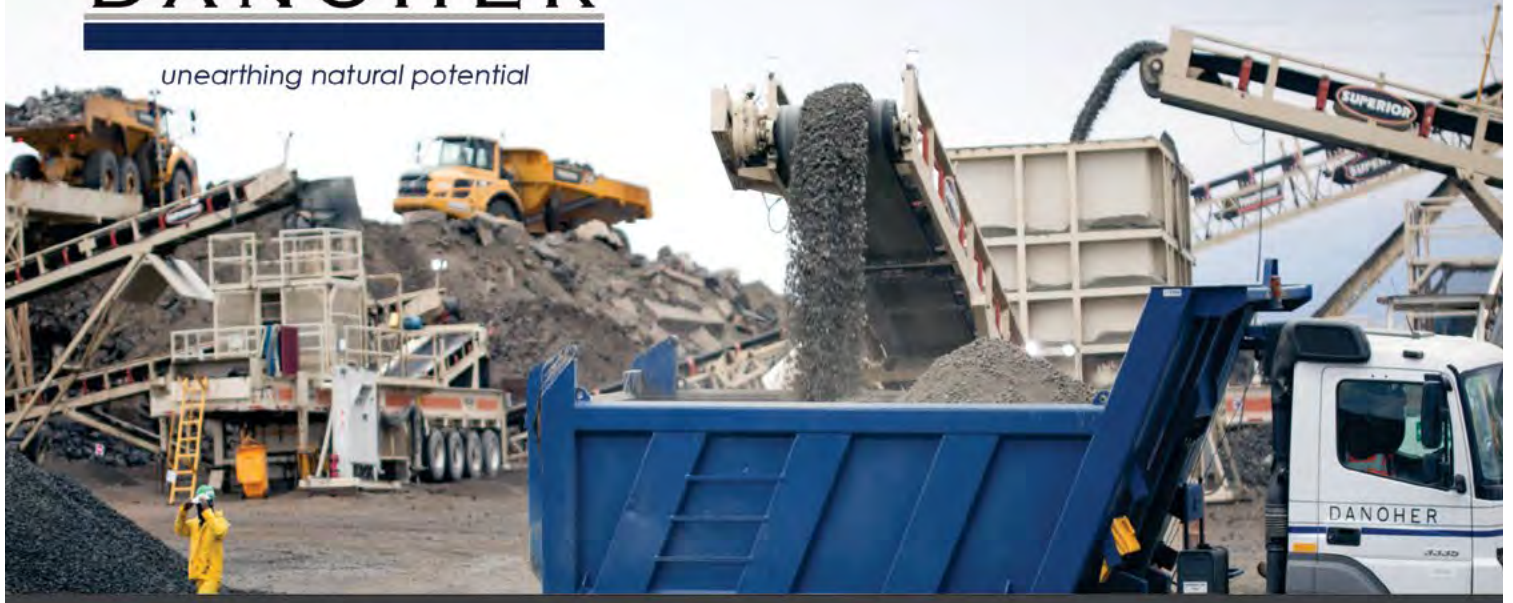
We are already seeing examples of collaborative efforts with specific emphasis on investing in inclusive local growth. The Indaba highlighted the Impact Finance Network (IFN), through which Anglo American and its partners, Impact Capital Africa and Edge Growth, are identifying innovative, impactful businesses in the region and bringing together a network of investors seeking social investment opportunities. Taking a regional approach, Tshikululu has begun the internal process of working in partnership to define a long-term, structured collaboration model across mining houses with operations in the same district. These companies and their host communities share deep, systemic challenges that cannot be solved through isolated programmatic investments. Instead, we are working together to find collaborative solutions that can work at scale.

Collaboration is not easy, but it is necessary. Effective collaboration, especially when targeting issues on a scale as big as local economic development, relies on good governance and clear strategy. It requires all parties to align on shared outcomes, even while different pots of funding and diverse activities are deployed to achieve them.

Inclusive local economic development is a strategic imperative for South Africa, and especially for the mining industry. Everyone has a role to play, and collaborating strategically to achieve shared goals is the only way to succeed. ●

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# FROM PAYLOAD TO PROFIT: **THE DATA-DRIVEN SHIFT**

The mining and quarrying sector across South Africa and the broader African continent is undergoing a decisive transformation. Market consolidation, stricter compliance requirements, and relentless pressure to maximise throughput while minimising waste and downtime are redefining operational priorities. In this environment, intelligent connected systems that provide real-time visibility and actionable insight are no longer optional - they are fundamental to sustainable performance. Loadrite, an international brand of smart scales for heavy equipment, is at the forefront of this shift, with a comprehensive, locally supported approach through Loadtech Loadcells that makes it possible to weigh in real time, optimise loading operations, and access live data from anywhere on the continent.

”

**Loadrite's L5000 smart scale and other Loadrite configurations bring precise weight measurement directly into the operator's view.**

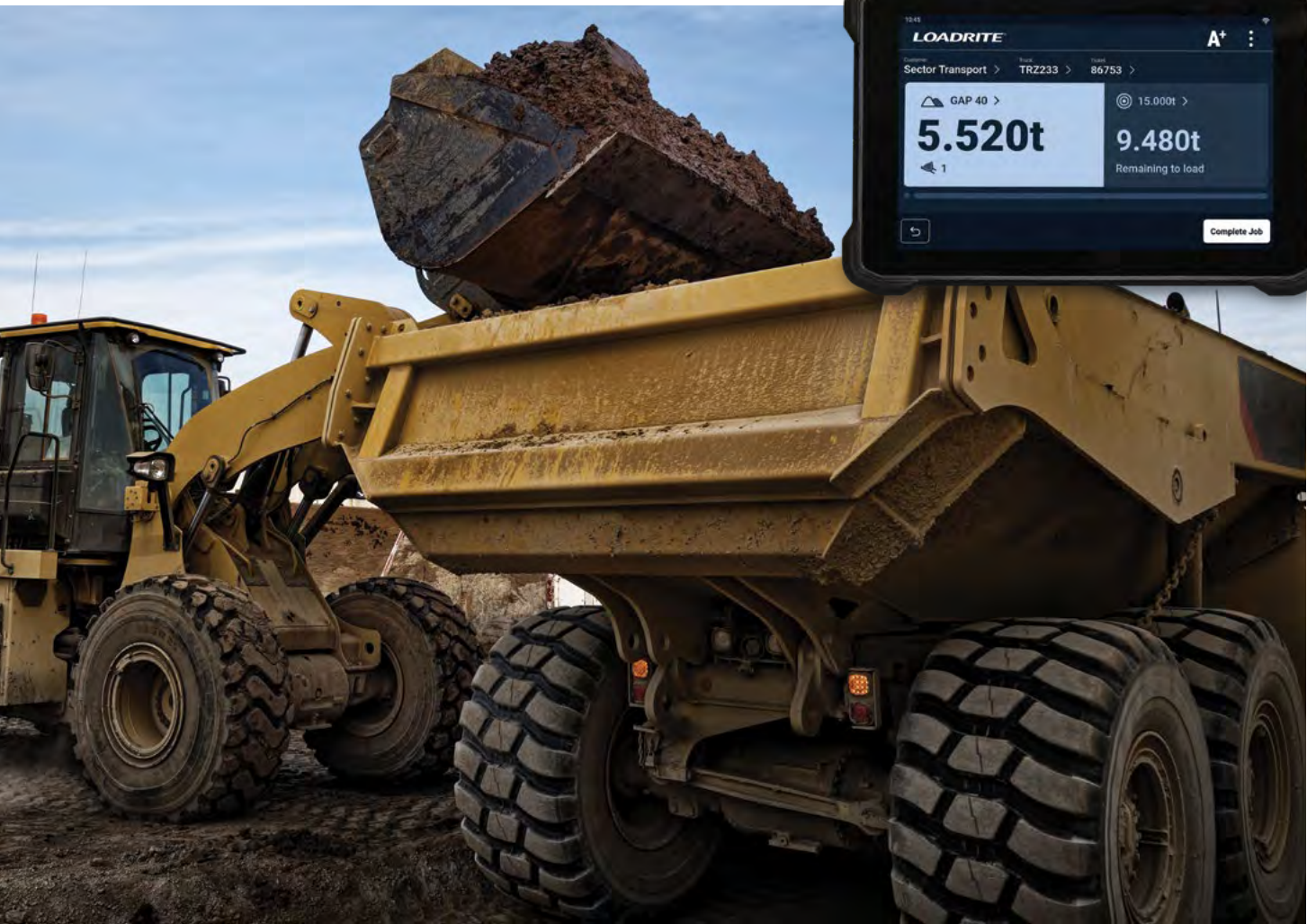
**A**frica remains a critical global supplier of base metals, precious minerals, and bulk commodities. In South Africa, gold, manganese, chrome, platinum group metals, coal, and aggregates continue to anchor both domestic economic activity and export markets. Yet operators face mounting pressure to reduce non-productive downtime, eliminate overloading penalties, and maintain reliability in harsh operating conditions.

Digital transformation is accelerating across the sector. Industry 4.0 principles - connected equipment, predictive maintenance, remote diagnostics, and cloud-based analytics - are becoming competitive differentiators. The ability to collect, consolidate, and interpret operational data across multiple sites and fleets is reshaping how mines and quarries are managed. What was once manual, reactive oversight



is evolving into proactive, data-driven optimisation.

This shift creates opportunity. Operations that can measure accurately,



respond quickly, and analyse performance systematically gain measurable advantages in cost control, compliance, and output consistency.



## SNAPSHOT



Loadrite, an international brand of smart scales for heavy equipment, is at the forefront of this shift, with a comprehensive, locally supported approach through Loadtech Loadcells.



Loadrite, complemented by InsightHQ and delivered through Loadtech's in-house capabilities, offers a complete, locally supported solution.



Loadrite's integrated ecosystem provides a practical, scalable path to weather the volatility of mining and quarrying markets while laying the foundation for a truly connected, intelligent, and data-driven mining operations landscape.



One of Loadrite's differentiators in the South African and African market is the commitment to all-in-house parts, installations, training, and technical support through Loadtech.



### Turning weight into intelligence

Loadrite, an international brand of smart scales for heavy equipment, is positioned at the forefront of this transformation. Supported locally by Loadtech Loadcells, the company delivers a connected ecosystem that converts payload data into measurable operational value.

At machine level, the Loadrite L5000 smart scale and related configurations provide precise payload measurement directly in the operator's line of sight. For front-end loaders, excavators, forklifts, and reach stackers, real-time weight feedback eliminates guesswork. Operators can achieve target loads faster, reduce spillage, and avoid under- or overloading. The result is improved truck cycle efficiency, lower fuel consumption, and reduced material loss.

