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JULY 2023



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MATERIALS HANDLING AND OPTIMISATION NEED TO BE STACKED TOGETHER

Efficient materials handling is vital to the success of any industry, and South Africa is no exception. As a country with diverse sectors ranging from mining and agriculture to manufacturing and logistics, the effective movement of materials plays a pivotal role in ensuring operational productivity. How do we reach optimisation is the question? The answer is as simple as effective equipment with bells and whistles that give operators and business owners exact data.

South Africa's economy relies heavily on the efficient movement of materials, making materials handling equipment a critical component of various industries.

From forklifts and conveyor systems to automated guided vehicles (AGVs) and robotic solutions, these technologies

enable businesses to streamline their operations, reduce costs, and enhance overall productivity.

However, many enterprises in South Africa continue to face challenges related to outdated equipment, limited access to modern technologies, and a lack of skilled operators.

To overcome these difficulties, South African industries must embrace advanced materials handling equipment.

State-of-the-art technologies, such as intelligent automation, sensor-driven systems, and real-time data analytics, can significantly optimise workflow processes.

For instance, smart conveyors equipped with sensors can detect product weight and size, enabling seamless sorting and routing.

Furthermore, AGVs powered by artificial intelligence can autonomously transport goods within facilities, reducing manual labour and increasing operational efficiency. These are technologies are steadily being implemented and rapidly becoming standard when new equipment reaches the workplace, warehouse or site.

Investing in modern equipment not only enhances efficiency but also improves safety standards. Ergonomically designed tools, automated palletising systems, and robotic arms can minimise the risk of injuries and reduce the physical strain on workers. These can foster a safer work

environment, boost employee morale and reduce absenteeism due to workplace-related injuries.

Adopting advanced materials handling equipment also paves the way for new business opportunities in South Africa. The integration of Internet of Things (IoT) technology and cloud computing enables real-time monitoring and remote management of equipment.

This connectivity allows businesses to track inventory levels, predict maintenance requirements, and optimise supply chain processes. With improved visibility and control over materials handling operations, enterprises can make informed decisions, enhance customer satisfaction, and capitalise on market demands.

Moreover, the introduction of advanced equipment adds to skills development and job creation. To harness the full potential of these technologies, the workforce must be trained in operating and maintaining them. Investing in skills development programmes and partnerships between industry and educational institutions will help bridge the skills gap and empower South African workers to participate in the evolving job market.

By prioritising the adoption of advanced materials handling equipment, South Africa can propel its industries forward, solidifying its position as a leading player on the global stage. 🌐

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A large white Liebherr rough terrain crane is shown in operation on a construction site. The crane's boom is extended high into the air, lifting a large, dark metal bucket. The crane is mounted on a heavy-duty chassis with large, treaded tires. The background features a clear blue sky with some wispy clouds and a line of trees in the distance. The crane's boom has the 'LIEBHERR' logo visible on it.

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Celebrating 25 years of Actros trucks

A total of five generations of the Mercedes-Benz Actros' three-pointed star have been introduced in 25 years in South Africa.

A quarter of a decade ago Mercedes-Benz Trucks paved the way in the evolution of trucking in South Africa when it launched its first generation Actros - an industry-first computerised truck specifically for long-distance and distribution haulage.

Since then four more Actros generations have been produced from the Daimler Truck Southern Africa (DTSA) assembly plant in East London and have continued in a class of their own.

Each iteration of the Actros in South Africa has won the title of "International Truck of the Year" while on the road in the country.

The fifth generation of the truck has been the real clincher locally. The year 2020 marked an industry-defining era for the South African market, when Mercedes-Benz Trucks introduced its ground-breaking fifth-generation Actros under the claim "Everyone talks, one delivers. The new Actros." This is the first truck that took technology to the next level with the replacement of conventional main and wide-angled mirrors with MirrorCam, a camera system that plays a major role in safety and manoeuvrability.

Additionally, four more core innovations were taken into consideration for this generation which included amongst others: Predictive Powertrain Control (PPC), Multimedia Cockpit, Active Brake Assist 5, and Mercedes-Benz Uptime with Fleetboard services as a standard. In the same year, for the fifth time, the Mercedes-Benz Actros reigned supreme as it was crowned International Truck of the Year 2020, cementing its position once again as the most innovative and fuel-efficient truck in the world. 🌟



Doosan Bobcat appoints new EMEA president

Doosan Bobcat has announced the appointment of Gary Hornbacher as the company's new President for the Europe, Middle East and Africa (EMEA) region.