In high-volume operations, marginal improvements compound quickly. Small gains in loading accuracy,

applied across thousands of cycles, translate into lower cost per tonne and greater profitability. Real-time feedback also reduces rehandling and enhances operator confidence, contributing to smoother shift performance.

Beyond the cab, InsightHQ serves as the cloud-based data centre and analytics hub of the ecosystem. It consolidates data from connected machines across multiple sites into a secure, centralised platform. Managers gain access to dashboards displaying payload metrics, machine utilisation, calibration events, and performance trends - whether on site or working remotely. A unified data environment replaces fragmented reporting with a single source of truth.

Live monitoring enables supervisors to respond immediately to anomalies. Alerts can be configured for out-of-range weights, calibration drift, or other deviations, allowing corrective action before minor issues become costly disruptions. Integration across mixed fleets ensures that loaders, excavators, forklifts, and reach stackers feed into the same analytical framework, supporting consistent performance benchmarking across operations.

The benefits extend beyond efficiency. Accurate weighing reduces exposure to overloading fines and strengthens contractual compliance. Digital audit trails simplify inspections and reporting, reinforcing governance and accountability. Precise measurement also enhances safety by preventing hazardous overload conditions and reducing the need for manual verification.

Over time, the accumulation of accurate data establishes measurable baselines for uptime, fleet utilisation, and payload consistency. Recurring patterns - such as calibration drift after certain usage thresholds or operator-related variability - can be identified early. Preventative maintenance and targeted retraining reduce unplanned downtime and extend equipment life. In this way, data evolves from a reporting tool into a strategic asset.

The Loadrite L5000 smart scale exemplifies this technological progression. Recognised in South Africa



**” The Loadrite ecosystem is designed to connect with a broad range of equipment. Whether a mine runs a mixed fleet of loaders, excavators, forklifts, or reach stackers, the data from each device feeds into the same InsightHQ environment.**

for its rugged design and precision, it integrates seamlessly with existing hydraulic systems while maintaining consistent accuracy even on uneven terrain through advanced angle sensing. An intuitive, evolving user interface with larger displays and clear target-weight guidance shortens the learning curve and supports rapid adoption. A dedicated day/night display mode enhances visibility in underground or low-light conditions, reducing visual fatigue.

As connectivity improves across the continent, InsightHQ enables increasingly robust remote diagnostics and system optimisation. Software updates, data field synchronisation, and performance monitoring can be coordinated between site teams and cloud-based systems, ensuring rapid response and continuous improvement.

### Local support and the road ahead

Technology's value is realised only when supported by dependable service infrastructure. In South Africa and across Africa, Loadrite's partnership with Loadtech Loadcells ensures installations, calibration, system integration, and ongoing maintenance remain locally managed. Experienced technicians familiar with regional operating conditions provide commissioning and technical support, while a structured supply chain ensures critical components are readily available - an essential factor in remote or demanding environments.

Training is a central pillar of the model. Operators and maintenance personnel receive structured onboarding that extends beyond system operation to data interpretation and performance optimisation. When teams understand both the technology and its analytical value, adoption deepens and return on investment accelerates.

Looking toward 2026 and beyond, the strategic focus centres on expanding

integration and embedding data-driven practices across more sites. Enhanced interoperability with plant management systems, ERP platforms, and maintenance software will enable end-to-end operational visibility. Hardware development continues to prioritise resilience, ensuring systems withstand dust, heat, vibration, and variable power conditions common across African climates.

Expanded training programmes will strengthen skills development at operator and supervisory levels, while collaborative partnerships with mining houses and infrastructure projects will demonstrate measurable improvements in load accuracy, safety performance, and cost efficiency at scale.

The broader impact of this shift is both operational and strategic. Precision in payload measurement compounds over thousands of cycles, reducing waste and equipment wear. Real-time visibility across fleets enables management to move from reactive troubleshooting to proactive optimisation. Standardised metrics reduce variability, improve forecasting accuracy, and support smarter capital allocation.

For operators on the ground, immediate feedback reduces rework and supports consistent productivity. For site managers and executives, consolidated dashboards provide clear oversight across locations. Procurement and maintenance leaders can justify investment decisions using quantifiable performance indicators such as uptime, payload accuracy, and maintenance trends.

Ultimately, mining and quarrying operations in South Africa and across Africa are progressing toward greater digital maturity. Converting operational data into actionable intelligence strengthens safety, efficiency, and profitability in an increasingly competitive global market. Through the integration of real-time smart scales, cloud-based analytics, and comprehensive local support, the transition from payload to profit becomes not just a strategy, but a measurable reality. ●



## MOBILITY AS A STRATEGIC ADVANTAGE FOR MINES AND QUARRIES

As mines, quarries and aggregate producers face rising costs, tighter margins, skills shortages and increasing pressure to improve safety and reduce their environmental impact, mobility is emerging as one of the most effective levers to improve operational resilience.

According to leading global manufacturer Astec Industries, equipment like the Astec GT205 mobile screen, GT125 mobile jaw crusher, the newly introduced FT2650 mobile jaw crusher, FT200 OC track cone crusher and GT165 scalper are increasingly sought after by astute operations recognising the benefits they offer in terms of flexibility, lower operation costs and improved safety compared to traditional, fixed installations.

Astec Industries product sales manager Philip Saunders expands on the advantages: “By allowing material to be processed directly at the extraction point, mobile units eliminate the need for extensive haulage, significantly reducing fuel consumption, labour and maintenance expenses. Mobile equipment typically has a lower upfront cost compared to building a fixed, stationary crushing plant. Productivity is increased and overall operational efficiency boosted by eliminating the downtime associated with waiting for haul trucks. Mobile equipment

boasts resale value and can be easily relocated to new projects, holding higher residual value.”

Saunders states that when it comes to operational flexibility and efficiency, mobile equipment delivers. “Because mobile plants, crushers and screens can be moved to the material, they are ideal for operators managing multiple, smaller or remote sites. They offer rapid deployment. Mobile plants typically offer significantly faster setup times than stationary alternatives – a matter of minutes and hours upon arrival of the units on site, rather than weeks and months, enabling quicker, immediate revenue generation.

### Safety and environmental benefits

“By reducing haul truck traffic on-site, mobile equipment directly lowers the risk of accidents. It also benefits the environment. Since the transport requirements are lower, carbon emissions, noise and dust are reduced. It is also simpler to add, remove, or upgrade mobile units to change the process or



increase capacity compared to modifying a stationary plant.”

Astec mobile incline screen plants have an array of features for maximum screening efficiency and production. “They are engineered to provide higher production capacities and more efficient sizing than comparable screens,” Saunders explains. “Our mobile plants combine heavy-duty screens with industry-leading conveyor heights. A large range of media provides flexibility for a variety of applications.”

The GT205 is a 5' x 20', track-mounted plant featuring a conventional screen on the top deck and a high-frequency screen on the bottom deck. The unique combination of high frequency and conventional screens in one self-contained unit puts more energy into the screening process, creating a powerful machine capable of increasing capacity by up to 50 percent on the bottom deck.

The GT205's large screen box enables the production of high volumes of material when producing straightforward products such as G5. But, with the three-deck four-product conveyor setup, there is an element of finesse available when coupled with the height and angle adjustable screen box, Saunders explains. “This functionality allows the quarry to maximise high quality low yield products such as 7 and 10mm surfacing stone.”

The three-deck mobile unit is fitted with a 5 x 20 screen and a Caterpillar C4.4 129 HP Tier III diesel engine. The screen's gradation control allows for reclaiming fines in both wet and dry applications. Plant capacity is rated at up to 600 tph, depending on application and material conditions. With some units achieving in excess of 800TPH with modifications and upgrades for special applications.

### **Mobile jaw is equally effective for aggregate and recycling applications**

Astec's mobile jaw plants are engineered for maximum jaw crushing mobility and production efficiency. Featuring heavy-duty Vanguard and Pioneer-series jaw technology, these plants are designed to deliver up to 25% more capacity than comparable competitive models, depending on application and configuration.

Astec's GT125 mobile jaw crusher is equally effective in aggregate and recycling applications. This crusher is making its mark around the world, in applications that include producing and recycling aggregate. The GT125's large, dynamically balanced, heavy-duty flywheels produce up to 33 percent more inertia than competitive models, leading to a reduced cost per ton over the lifetime of the machine. The crusher's large, 32mm

stroke processes more material than competitive models, increasing production and reducing operating costs. A simple manual folding head section on the discharge conveyor reduces the footprint of the machine, reducing shipping costs.

Astec has also recently introduced the larger FT2650 mobile jaw plant into its local South African offering, expanding its tracked jaw range for higher-capacity applications. The FT2650 incorporates a 50" x 26" (1 270 mm x 660 mm) Vanguard jaw crusher. Designed for contractors and producers requiring greater primary throughput, the FT2650 integrates hydraulic CSS adjustment, a robust tracked chassis and real-time monitoring systems to support consistent high-volume production in demanding quarry and mining environments.

The Astec FT200 OC track cone crusher incorporates a Kodiak K200+ cone with a high-efficiency roller bearing design, delivering improved mechanical efficiency and reduced operating costs. The unit features remote closed-side setting adjustment, interchangeable chamber configurations and a low-impact tramp relief system that protects the crusher from overload events. A variable-speed hydraulic drive and automated feed regulation support consistent product quality and throughput, while precision balancing and protected internal counterweights enhance long-term reliability.

The rugged, exceptionally portable Astec GT165 scalping screen offers ideal gradation control for recycled, crushed stone, demolition and topsoil applications. This track-mounted screen was designed as a tool for overburden, to scalp ahead or behind a primary crusher, as well as screen a wide array of materials, from aggregates to recycle to organic materials.

“While mobile equipment is generally ideal for short-to-medium-term projects or to augment large, long-term, fixed operations, its portability, lower labour requirements and ability to keep up with an advancing site make it a critical tool for modern, efficient and profitable operations,” Saunders concludes. ●



ACE is engineered for unparalleled security and features a robust dual locking mechanism that ensures maximum reliability.

## REDEFINING SCREENING MEDIA ATTACHMENT SYSTEMS FOR FASTER, **SAFER CHANGEOUT**

Hand and finger injuries remain one of the most common safety concerns in mining, often occurring during physically demanding maintenance tasks. To help address this risk and remove potential safety hazards, Multotec has developed a range of hammer-less screening media attachment systems that significantly reduce the amount of hammer blows traditionally required when installing or removing screen media.

**D**esigned for faster, easier changeouts while lowering the number of hammer blows needed, these systems not only make the process quicker and easier for maintenance, but also significantly improve operator safety, reducing the risk of injuries, fatigue and unplanned downtime in demanding mining environments.