He will be based in Dobris, Czech Republic, where the company has consolidated its manufacturing facility, R&D centre, training institute and EMEA headquarters onto one campus.

Hornbacher has served in a diverse number of roles during his 36-year tenure with Doosan Bobcat. He brings extensive experience in Sales & Marketing, Product



Gary Hornbacher, the new Doosan Bobcat president for the Europe, Middle East and Africa (EMEA) region.

Management, Strategy, and Total Quality Management. His most recent position before coming to EMEA was as Vice President of Channel Development & Training at Doosan Bobcat North America.

"We are excited to welcome Gary Hornbacher as the new President of Doosan Bobcat EMEA," said Scott Park, CEO and Vice Chairman of Doosan Bobcat.

"Gary's previous experience as Senior Vice President Commercial in the EMEA region coupled with his diverse background with Bobcat positions him to effectively drive forward our strategic vision and motto – ***we empower people to accomplish more.***"

Hornbacher will focus on a people-first culture by creating a collaborative environment where people can thrive and by leveraging individuals' talents to accomplish amazing achievements.

"I am thrilled to join the dynamic Bobcat EMEA region, and I look forward to again serving alongside our team," says Hornbacher.

Hornbacher assumed his new role as Doosan Bobcat EMEA President on 1 July and will report to Scott Park, CEO and Vice Chairman of Doosan Bobcat. 🌟

Tyre industry eyes 2050 net-zero targets

Cutting-edge technology with capital investment and innovative practices will assist the South African Tyre Manufacturers Conference (SATMC) to achieve carbon neutrality by 2050 in line with global targets.

Bridgestone South Africa, Continental Tyre South Africa, Goodyear South Africa, and Sumitomo Rubber South Africa, as members of SATMC, are making a collective effort to play a key role in mitigating climate change in their industry.

"The role of emissions in climate change cuts to the heart of the industry we operate in. As a united body of local manufacturers, we aim to be responsive to the needs of our customers and partners. Climate change impacts us all, and we are all demanding real action from each other," says Nduduzo Chala, Managing Executive of the SATMC.

Bridgestone has announced the launch of the 'Bridgestone E8 commitment' which includes a corporate commitment to the realisation of a carbon-neutral mobility society. Setting focused targets, Bridgestone has committed to reducing its absolute CO₂ emissions by 50% by 2030 (when compared to the base year 2011).

Continental Tyre South Africa, in line with its international mandate, is striving for 100% emission-free driving, industrial products and factories. The company has committed to a three-step process towards achieving 100% climate neutrality by 2050 at the latest, along its entire value chain of products, operational processes, and supply chain.

Goodyear's Better Future framework outlines the company's high-priority environmental, social and governance topics globally under four pillars – Sustainable Sourcing, Responsible Operations, Advanced Mobility and Inspiring Culture. In December 2021, Goodyear Tire & Rubber Company announced its goal to reach net-zero value chain greenhouse gas (GHG) emissions by 2050, aligned with the Science Based Targets initiative (SBTi) and its new Net-Zero Standard.

Finally, Sumitomo Rubber South Africa's journey to net zero is aligned with its parent company, Sumitomo Rubber Industries (SRI), headquartered in Japan, and is based on the GENKI Sustainability Activity Guidelines of Governance, Ecology, Next-Generation Products & Solutions, Kindness, and Integrity. The company has declared a commitment to reduce carbon emissions by 50% by 2030 and achieve carbon net zero by 2050. 🌟

Celebrating the 50 000th Cat wheel excavator



In 1984, Caterpillar, Eder and Zeppelin Baumaschinen, the Cat dealer in Germany, introduced a new wheeled excavator line, offering four models. Eight years later, the line became a 100% Cat product with a designated wheel excavator team.

Twenty-eight years later, in 2012, Caterpillar celebrated its 25,000th wheel excavator production. This year, Caterpillar announced the production of its 50,000th wheel excavator, a Cat M318 Next Gen model, adding another 25,000 units to the total in just 11 years.

Europe and South Korea were among the first adopters of this new solution. However, the combination of speed, power, versatility, and ability to operate a wide range of hydraulic tools has the Cat Wheel Excavator line growing in popularity in China, Southeast Asia, the Middle East, North America and other world markets. Starting with only four models, today's expanded Cat wheel excavator line includes eight models – Cat M314 to M322 – for markets with higher emissions regulations, one model – M315 GC – for China, three models – M315 to M320D2 – for those adhering to lower emissions standards, the M323F railroad-specific model, and four materials handlers from the MH3022 to MH3040.