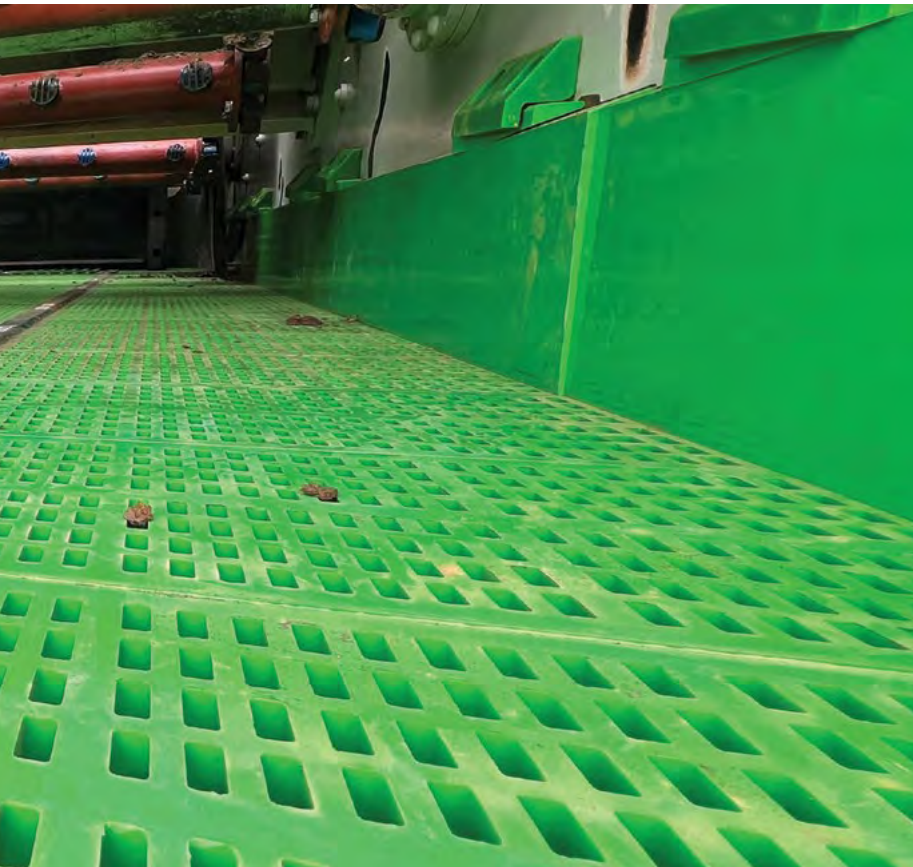
“Safety is at the heart of every innovative solution we design,” says Denzyl Macauley, Screening Support Manager at Multotec. “By reducing hammer use during panel changeouts, we are directly addressing one of



Denzyl Macauley, Screening Support Manager at Multotec.



Jean Laurens, Screening Support Engineer at Multotec.



to fasten modular screen panels to support frames on mineral processing equipment such as trommels and vibratory screens. Each panel typically requires multiple hammer blows per pin, as well as additional tools such as screwdrivers and crowbars. The removal process is also two-step, which increases both time and risk. These tasks are often carried out in confined and ergonomically challenging spaces.

For maintenance personnel, this creates multiple safety hazards: from hand and finger injuries caused by missed hammer blows, to pinch points when holding pins in place during hammering, to repetitive strain from repeated, forceful exertion. In some cases, hot work such as flame cutting is required, which introduces additional burn and spark risks. In today's mining industry, where safety is non-negotiable, such risks not only endanger personnel but also contribute to unplanned stoppages and productivity losses from extended installation times.

### Invest in both safety and productivity simultaneously

As an alternative to this, Multotec's hammer-less attachment systems for screen media simplify static and vibrating screen media changeouts, making them faster, safer and more efficient. Instead of repeated hammering, panels can be clipped or snapped into place using just a few light hammer blows, or simple hand leverage. This minimises the force required, reduces the number of moving parts compared to conventional systems, and lowers overall maintenance effort and cost.

"By simplifying the process and reducing hammer blows, our latest attachment systems make screen panel changeouts faster, easier, and safer," explains Jean Laurens, Screening Support Engineer at Multotec. "That means fewer injuries, greater efficiency and less disruption to production," adds Laurens.

Furthermore, Multotec offers several latest-generation hammer-less systems for use on modular runner-type screens that accommodate interlocking, standardised screen panels. These systems can also be retrofitted to any existing screen decks or applications currently in operation.

The ERX system, designed for extremely heavy-duty applications, secures modular interlocking polyurethane or rubber panels using fixed clamping strips and a top locking strip. This eliminates the need for multiple bolts and nuts and removes hot

SNAPSHOT

Safety is at the heart of every innovative solution we design.

Multotec's hammer-less attachment systems for screen media simplify static and vibrating screen media changeouts.

ACE is engineered for unparalleled security, and features a robust dual locking mechanism that ensures maximum reliability.

The result is a safer working environment, faster maintenance, greater plant availability and improved productivity, fully aligned with the mining industry's growing emphasis on both safety and operational efficiency.

mining's most common safety hazards and helping to reduce the number of hand injuries on site," Macauley adds.  
Conventional attachment systems require repeated hammer blows



Designed for faster easier changeouts while lowering the number of hammer blows needed.

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**By simplifying the process and reducing hammer blows, our latest attachment systems make screen panel changeouts faster, easier, and safer.**

work such as grinding or cutting during changeouts.

The Y-LOK system is specifically tailored for Multotec trommel screens, where modular polyurethane or rubber screen panels attach via a snap-on mechanism along a Y-shaped groove rail system, enabling quick and secure installation with minimal hammering.

For general screen attachment needs, the CCX and HALO systems provide versatile clip-in and snap-on solutions suitable for applications ranging from sizing and dewatering to media recovery. These systems reduce reliance on tools, allowing single-person changeouts to be done by hand, while being compatible with all screen media materials.

Derived from the ERX series, Multotec's Adaptable,

Cost-effective, Ergonomic (ACE) fixing solution requires zero hammer blows, eliminating the risk of impact injuries during screen panel changeouts. The ACE panels lock in place with just hand pressure so there is no impact risk and no pinch points. By reducing physical effort, it lowers the risk of strain or injury, creating a safer, more ergonomic work environment.

Once in place, ACE is engineered for unparalleled security and features a robust dual locking mechanism that ensures maximum reliability. When paired with the top locking strip, it becomes virtually fail-proof, staying securely in place even where other fastening solutions have failed. This exceptional resilience makes the system the most reliable solution on the market.

When the time comes for

removal, ACE requires no screwdrivers or pry bars. Multotec's engineered, battery-powered tool makes panel removal simple, fast, and safe, which is the smarter way to get the job done.

Together, these advanced attachment systems demonstrate Multotec's focus on putting personnel safety first while streamlining changeouts. By reducing hammering and simplifying installation, they lower the risk of hand injuries and pinch points, cut down on repetitive strain and decrease operator fatigue, improving alertness and morale. The result is a safer working environment, faster maintenance, greater plant availability and improved productivity, fully aligned with the mining industry's growing emphasis on both safety and operational efficiency.

Available through Multotec's global branch network, these attachment systems reflect the company's strong commitment to innovation and safety. They give mines a practical, proven way to reduce injuries, improve worker conditions and achieve higher productivity during routine maintenance. ●



**Committed to our  
people, who are  
committed to  
your future.**

At the heart of Multotec is a commitment to global investment in the people, processes and places that drive the mineral processing industry forward.

With 50 years behind us, we will continue to partner with our industry, the people in it and the people it serves.

**It's Multotec Unlimited.**



**MULTOTEC**

[www.multotec.com](http://www.multotec.com)



Weir hosted a number of customers at its Alrode operation, welcoming them to the new Screens Heavy Bay facility to showcase its enhanced screen manufacturing capabilities.

## SA TAKES THE LEAD AS GLOBAL HOME OF WEIR'S ENDURON® ELITE SCREENS

South Africa has cemented its position as a global centre for the production of Weir's cutting edge ENDURON® Elite banana screens. Backed by major infrastructure investment at Weir's Alrode facility in Gauteng, this site is now the first in the world dedicated solely to manufacturing this advanced new range.

**T**he Alrode expansion adds a further 1 600 m<sup>2</sup> of dedicated production space under roof, equipped with two 63 ton gantry cranes operating at a clearance height of 18,5 metres, according to Alandré van Vuuren, Integrated Supply Chain Director at Weir. This strategic upgrade was driven by a landmark £53-million contract awarded to Weir by Barrick's Reko Diq copper-gold project in Pakistan, which includes the supply of fine grinding, separation, and tailings solutions.

"The advanced technological capability and rigorous quality assurance at our Alrode plant - together with our robust local

and regional supply chain - enabled us to manufacture the first two ENDURON® Elite screens even before completion of the expansion," says Van Vuuren. "We already had the specialised expertise and equipment in place, including a laser facility capable

of cutting the massive 12 m by 5 m side plates. In parallel, we ran a targeted supplier development programme to further strengthen and empower our local supply partners."

The outcomes of this process were rigorously assessed and



**The advanced technological capability and rigorous quality assurance at our Alrode plant - together with our robust local and regional supply chain - enabled us to manufacture the first two ENDURON® Elite screens even before completion of the expansion.**



The new heavy bay screen manufacturing facility at Weir Alrode is now producing the ENDURON Elite double deck banana screens for the Reko Diq order.



The recent expansion at Weir Alrode, which included the addition of a heavy bay screen manufacturing facility, has added a further 1 600 m<sup>2</sup> of dedicated production space under roof.



Alandré van Vuuren, Integrated Supply Chain Director at Weir.

audited by both an independent third party and Weir's own technical team, clearing the way for the expansion which commenced in early 2025.

Construction has required substantial earthworks and piling, with excavations reaching two storeys below ground to accommodate the concrete and steel structure of a 1 000 ton plinth. This specialised plinth is engineered to absorb the intense vibration forces generated by the exciters during product testing.

The expansion has created two dedicated assembly stations for the high capacity double deck ENDURON® Elite screens – each weighing nearly 50 tonnes, with deck dimensions of up to 4,3 m wide by 8,5 m long.

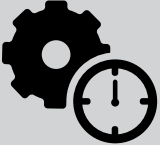
“This expansion marks a significant boost to South Africa's manufacturing capacity,” he says. “Facilities with heavy engineering capability and crane clearance at these heights are rare in the country, yet they are essential to support the ambitious manufacturing plans we are rolling out at Alrode.”


The upgraded facility enables the safe and efficient assembly of large screen components such as the subframe, screen body, screen deck and exciters, with completed units reaching heights of over 15 metres, Van Vuuren notes.


The new production bays will have the capacity to manufacture at least two ENDURON® Elite screens per month – without disrupting Alrode's ongoing output of small, medium and large screens across the broader ENDURON® range.

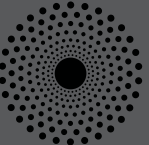
“Our production for the first half of 2026

## SNAPSHOT

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Weir is advancing the development of its Alrode plant in line with its strong sustainability commitments, with the expanded facility serving as one of the company's pilot sites for water-based paint application.
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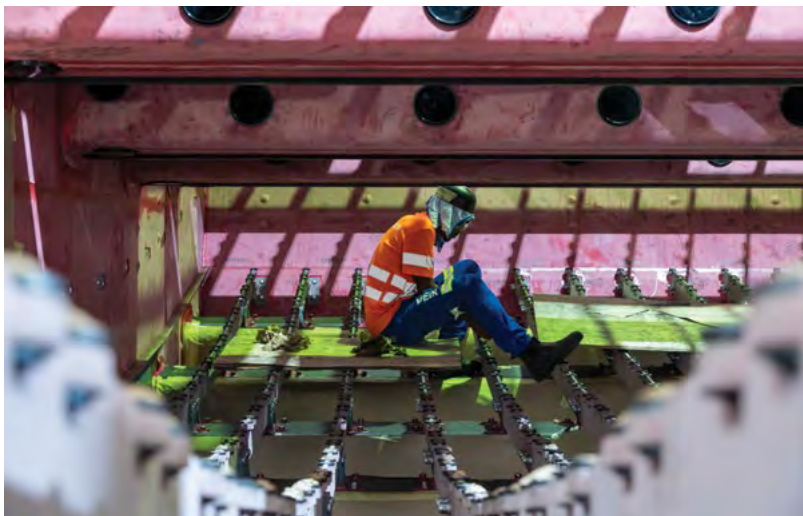
While most of the ENDURON® Elite screens produced at Alrode will be destined for export, nearly all components and materials are sourced locally.



Construction of the new heavy bay screens manufacturing facility commenced in February 2025, with the project requiring substantial earthworks and piling to prepare the site for development.



The new Screens Heavy Bay facility at Weir Alrode was opened recently by Bridget Ledwaba, Managing Director Weir Africa, and Ryan Hilton, Regional Managing Director - EMEA.



The expansion at Weir Alrode with the construction of its new heavy bay screen manufacturing facility opened up around 40 new positions in screen assembly, hand lining and painting.

will be dedicated to fulfilling the Reko Diq contract, but market interest in our larger ENDURON® Elite screens is already strong," he says. "We anticipate ramping up production soon and have deliberately designed the facility to accommodate future capacity upgrades as demand grows."

Weir is advancing the development of its Alrode plant in line with its strong sustainability commitments, with the expanded facility serving as one of the company's pilot sites for water-based paint application. This shift helps lower carbon emissions across both the production process and supply chain, he notes, supporting Weir's global target of reducing carbon emissions by 50% by 2030.

"The facility is running entirely on renewable energy from a solar power generation system - with the only exception being the variable speed drive used to start up the screens," he says. Van Vuuren emphasises the broader economic benefits of the expansion, from boosting local procurement and export earnings to creating jobs and developing skills. While most of the ENDURON® Elite screens produced at Alrode will be destined for export, nearly all components and materials are sourced locally. ●

# THE POWER OF **YELLOW** IRON



AGILITY MEETS DURABILITY.



**JOHN DEERE**





With three scalable modular sand plant configurations operators can align production capacity with real market demand.

## THE MODULAR SAND SHIFT

As pressure mounts on natural sand resources and construction demand accelerates, manufactured sand is rapidly becoming a strategic priority for quarry operators across Southern Africa. According to James Atkins, Product Specialist at Pilot Crushtec, the shift is being driven by a combination of regulatory reform, environmental responsibility, and the need for predictable, high-quality aggregate production. Wilhelm du Plessis reports.

### Regulatory pressure and rising construction demand

Two powerful forces are reshaping the sand market. The first is regulatory tightening around river and estuary sand mining. Environmental legislation such as the National Environmental Management Act, along with stricter municipal permitting and environmental management requirements, have placed increasing scrutiny on natural sand extraction.

River sand is a finite resource. Mining in watercourses disrupts ecosystems, affects water quality, and creates long-term environmental damage. Permitting processes

are becoming more complex, compliance requirements more demanding, and enforcement more active. As a result, operators are being steered toward alternatives that are environmentally responsible and legally sustainable.

The second driver is market demand. Construction activity across the region has shown renewed momentum, fuelled by urban expansion, infrastructure upgrades, and private development. Manufactured sand offers a consistent, engineered product that meets tighter grading and quality requirements demanded by modern construction standards.

"There is definitely increased demand," says Atkins. "As

regulations tighten around natural sand mining, and as construction activity grows, manufactured sand becomes the more reliable and compliant solution."

In addition to compliance advantages, manufactured sand provides pricing certainty and the ability to locate production closer to end markets. Unlike river sand, which must be transported from specific extraction points, manufactured sand plants can be positioned near construction hubs, reducing transport costs and improving supply efficiency.

Recycling is also contributing to growth in this space. Demolished concrete and other construction waste can be processed into usable sand and aggregate products, supporting circular economy principles and reducing landfill pressures.

### Modular design versus conventional fixed plants

Traditional fixed sand plants are typically bespoke projects. Operators engage engineering houses to design and construct site-specific installations, often



James Atkins, Product Specialist at Pilot Crushtec.

involving extended design lead times, significant civil works, and high upfront capital expenditure.

Pilot Crushtec's modular sand-making plants follow a different philosophy. The systems are pre-engineered, drawing on more than three decades of crushing and screening expertise. Rather than starting from scratch with each installation, the company offers proven plant configurations that can be deployed rapidly and adapted to site requirements.

"The design work has effectively already been done," explains Atkins. "We know what works. That reduces both risk and cost for the customer."

One of the most significant differences lies in civil requirements. Modular plants are designed to operate on compacted ground with minimal concrete foundations. Where civil works are required, they are limited to small areas. This reduces installation timelines and lowers upfront capital exposure.

The modular systems are also containerised for transport. Plants are assembled and tested before dispatch, then broken down into container-friendly modules for shipping. This simplifies logistics for both regional and international customers. Upon arrival, installation can either be handled by the customer using detailed documentation or commissioned by Pilot Crushtec's SupportLink teams.

Importantly, modular plants are not tied to a single project. They can be dismantled, relocated, and redeployed with relatively low establishment and disestablishment costs. For smaller operators or contract



The IC50 impact crusher optimises performance in real time, delivering consistent product quality, improved safety and maximum plant efficiency.



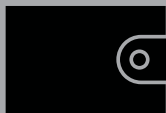
## SNAPSHOT



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producers, this mobility offers a major financial advantage.

### Flexibility, efficiency and product quality

Modular architecture supports flexibility and scalability. Additional modules, crushers, or conveyors can be integrated as production requirements grow. Capacity can therefore be increased incrementally rather than through large, once-off capital expansions.

At the heart of Pilot Crushtec's sand plants are vertical shaft impact crushers, widely recognised for their shaping and sand making capabilities. These machines play a central role in improving particle shape and achieving tighter grading control, both critical in high-quality manufactured sand production.

"Our vertical shaft impact crushers are known for their efficiency," says Atkins. "They offer strong kilowatt per tonne performance, which means you



The Pilot Crushtec SMP200 modular plant combines a feeder, conveyors, screens and the Twister VS200 VSI crusher to process 5 to 45 mm feed and produce up to 55 mtp of minus 5 mm sand.



The Pilot Crushtec SMP300 integrates a feeder, conveyors, screens and the Twister VS350 VSI crusher to process 5 to 60 mm feed and produce up to 100 mtp of -5 mm sand.



Designed for minimal civil works, modular installations can operate on compacted ground, reducing installation time and upfront capital.

are getting effective reduction and shaping without excessive energy consumption."

Overall plant efficiency can be viewed through the lens of availability, throughput, and utilisation. Throughput is determined by feed material and configuration, but availability is where design quality becomes critical. Pilot Crushtec uses premium global components to enhance reliability and reduce breakdown frequency.

Stockholding of key parts and

access to internationally recognised component brands further support uptime. Faster access to spares and technical support reduces downtime and protects productivity.

Energy supply is also adaptable. While plant equipment operates electrically, power can be sourced from the grid or from diesel generators depending on site conditions.

The result is a system that delivers consistent output quality, reliable performance, and operational predictability. Manufactured sand

plants therefore not only meet regulatory expectations but also support improved plant management and cost control.

### Lower risk entry and scalable growth

For emerging quarry operators, capital risk is a central concern. Many start-ups enter the market using second-hand or incorrectly specified equipment, which may appear cheaper initially but often results in higher maintenance costs and unpredictable output.

Modular sand-making plants offer a more secure entry point. Pre-engineered configurations provide known performance parameters, allowing customers to budget against realistic production expectations. Proven designs reduce technical uncertainty, and incremental expansion options allow operators to align investment with market demand.

Pilot Crushtec offers three modular sand plant configurations. The SMP100 incorporates the VS100 vertical shaft impact crusher and is typically suited to smaller operations seeking a lower capital entry point with efficient output. The SMP200 features the VS200 crusher and offers increased capacity for mid-tier producers. At the higher end, the SMP300 integrates the VS350 crusher, delivering greater throughput for larger operations requiring higher production volumes.

Each configuration is designed around specific throughput requirements while maintaining consistent shaping performance and grading control. The modular nature of these systems ensures that operators can scale from entry-level production to higher capacities as demand grows.

As sustainability, compliance, and operational efficiency become central to aggregate production across Southern Africa, modular manufactured sand plants are gaining traction as a practical and forward-looking solution. By combining proven crushing technology with flexible, scalable design, Pilot Crushtec's systems provide quarry operators with a compliant, efficient, and lower-risk pathway into the expanding manufactured sand market. ●

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# L 566

# Wheel loader

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The innovative Liebherr driveline significantly increases working efficiency. Faster loading cycles, high tipping loads and high machine availability increase material handling capacity.