Rokbak expands US dealer network

Scottish articulated hauler manufacturer Rokbak continues to grow its dealer network in the US with a new partnership with Alpha & Omega Equipment Sales and Rental.

Rokbak has further expanded its US dealer network by partnering with Alpha & Omega Equipment Sales and Rental – one of Texas' leading providers of construction equipment. This new partnership supports Rokbak's expansion plans, reinforces its commitment to customers and strengthens its presence in this important market.

Alpha & Omega will bring both the RA30 and RA40 to its customers in Lubbock and Midland-Odessa, Texas, who work in industries including construction and mining.

Around 60% of the machines that leave Rokbak's Motherwell factory head across the Atlantic to customers in America. The US is leading articulated hauler demand with huge infrastructure spend and significant construction activity around house and road building. The total articulated hauler market for North America is usually around 3,500 units, with 2022 closing out with an expectation-defying 4,000 units. North American customers currently account for nearly half of the total market, which was just over 9,000 units in 2022.



Some of the previous winners of the Innovation Awards.

Automechanika Johannesburg promises to be unmissable

While the countdown to the eighth Automechanika Johannesburg for visitors has begun, entries for the Innovation Awards are also open. The event will run from 5 September until 7 September and is once again expected to attract visitors from across the African continent and beyond.

"Whether it be parts, accessories, tools, mobility services, autonomous driving or intelligent software for workshops and car dealerships, Messe Frankfurt South Africa is confident that manufacturers and suppliers in the automotive aftermarket have a wealth of new products and innovations that will qualify to enter the competition," says Tracy Gounden, Portfolio Manager of Messe Frankfurt South Africa, the organiser of Automechanika Johannesburg.

"After the immense interest shown and the high standard of entries received for last year's Awards, we look forward to receiving a record number of entries for 2023."

The cut-off date to enter is midday on

Friday, 18 August 2023.

Entries will be judged by a group of hand-picked jury members that are all experts in fields such as macroeconomics, import and export, aftermarket retail, business and skills development, transformation, sustainability, automotive technology and more. They will be tasked with identifying the most innovative and pioneering automotive products that are manufactured, supplied or distributed in South Africa.

Organisations represented on the panel of judges will include, among others, the Retail Motor Industry (RMI), the Automobile Associated (AA), the National Association of Automotive Component and Allied Manufacturers (NAACAM), the National Association of Automobile Manufacturers of South Africa (NAAMSA), the Automotive Industry Export Council (AIEC), the Motor Industry Bargaining Council (MIBCO), the Automotive Industry Development Centre (AIDC), and the sponsors of the event. 🌐

New JCB midi excavators displayed at Kohler Demo Days

Kohler Engines hosted the first edition of Demo Days, a new event format dedicated to the trade press.

Divided into two days, one for the Italian press and one for the European media, Demo Days allow journalists to walk through the doors of Kohler, assimilating its history, touching its engines firsthand, and enjoying its performance thanks to the machines of those who have chosen Kohler.

Among those are the new JCB 90Z-2 midi excavators are the result of years of experience in designing and manufacturing crawler excavators. This new model features the latest generation Stage V-compliant engine and significant improvements in performance, comfort and ease of operation.

All while delivering excellence in fuel economy, safety and reliability. JCB's keywords for Kohler are many: quality, performance, robustness, low total cost of ownership and versatility. And they are all channelled into the answer given by the KDI 2504 on the 90Z excavator, which takes full advantage of its potential. 🌐



One of the new JCB 90Z-2 midi excavators was displayed during the Demo Days event.

MDS secures first major distributor for South Africa

MDS, a global provider of heavy-duty rock trommels and conveyors, has announced the appointment of ELB Equipment (ELB) as its official distributor for South Africa.

ELB is one of few South African companies that can offer a broad range of earthmoving, construction, mining, and quarrying equipment from a single supplier. The company has established itself as one of the most respected names in the industry.

Raheel Qamar, MDS Business Development Manager explains, "ELB is a logical partner for MDS since it represents other Terex brands such as Powerscreen scalpers and screens, which already dominate the local market. The addition of our leading heavy-duty rock trommels will close the circuit for miners who are familiar with ELB Equipment's high level of service and minerals processing offerings."

MDS-tracked, static and recycling trommels can handle a wide range of media including blasted rock and riprap, as well as varying substrates such as clay, limestone and even recycled concrete rubble. The rugged ability of the trommels makes them stand out in the market as they can shorten the processing equipment chain onsite – either direct from blasting and loading or from a primary crusher or even recycled materials



Raheel Qamar, Business Development Manager, MDS; Desmond van Heerden, CEO, ELB; Conor Hegarty, General Manager, MDS; and Gerrit Kapp, Commercial Director, ELB.

and composting. It is this ability to speed up processing and handle oversized materials that is most exciting for the local South African market.