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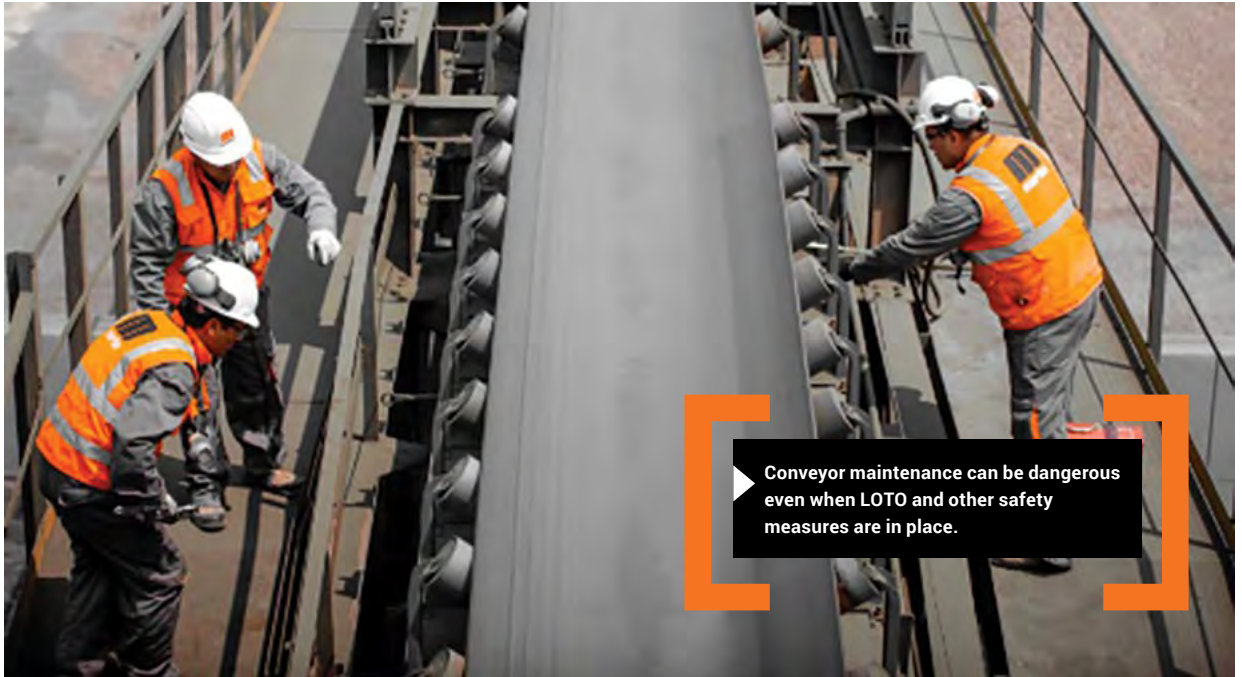
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# OPTIMISING RESULTS AND ROI FROM CONVEYOR SAFETY TRAINING

The hours spent training production and maintenance teams can lead to variable results. They might just tick the boxes without providing a return on investment. Or they can enhance safety, foster team building, and develop a deep understanding of the equipment that boosts efficiency and uptime. By R. Todd Swinderman, President Emeritus/Martin Engineering.



Conveyor maintenance can be dangerous even when LOTO and other safety measures are in place.

**T**raining should be robust and encourage problem-solving using modern methods and standards. Companies that prioritise safety experience fewer safety incidents, less regulatory oversight, and higher productivity and profits.

When it comes to conveyor belts, a one-day training session can serve as a refresher, but it is recommended that staff complete a comprehensive course lasting at least two days. Conveyors are as complex as they are crucial to operations, and training should include a mix of classroom and hands-on learning, followed by a pilot programme to encourage team building and gauge results.

## The problem

A commitment to safety starts at the top with corporate culture. A “production-at-all-costs” approach means safety concerns are always present. Bad habits and injuries

often stem from three things:

- Lack of funding.
- An understaffed maintenance department.
- A ‘run-till-broke’ mentality.

Good safety habits require training and the patience for extra steps. Cutting corners and labelling it “efficiency” can lead to serious injuries, low morale, downtime, and lost production.

## Basic training

Everyone who operates, cleans, or maintains conveyors should be trained on the hazards of bulk material handling. Basic training helps staff identify problems and resolve them safely. Appropriate safety training emphasises a basic understanding of conveyor design and operation, as well as the Lock-Out Tag-Out (LOTO) procedures required for working on and around the system.

## Advanced training

Over time, production demands

cause the conveyor belt speed and capacity to reach beyond the original design specifications. Systems are incrementally modified to minimize problems associated with the demands. Advanced conveyor design training for engineers and mechanics is critical for diagnosis and the development of updated solutions. No two conveyors are identical, so adhering to standard design methods allows a technician to make adjustments that another can recognise and understand.

## Day one

A walk down “problem belts” before the training helps the instructor focus on site-specific problems and the management’s expectations. The first day starts in the classroom with the class reviewing typical problems, discussing challenges, and the best practices of safely addressing them. The class identifies a couple of problem conveyors and splits

into small teams. Each team examines the same problem and brainstorms solutions.

### Day two

The class reviews and discusses root causes, solutions, and procedures. Once the teams reach an agreement, they prepare a short presentation using the knowledge they gained. The presentations may also include an estimate of the cost of the proposed solutions.

Management is then invited to listen to the team presentations, ask questions, and show a commitment to safety and communication. By making the presentations, trainees display knowledge and support for the solutions. It is critical at this step that the manager(s) who attend the presentations have the authority to act on the proposals and are willing to commit to a pilot programme to demonstrate that theoretical results can be translated into reality.

### Pilot programme

One or more conveyors from the presentation are selected for a pilot programme. Usually, the results of the pilot programme are immediately noticeable. A lapse in maintenance affects the pilot results, so extend the test period to the next scheduled shutdown, with periodic inspections and adjustments made by the equipment manufacturer.

It is incumbent upon management to take safety and maintenance training as seriously as the staff, listen to employees' concerns, and fix the problem correctly the first time. As research has shown, companies that prioritise safety, training, and



In-class sessions should transition to on-site, hands-on training, supported by online content for access afterwards.



Advanced conveyor training highlights the relationship between equipment, efficiency, and safety.



Third-party inspection ensures the integrity of pilot results.



**A lapse in maintenance affects the pilot results, so extend the test period to the next scheduled shutdown, with periodic inspections and adjustments made by the equipment manufacturer.**

updating equipment enjoy fewer safety incidents, less regulatory oversight, higher productivity and greater long-term profits.

The online Martin® Foundations™ Learning Center draws on the collective knowledge and expertise gathered over 80+ years of solving bulk-handling challenges. Aimed at apprentice technicians and experienced engineers alike, the non-commercial information is offered at no charge and is accessible by computer, tablet, or smartphone. ●

# TRU-TRAC TARGETS **HIDDEN COSTS OF MISALIGNMENT AND SLIPPAGE**

Conveyor belt misalignment and roller slippage remain among the most persistent and costly problems in mining and bulk materials handling operations. While these issues are often treated as unavoidable, the real costs can be significant - from lost tonnes and spillage clean-up to premature belt replacement and emergency downtime. Leader in conveyor belt solutions, Tru-Trac continues to focus on helping mines and other operations address these hidden costs directly.

**"C**onveyors are the arteries of any mine and the costs of inefficiency add up quickly," Guy Fitt, National Sales Manager at Tru-Trac, says. "When you calculate the production losses, unplanned maintenance and shortened belt life caused by misalignment the savings from properly aligned systems are substantial. Our Apex Series and Grip-Trac range are designed to pay for themselves many times over during the life of the conveyor."

Belt mistracking is not just a maintenance issue. It can stop production, force emergency shutdowns and drive up operating costs through increased spillage, damage to structure and premature belt wear. The Apex Series trackers have been designed to minimise these risks by providing faster correction and more stable belt alignment, even under fluctuating loads and speeds.

A key feature is the use of adjustable wing rolls on the trough units, giving operators greater control in stabilising the belt path. This innovation reduces the likelihood of spillage and uneven wear while extending the working life of the belt.

"The Apex design is a rethink of how trackers interact with the belt," Gerhard Strydom, Technical Manager at Tru-Trac says. "It gives mines far more control in maintaining stability, which directly impacts uptime and cost reduction."

## Tackling slippage

Slippage between belt and rollers is another major contributor to lost productivity and roller wear. Traditional lagging solutions, often relying on standard rubber or polyurethane compounds, tend to wear quickly in demanding mining conditions. Tru-Trac's Grip-Trac lagging addresses this through a reinforced rubber compound with greater wear resistance,

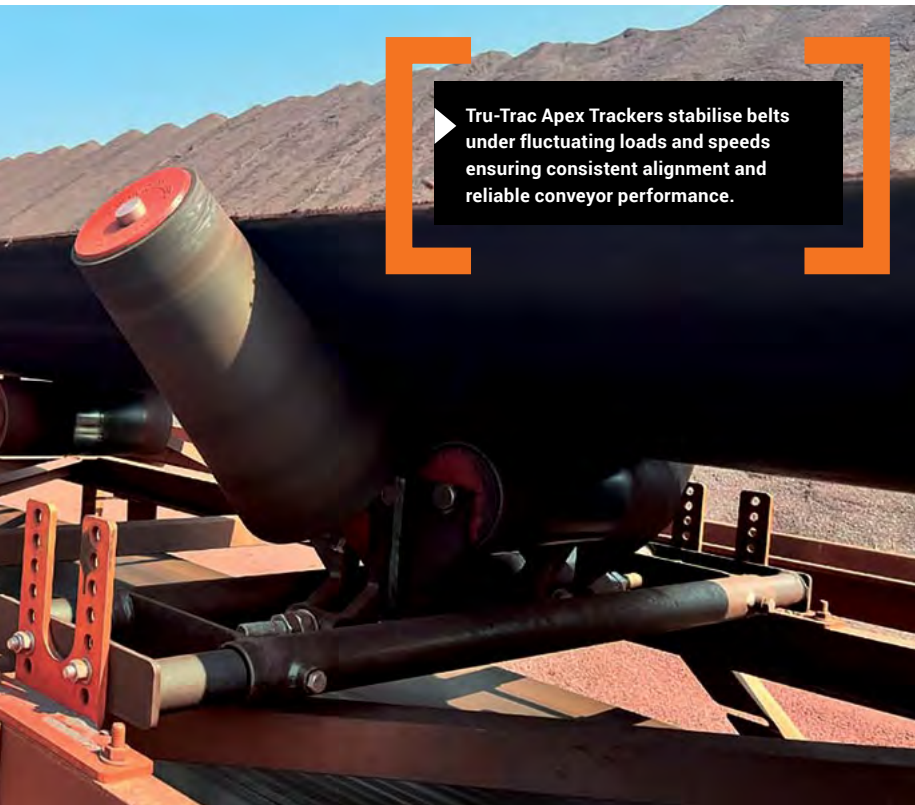


combined with a tread pattern specifically designed for mining applications.

The pattern improves traction, disperses water and fines and reduces heat build-up and uneven wear. It also acts as a built-in wear indicator, giving maintenance teams a clear signal for timely intervention. "This extends service life and reduces the risk of unexpected

”

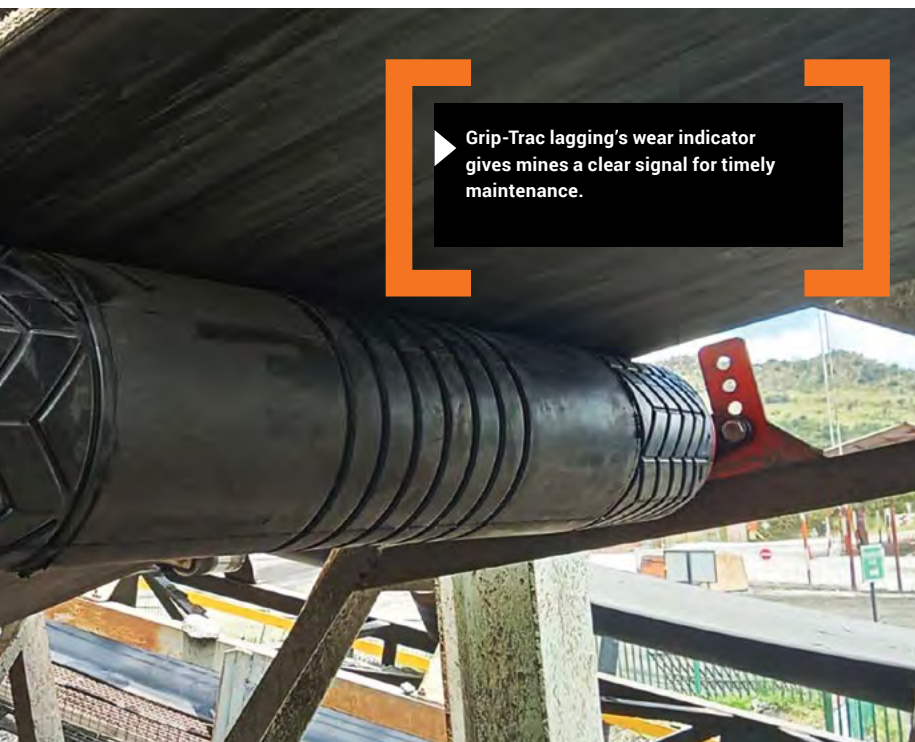
**We focus heavily on material selection, machining tolerances and assembly processes to ensure consistent reliable performance.**



Tru-Trac Apex Trackers stabilise belts under fluctuating loads and speeds ensuring consistent alignment and reliable conveyor performance.



Guy Fitt, National Sales Manager at Tru-Trac.



Grip-Trac lagging's wear indicator gives mines a clear signal for timely maintenance.



Tru-Trac's Apex Series Trackers and Grip-Trac lagging tackle the hidden costs of belt mistracking and slippage, delivering more stable, efficient and reliable conveyor performance.

failures. It allows mines to plan maintenance, rather than react to breakdowns," Strydom notes

#### Built to last

According to Franco Cloete, Manufacturing Manager at Tru-Trac, the commercial value of these products lies as much in the way they are built as in their design. "Every Apex Tracker and

roller with Grip-Trac lagging is manufactured to exacting standards in our South African facility," he says. "We focus heavily on material selection, machining tolerances and assembly processes to ensure consistent reliable performance. Our customers can trust that these are not short-term fixes but rather long-term solutions."

Tru-Trac's belt tracking and lagging technologies have been proven across multiple continents from chrome operations in South Africa to coal mines in South America and iron ore operations in Australia. The company's global footprint demonstrates that these solutions perform reliably in diverse and demanding environments. ●

# VOLVO CONSTRUCTION EQUIPMENT'S NEW-GENERATION WHEEL LOADERS

Babcock has announced the local launch of Volvo Construction Equipment's new generation wheel loaders in South Africa, bringing enhanced productivity, fuel efficiency and operator comfort to customers across construction, quarrying, mining and material handling applications.



**T**he new generation range available locally includes the Volvo L150, L180 and L220 wheel loaders, each designed to perform in demanding operating conditions while supporting lower total cost of ownership over the machine lifecycle.

### Designed to deliver higher productivity

Volvo CE's new generation wheel loaders incorporate advanced load-sensing hydraulics to improve attachment responsiveness and reduce cycle times. Auto Bucket Fill technology enables faster, more consistent bucket filling, while automatic bucket levelling helps operators return the bucket

to a level position from both dump and curl modes for improved accuracy and repeatability. The integrated Volvo powertrain synchronises the engine, transmission and axles for optimal efficiency and performance. OptiShift technology, together with Volvo's patented Reverse-By-Braking (RBB) system, helps shorten cycle times, reduce fuel consumption and limit drivetrain wear in repetitive loading applications.

All models are compatible with HVO (Hydro-treated Vegetable Oil) fuel, supporting customers' decarbonisation goals without requiring engine modifications.

### A step change in operator comfort

The redesigned cab environment focuses on visibility, ergonomics and ease of use. The intuitive Volvo Co-Pilot interface allows operators to manage machine functions, productivity tools and comfort settings through a single display, with the ability to view up to four widgets simultaneously.

Additional improvements include enhanced armrests, increased storage, multiple USB charging points, improved climate control and a choice of seating options, including heated and ventilated seats. Optional Comfort Drive Control (CDC) enables single-lever steering to reduce operator fatigue during long shifts.

”

As the authorised Volvo Construction Equipment dealer in South Africa, Babcock is proud to introduce this new generation of wheel loaders to the local market.

**Built with safety and serviceability in mind**

Service access has been improved through a tiltable cab and a new service platform with harness anchor points, making routine maintenance safer and more efficient. Under-grille lighting improves visibility during refuelling, particularly in low-light conditions.

Safety features include Volvo Smart View with 360-degree visibility, an upgraded Collision Mitigation System, high-visibility lighting, automatic door opening and robust handrails — all

contributing to safer operation on busy sites.

**Smart digital solutions for modern fleets**

Customers can further enhance productivity through Volvo's digital solutions suite. Load Assist provides on-board weighing and operator coaching, while Load Ticket enables seamless data transfer from the machine to the office, simplifying invoicing and reporting. CareTrack telematics and Site Operations tools support uptime monitoring, fleet optimisation and

mixed-fleet management.

**Flexible funding to support customer investment**

To support customers' capital investment decisions, Babcock offers access to tailored funding and financing solutions through Volvo Financial Services. These solutions are designed to align equipment investment with operational and cash-flow requirements, enabling customers to deploy the latest technology while managing risk and long-term costs more effectively.

**Local support across the equipment lifecycle**

“As the authorised Volvo Construction Equipment dealer in South Africa, Babcock is proud to introduce this new generation of wheel loaders to the local market,” said Quintin O’Reilly, Head of Sales - Equipment, Babcock. “These machines deliver tangible gains in productivity, efficiency and operator comfort. When combined with Babcock’s national service footprint, parts availability and flexible financing options, they offer a compelling solution for customers focused on long-term performance and value.” ●



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## BUILT TO HAUL. ENGINEERED TO ENDURE.

Gert Agenbag, Product Planning & Marketing Senior Manager at Hino South Africa; Alwyn Engelbrecht, Sales Engineer at Volvo Trucks South Africa; and Olaf Petersen, Vice President: Sales & Marketing, together with Ziyad Gaba, Vice President: Customer Service, Parts and Value Chain at Daimler Truck Southern Africa, examine how modern tipper solutions are engineered for performance, durability and lower total cost of ownership in South Africa's toughest construction, mining and quarrying environments. **Juanita Pienaar reports.**

### Tipplers under pressure

In construction, mining and quarrying, few assets work harder than a tipper truck. Long hours, abrasive dust, extreme temperatures and punishing terrain demand more than raw power. Today, buying decisions hinge on total cost of ownership – from fuel efficiency and uptime to durability, resale value and aftersales support.

In response, manufacturers are delivering purpose-built tipplers tailored to local conditions,

combining heavy-duty drivetrains, advanced traction systems, predictive maintenance and strong support networks to maximise performance over long, demanding lifecycles.

### Matching the tool to the job

Hino South Africa takes a purpose-built approach, offering four dedicated tipper models across the 10 m<sup>3</sup>, 5 m<sup>3</sup>, and 3 m<sup>3</sup> segments. At the top end, the Hino 700 2841 AMT 6x4 serves as the flagship heavy-

duty tipper, powered by a 13-litre engine paired with a 16-speed ZF automated manual transmission. The drivetrain is reinforced with inter-axle differential locks and cross locks on both rear axles, delivering the traction and stability required on challenging terrain.

According to Agenbag, the focus is firmly on durability and real-world operating efficiency. Each model is “engineered to Hino’s exacting quality standards and specifically designed to perform



## SNAPSHOT



In construction, mining, and quarrying, few assets work harder than a tipper truck.



Fleet owners scrutinise total cost of ownership (TCO) more closely than ever, weighing fuel efficiency, uptime, durability, resale value, and aftersales support alongside outright performance.



South African operating conditions are unforgiving, and manufacturers are acutely aware that reliability is non-negotiable.



While diesel remains dominant, sustainability is increasingly shaping procurement decisions.

in the demanding and often harsh operating conditions of the South African market”.

Volvo Trucks South Africa, meanwhile, positions its construction range firmly around application-specific flexibility. As Engelbrecht explains, “In an industry as tough and demanding as construction, there are no one-size-fits-all tools. Trucks are no exception. Whether it’s higher horsepower, payload, traction control, better manoeuvrability, or lower CO<sub>2</sub> emissions, ultimately it comes down to finding the right tool for the job.”

Within Volvo’s portfolio, the FH and FMX ranges are central to tipper applications in construction, mining, and quarrying, available in both on-road and off-road configurations depending on the territory and duty cycle. Volvo also offers battery-electric trucks for





the construction industry in South Africa, responding to growing demand for “vehicles with lower noise levels and zero exhaust emissions at and around urban construction sites”.

Daimler Truck Southern Africa (DTSA) completes the picture with a comprehensive lineup that includes the Mercedes-Benz Arocs 3336K/36, 3236B/51, and 4152K/51 for heavy-duty work, complemented by FUSO FJ26 variants for medium-duty tipping. As Petersen notes, these models are “engineered for heavy-duty performance and durability in demanding environments”, ensuring coverage across a broad range of construction, mining and quarrying applications.

### Built for harsh local conditions

South African operating conditions are unforgiving, and manufacturers are acutely aware that reliability is non-negotiable. From a Daimler Truck perspective, the emphasis is on rugged, practical engineering. DTSA’s tipper models are built on heavy-duty chassis and equipped with drum brakes for reliable stopping power in demanding environments. Stabiliser bars reduce body roll, hub reduction axles enhance traction and load-carrying ability, and differential locks improve control on slippery or uneven terrain. Dust-proof air filtration systems protect engines from fine particles, while protective grilles shield vulnerable components from stone impacts and branches.