ELB Equipment Divisional Director, Wakefield Harding, says "The addition of MDS static and tracked trommels supports our growth strategy to expand our offering into new crushing, screening, and environmental industries, with products that complement our existing portfolio. This range is unmatched in the local market and is simply not available as standard-produced machines elsewhere. It will introduce a

new way of doing things in the local market and is bound to turn up production volumes while increasing profitability on many new and existing plants in South Africa."

Raheel Qamar concludes, "We want to extend a warm welcome to the team at ELB Equipment, who are known for providing excellent service and after-sales support to their customers. I am looking forward to working closely with the team to build and develop MDS across South Africa." 🌐

Ways to address payment fraud in the construction industry

As one of the top ten mining countries in the world, South Africa's economy relies heavily on this industry as well as those closely related to it, such as construction. Yet this also makes these industries attractive targets for cybercriminals.

"Today's CFO needs to be highly attuned to the constantly evolving fraud landscape," says Ryan Mer, CEO of eftsure Africa.

"Payment fraud, supplier fraud and tender-related fraud pose a significant risk in the mining and construction sectors in South Africa. Companies operating in these industries need to stay on top of ever-evolving fraud trends and adapt their defences accordingly, or it could impact their financial stability."

Mining and construction companies require comprehensive background checks to verify the credibility of suppliers. These background checks should involve scrutinising supplier directors, checking for any politically exposed persons (PEPs) and sanctions, and linking directors to employees.

Mining and construction businesses can consider partnering with specialised companies to conduct background checks on suppliers. Such companies offer extensive reports that include crucial information for

assessing supplier credibility.

The challenge lies in determining the pricing structure for these reports, as they typically charge per report. Balancing the costs of these verification reports while maintaining competitive pricing structures will be crucial for success. Consider negotiating collaborative contracts with these companies or integrating the price into services offered to offset costs. Once an organisation has credible background reports on its suppliers and vendors, continuous payment control and monitoring measures must be in place to protect the integrity of key supplier information, including payment details.

Because people are often the weakest link in the security chain, most companies today have automated processes in place to minimise the risks associated with manual processes. The next step is to not only automate but to integrate.

A Software as a Service (SaaS) provider such as eftsure Africa can help enhance processes and limit payment fraud risks by providing an integrated onboarding, verified master data management and payment screening solution that cross-references the payments an organisation is about to

release with a database of verified bank account details. This can be integrated into anything from ERP and accounting systems to sales and customer relationship management systems. The platform alerts you to any potentially compromised payment details, allowing you to deal with the problem before the flow of funds has occurred. 🌐



Ryan Mer, CEO of eftsure Africa.

Real-time data can boost margins for the construction industry

It is not unusual for costs to overrun as much as 80% on construction projects, but the current variability of labour and material costs – especially on long-running projects – has resulted in cost overruns of up to 200%. This is not sustainable at a time when the industry is increasingly under pressure to deliver on time and to budget.

RIB Software Enterprise Sales Manager, Quimby Bunce, says cost management in construction is typically conducted retrospectively. “The nature of construction means the costing process is often characterised by a time delay where tracking actual costs versus original budgeted costs (determined during the estimation stage) becomes somewhat of an art.

“Often, project managers only realise that costs are overrunning sometime after the fact, which makes it difficult to implement mitigation measures timeously. This is particularly true of long-term projects, which are especially vulnerable to the unpredictability of variable costs,” says Bunce.

With a global economic downturn on the cards, exacerbated by inflation, a weakening currency, a shortage of skilled labour and the escalating cost of materials, the discipline of cost control is more important than ever for the construction industry.

The idea of having to digitise construction to get things done quickly, to link processes, people and data, is often questioned – but

one of the ways the industry can forge ahead.

“Many are under the illusion that it is the professionals within the industry who are going to be responsible for deciding whether they need to change and what needs to change,” notes Bunce.

“The truth is: if you look at industries that have transformed, the pressure comes from outside. It’s not the industries themselves that decide to reform, it is the pressures from adjacent industries and customers. In the United States and Europe, regulation is driving that change and South Africa will soon have to follow suit.

“In the public sector space, we’re already seeing projects being awarded at fixed costs although, admittedly, in South Africa, fixed and firm price contracts, particularly where the contract period is more than 12 months, are the exception rather than the rule. Customers are no longer open to the traditional time and budget overruns. They are expecting the construction industry to act more like other industries they interact with – industries that are more diligent when it comes to costing projects,” he adds.