Volvo echoes this focus on durability. Engelbrecht points out that construction trucks often face “heavy loads over rough terrain and muddy, unpaved roads”, while also needing to “operate around the clock” and manoeuvre safely in confined, high-risk environments.

The Volvo FMX exemplifies this philosophy. It is built with a robust drivetrain, increased ground clearance, reinforced axles and suspension, and a heavy-duty exterior designed to absorb punishment. “An iconic heavy-duty bumper, made from 3 mm high-grade steel, [is] there to shield the truck’s front from dents and broken headlights in any terrain,” says Engelbrecht. Axle capacities are equally impressive, with the front axle rated up to 10 tonnes and the bogie up to 38 tonnes.

### Performance that translates into productivity

Power, torque, and payload optimisation are central to productivity in tipper applications, but manufacturers are increasingly focused on how these elements interact with fuel efficiency and driveline longevity.

At DTSA, the flagship Mercedes-Benz Arocs 4152K/51 stands out for its advanced powertrain technologies. Petersen highlights its High Performance Engine Brake for improved braking performance on steep gradients, while Turbocompound technology “boosts engine efficiency and output, resulting in better fuel economy and enhanced productivity”.

Volvo’s approach remains centred on extracting maximum value from every litre of fuel. “All our models are designed with power, torque, fuel efficiency, and payload optimisation in mind,” Engelbrecht says. “Our solutions are to offer the best value to our customers, even in tipper applications.”

Hino’s strategy balances outright capability with low running costs. The Hino 500 1627 Tip MT, for example, has earned a strong reputation locally for “exceptional build quality, durability, and low running costs”, making it a preferred choice where uptime and TCO are critical decision factors.

### Technology that keeps trucks moving

Modern tipper operations rely heavily on technology to maximise uptime and reduce operator fatigue. Hino equips all its tipper models with Hino Connect as standard, providing fleet managers with detailed insights into fuel consumption, operating time, distance, and real-time diagnostics. This data-driven approach supports proactive maintenance and performance optimisation across diverse operating environments.

Volvo’s I-Shift transmission plays a central role in productivity under demanding conditions. Engelbrecht explains that it “helps operators get the best power and efficiency out of the truck’s



powertrain”, with optional crawler gears and heavy-duty software for extreme operations. Volvo Dynamic Steering further enhances control and comfort by filtering out bumps and reducing physical strain on the driver.

DTSA complements mechanical robustness with digital intelligence. Mercedes-Benz PowerShift 3 delivers smooth, precise gear changes, while standardised Fleet Management System interfaces and Mercedes-Benz Uptime enable predictive maintenance and early fault detection, reducing unplanned downtime.

### Lowering the total cost of ownership

Across all three manufacturers, TCO is a unifying theme. Hino reinforces its value proposition through custom-designed service plans and, from 2025 onwards, a standard six-year drivetrain warranty across all vehicles, providing customers with long-term cost certainty.

Volvo Connected Services lower total cost of ownership by using real-time vehicle data to run trucks smarter and longer. Telematics and remote diagnostics let fleets cut fuel use, reduce idling, and improve driving behaviour, while predictive maintenance prevents breakdowns and optimises service intervals. The result is higher uptime, fewer workshop visits, and a lower cost per kilometre over the truck’s life.

From a DTSA perspective, residual value plays a significant role. “One of the most significant contributions to customers is the high resale value of our trucks, driven by the strong brand reputation and durable build quality,” Petersen notes, translating into improved lifecycle returns.

### After-sales support where it counts

In sectors where downtime can bring entire operations to a halt, after-sales support is critical. DTSA’s support strategy is led by its Customer Service, Parts, and Value Chain division. As Gaba explains, the company offers 24/7 roadside assistance through its Service24H programme, supported by strategically positioned dealers, mobile service units, and a sophisticated Dealer National Inventory system to ensure rapid parts availability and reduced downtime.

Volvo Trucks operates an extensive national network of accredited workshops, staffed by Volvo-trained technicians and supported by genuine

parts backed by a two-year fitted parts warranty. “From proactive service planning to round-the-clock roadside assistance, Volvo Trucks helps you reduce downtime, cut admin, and stay in control,” Engelbrecht says.

Hino’s after-sales footprint includes 66 dealerships nationwide, daily parts delivery to Hino and Toyota dealers, and dedicated mobile service units that provide on-site assistance. This combination ensures “rapid turnaround times and dependable vehicle uptime – keeping businesses productive and vehicles on the road”.

### The next phase for tipper solutions

While diesel remains dominant, sustainability is increasingly shaping procurement decisions. Engelbrecht notes that “one of the biggest challenges facing the construction industry is the need to reduce carbon emissions and transition to Euro 5 or Euro 6 diesel drivelines”, with alternative fuels and electric solutions gaining traction, particularly in urban environments.

DTSA is seeing similar trends, with customers prioritising payload efficiency, safety compliance, telematics and sustainability through the lens of total cost of ownership. As Gerber succinctly puts it, “DTSA doesn’t just sell trucks – we deliver complete solutions that keep Africa moving.”

Hino, meanwhile, continues to focus on proven, purpose-built tipper solutions that prioritise durability, low running costs, and dependable uptime. With a dedicated local tipper range, nationwide dealer support, and the introduction of a standard six-year drivetrain warranty from 2025, Hino positions itself as a pragmatic, value-driven choice for operators working in demanding South African conditions.

In a market defined by hard work and harder conditions, modern tipper solutions are about far more than moving material. They are strategic assets, engineered to deliver productivity, resilience, and long-term value, load after load. ●

# HOW TO AVOID COMMON OPERATING ERRORS **THAT ARE COSTING YOU MONEY**

Wouldn't it be great if there were some easy ways to increase profitability without spending any money? Good news – there is! Garry Moore, Rokbak Customer Support Manager APAC, EMEA & UK, shares some easy changes you can make that will help to drive profits up.



## **Make sure daily checks are completed and service schedules are being adhered to**

Daily checks are critical to prolonging component life and avoiding breakdowns. Operators should perform pre-start inspections such as checking tyres, hydraulic lines, cables, lights and fluid levels daily. This allows any minor issues to be dealt with before they escalate. For example, insufficient fluid in the hydraulic tank could cause a serious problem, and not checking your tyre condition and pressures could lead to a blowout. These are both examples of where performing daily checks will save you time and money. Site managers should ensure operators have time to do this task and provide them with a checklist that requires sign-off to record that it has been completed.

As well as undertaking daily checks, it's important to conduct regular machine inspections to look for any early visible fatigue or wear issues. You should also follow service schedules. Some components need to be checked every 250 hours, others every 500, 1,000 or 2000. Correct maintenance will ensure you get the best productivity and results from your articulated hauler.

## **Load the truck correctly**

The truck should be loaded and unloaded on relatively firm, flat ground, and the material should be evenly distributed in the body to avoid spillage and the risk of the truck tipping over. It's important not to exceed your truck's payload capacity. Doing this adds stress, which will go into the frame, axles and tyres. It will increase the amount of money you spend on maintenance as well as your risk of downtime.

If you have an onboard weighing (OBW) system, which is optional on the Rokbak RA30 and RA40, make sure it's working correctly and that both the ADT and excavator or wheel loader operator loading the truck are familiar with the system. With Rokbak's Haul Track telematics system connecting to the Rokbak OBW system, any underloading or overloading can be easily identified. This combination of technology offers huge potential to monitor production management and costs for higher efficiency.

## **Maintain your haul roads**

If you don't properly maintain your haul roads, your articulated dump

truck could potentially get stuck in a rut, or you could damage the drivetrain. Haul routes should be walked when it's safe to do so and inspected regularly, and operators should raise any poorly maintained sections with management.

## **Avoid excessive speed and harsh braking**

Excessive speed and harsh braking not only increase fuel consumption, which adds to your operating costs, but also cause unnecessary wear on the braking and driving components. When going down a gradient, you should use the hauler's retarder systems to ensure smooth braking. Operators should be trained on how and when to use the different retarders in combination, such as the engine and transmission retarder, to reduce wear on the braking components.

Site managers and machine owners can check Rokbak's Haul Track telematics system daily to ensure there is no excessive speeding or harsh braking.

## **Ensure good communication and visibility on site**

Good communication is essential to site efficiency. The hauler and loading tool operators, as well as the ground staff, should be communicating via radio. This will help the operators be in the right place at the right time, avoid congestion and reduce wait times.

Maintaining optimal visibility will ensure high levels of safety and productivity. This means ensuring mirrors are clean, in good condition and correctly adjusted. Rear-view cameras must also be clean, with reverse alarms operational. Headlamps and beacons too, should be clean and operational. ●

# CATERPILLAR LAUNCHES THE NEW CAT® 707

With its 66-tonne maximum payload, the versatile new wide body truck design offers the option of standard or heavy-duty configurations and the choice of 40- or 42-m<sup>3</sup> sizes to match the material and jobsite conditions.



**B**uilt for long life and high uptime availability, the durable new Cat® 707 wide body truck features a fully integrated Cat powertrain, including a Cat C13 engine, Cat automatic transmission and proprietary Cat axles. With its 66-tonne maximum payload, the versatile new wide body truck design offers the option of standard or heavy-duty configurations and the choice of 40- or 42-m<sup>3</sup> sizes to match the material and jobsite conditions.

We have engineered our new wide body truck with a unique philosophy – it's built to be rebuilt, offering consistent mechanical availability and longevity through a second lifecycle, which can help lower operating costs.

With its foundation of reliable operation and a cost-effective rebuild option, the new 707 wide body has been engineered, manufactured and field-tested using the latest technologies to ensure the truck is ready for work. This is the first Cat wide body truck model in a new product family that broadens the Cat hauling systems portfolio.

## Durable performance

The 707 can be configured with the 400-kW Cat C13B engine to meet China Nonroad Stage IV emissions standards or the 358-kW C13, which emits equivalent to U.S. EPA Tier 3 regulations. Both options include a standard engine brake set at a high rating. The truck's six-speed automatic transmission can be equipped with an optional integrated hydraulic retarder. For reliability, the 707 features proprietary Cat axles, integrated Cat powertrain controllers, and Cat wiring and electric harnesses.

Three brake and retardation levels – integrated Cat engine brake, optional Cat hydraulic retarder, and parking and service brakes – provide superior downhill loaded control for enhanced safety and faster hauling cycles. The new 707 offers ideal pass matches with Cat 986, 988 and 988 XE loaders and Cat 350, 374 and 395 excavators for improved productivity.

The new wide body truck's left-side operator seat placement and optional right-side instructor seat provide easier operation and

comfort for the operator and trainer. The cab features sturdy, four-point mounting and protection is provided by a standard falling object protective structure (FOPS) and optional rollover protective structure (ROPS) for enhanced safety. An available reversing camera helps improve maneuvering safety. Automatic shifting with simple gear selection transmission controls helps to increase efficiency, and the truck's hoist system offers fast, 20-second raise and lower cycle times to quickly unload material.

## Low lifecycle costs

The fully integrated Cat powertrain components are mounted to a durable, reinforced chassis. When coupled with flexible Cat Customer Value Agreements (CVAs), customers can achieve higher uptime during the new truck's service life, while maintaining reliable mechanical performance and longevity through a second lifecycle.

Shutting down the truck safely, a ground-level engine shut-off switch stops fuel to the engine when activated. Grouped service points help customers spend less time and money on maintenance. The new 707 wide body truck offers parts commonality with other Cat machines with common C13 engine, CX31RT transmission and common cab. LED lights provide longer life and brighter illumination with less power consumption and are more resistant to vibration and water damage.

The new Cat 707 wide body truck is available for select regions with U.S. EPA Tier 3 equivalent and China Nonroad Stage IV emissions standards. Companies can contact their Cat dealer for truck availability in the region. ●



# ROBUST STAKEHOLDER PARTNERSHIPS AT THE HEART OF MINING EXCELLENCE

Collaboration among key stakeholders in Africa’s mining sector unlocks solutions to pressing challenges – like safety and environmental risks, skills shortages, rising operational costs, and price volatility – that is ambitious for any single entity to tackle alone.

**W**hen innovation emerges from such close partnerships, technology is also deployed effectively, ensuring seamless alignment with operational realities and fostering stakeholder trust.

The 2026 Investing in African Mining Indaba, which was held February in Cape Town, once again united stakeholders from across the continent’s mining value chain to deepen collaboration and build a more resilient, inclusive and prosperous future for African mining.

The event’s focus was on strong partnerships, aptly reflected in its overarching theme, “Stronger Together: Progress Through



As the authorised Volvo Construction Equipment dealer in South Africa, Babcock is proud to introduce this new generation of wheel loaders to the local market.

Partnerships”, which resonates with blasting, explosives, and mining chemicals solutions provider BME’s core ethos of ‘partnerships for shared innovation and problem-solving.’

Through its strategic global partnerships, BME offers forward-thinking mine-to-metals solutions that balance performance with responsibility. Delivering on its parent company Omnia Holdings purpose of “innovating to enhance life, together creating a greener future,” the company’s two core mining divisions, BME Blasting Solutions and BME Metallurgy, will be showcased its sophisticated technologies at the much-anticipated conference which underpin the full mining value chain.



### Partnerships that elevate mining

Seelan Gobalsamy, CEO of Omnia, said that the company collaborates with its stakeholders to advance new mining technologies, elevate operational excellence and foster trust with communities.

“Omnia remains committed to combining innovation with responsibility to deliver solutions that perform with excellence and contribute to sustainable mining,” he said. “In line with this commitment, BME continues to demonstrate a strong track record of delivering safe, innovative and quality solutions to its customers.”

He said that backed by Omnia’s

integrated manufacturing and supply chain capabilities, BME’s security of supply to customers and cutting-edge innovation had driven meaningful transformation in a sector that is positively leveraged to long-term global trends.

### Unlocking Africa’s mining potential

Ralf Hennecke, Managing Director of BME, said that through its strategic partnerships, the company had grown its presence in Africa, while remaining true to its base in South Africa.

“The continent continues to provide immense growth potential, mirrored by vibrant exploration activity and a diverse range of

minerals, including those that are crucial to battery performance, longevity and diversity,” he said.

This, while minerals that have long remained the backbone of African economies, such as gold, have also been attracting significant investment.

“There is also still immense scope to work closely with the mature South African mining industry to help it to reduce operating costs,” he said.

He attributed BME’s continued success in existing and new markets to its ability to provide customers with tailored solutions that address unique operational and technical challenges.

“This has positioned us as an explosives and metallurgical partner that collaborates strategically for the benefit of our customers and host communities,” he said, also underscoring the importance of BME transferring skills and developing its local knowledge base.

### Driving green chemistry

Lefa Masiuana, General Manager: Mining Chemicals at BME, said that BME Metallurgy – the company’s mining chemicals division – worked closely with customers to explore safer, more sustainable chemical use to reduce environmental risk and waste, while also boosting mines’ productivity and efficiency.

“These efforts are being driven by stricter regulations, in addition to demands by stakeholders to operate in a more environmentally sustainable manner,” he said.

For instance, the company is helping clients to implement chemical circularity by recovering and recycling chemicals back into the system.

“This approach has halved total reagent demand while also saving on the cost of chemical neutralisation – for safer and more responsible transportation of chemicals and waste disposal,” he said.

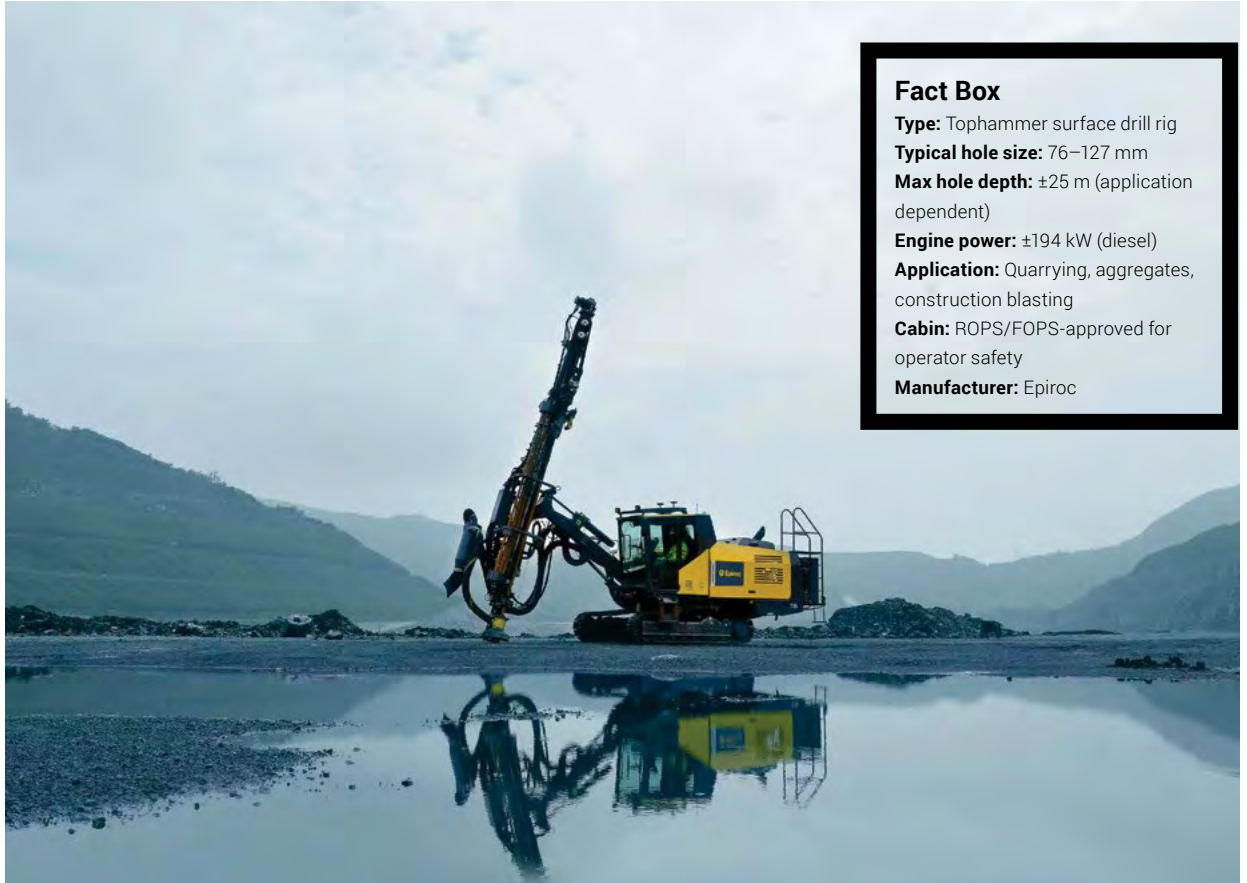
An example of one of BME Metallurgy’s chemical circularity projects is the replacement of pyrolusite with hydrogen peroxide, an environmentally friendlier alternative, as an oxidant in uranium acid leaching circuits.

Masiuana added that BME Metallurgy was working with mines to find optimal ways of managing the environmentally responsible disposal of packaging.

“This issue remains a large problem, especially for remote mines that must incur high costs in transporting empty containers over long distances to the closest licensed off-site landfills or incinerators,” he said. ●

# EPIROC IS LAUNCHING THE NEW GENERATION POWERROC T45

Epiroc launched a new and improved PowerROC T45. The new generation surface drill rig offers increased fuel efficiency and high availability. It is a welcome addition to the PowerROC family.



## Fact Box

**Type:** Tophammer surface drill rig  
**Typical hole size:** 76–127 mm  
**Max hole depth:** ±25 m (application dependent)  
**Engine power:** ±194 kW (diesel)  
**Application:** Quarrying, aggregates, construction blasting  
**Cabin:** ROPS/FOPS-approved for operator safety  
**Manufacturer:** Epiroc

**“W**e are eager to get this rig out to our customers around the world. The

PowerROC T45 MKII is the perfect choice for construction sites and aggregate, cement and limestone quarries, says Sr. Product Manager Masanori Kogushi.

The new generation PowerROC T45 is equipped with an Epiroc developed control system, which helps decrease fuel consumption. This is due to the auto engine speed control, which enables automatic optimization of the engine RPM for all operations.

“The new generation PowerROC T45 offers up to 40 % lower fuel burn

compared to the previous generation”, says Masanori Kogushi.

To assist with easy operation, the PowerROC T45 MKII includes an intuitive 12 -inch display that presents all the necessary data, monitors running status and offers the operator additional assistance. Two one-touch lever controls make rod changing and drilling both simple and quick. The system is easy to learn and use.

The PowerROC T45 MKII has many similarities to the PowerROC T35 MKII, which was released last year. Like the other rigs in the PowerROC family, the PowerROC T45 MKII features a modular and straightforward design, which keeps servicing simple.

“Compared to the PowerROC T35 MKII, the PowerROC T45 MKII surface drill rig offers a big hole range, which is something many of our customers want. This PowerROC T45 MKII launch is

there-fore a natural step forward in our offering within the PowerROC family”, says Masanori Kogushi.

The PowerROC T45 MKII has been field-tested with positive results during the last couple of months. “We have fine-tuned the rig for maximum performance and have achieved all our major targets”, says Masanori Kogushi.

The new generation PowerROC T45 comes with two different engine alternatives – Tier 3/Stage IIIA and Tier 4 Final/Stage 5. ●

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