Bunce says all indications are that the country is entering into economic decline. “Apart from global impacts, load shedding has a substantial impact on productivity, resulting in unpredictable supply chain and costs, as well as the ability of contractors to complete works on time.



RIB Software Enterprise Sales Manager, Quimby Bunce.

“Understanding the resources, the source of the resources and the cost as they change in an escalator environment, as well as the time to complete the works, it is essential for contractors to predict the outcome cost of their projects. Through effective cost control, they’ll be taking positive steps towards protecting margin and future-proofing their organisations,” he concludes. 🌟

AfriSam cement, pivotal for Cape Interchange upgrade

Since July 2021, Haw & Inglis Construction has been proceeding with the upgrade of the Cape Town Refinery interchange.

For the project, AfriSam is providing around 6,300 m³ of ready mix concrete as well as material for layer works, according to Bradley Thomas, Territory Sales Manager at AfriSam.

“An important application of our Ready-mix was for the piling under the bridges, which required almost 1,500 m³ of high strength 40MPa concrete for this purpose,” says Thomas.

“A priority here was to avoid any jointing in the piles, so it was essential that each pour – about 3,5 m³ per pile – was continuous.”

He notes that the decks on the two main bridges over the N7 also require continuous pours, amounting to substantial volumes of 500 m³ of W50 MPa concrete per deck. Placement is carried out using a high-capacity 36 m boom placer. The readymix is supplied from AfriSam’s Contermanskloof plant in Durbanville, located 8 km from the



The readymix is supplied from AfriSam’s Contermanskloof plant, with backup plants nearby in Woodstock and Bellville.

site, with support from the company’s other nearby plants at Woodstock and Bellville.

The spreading of supply sources allows for further mitigation of project risk related to ready mix deliveries, says Thomas. For instance, large continuous pours leave little room for error, and unforeseen events such as traffic congestion must be factored into resource planning.

“On the smaller scale aspects of the project’s ready mix requirements, our flexibility also allows us to effectively supply the smaller sub-contractors on the project,” he

adds. “We have therefore also been able to play a role in enterprise development, supplying the kerb mix to SMME contractors installing the precast kerbs.”

In addition to carefully facilitating the traffic flow through the interchange during construction, the project has also had to navigate underground and overhead services from high voltage power lines and diesel pipes to sewer networks and optical fibre lines, he says. A further environmental priority was not to disturb two small wetlands within the road reserve. 🌟



SANY STRENGTHENS COPPER MINE OPERATIONS IN BOTSWANA

QUICK TAKE



Sany South Africa moved to a new
12,700m² Warehouse

Revitalised in 2021, Kopano Copper Mine is operated by MP Mining Pty Ltd in Botswana. In the past two years, through scientific management and efficient operation, MP Mining has restored the vitality of this long-dormant copper mine and achieved an annual output of 70,000 tons of copper concentrate.



At Kopano Copper Mine the SY980H has shown performance of 4 000 hours, with zero failure



As a good option for ore transportation, the SKT105S provides a more economical choice for mining



Sany is a one-stop shop that understands after-sales support to customers and is committed to providing customers with the best service

As a core component of modern industry, copper is widely used in electric power and renewable energy. The rapid development of green energy, and an ever-growing demand for copper, come up against an increasingly difficult

copper mining environment. The reliability and efficiency of equipment has been key to winning the market in Botswana.

Machine backing

Known for outstanding performance and reliability, Sany products have won the

trust and praise of its customers. There are currently 18 Sany SKT105S wide-body mining trucks, two SY980H excavators, and one SY500H excavator working in the Kopano copper mine.

At the bottom of the pit, Sany SKT105S trucks and SY980H excavators cooperate

The fleet of Sany equipment at Kopano Copper Mine.



to load ore.

Each truck carries 65 tons of copper ore to and from the two-kilometre production line. The slope of 12.5 degrees and a load of 65 tons are a testament to the stability of the equipment.

With an availability of more than 95% and a transfer efficiency of 260t/h, the SKT105S stands out amongst ADTs and other trucks operating in the same field because of its 25L/h fuel consumption.

Compared to other brands, the Sany SY980H excavator offers customers high efficiency, low fuel consumption and high stability.

"The fuel consumption of the SY980H is 52l/h, compared with the 80l/h of another comparable brand. This means, if it works more than 19 hours a day, it will save over 200,000 US dollars a year. Add to that availability and reliability, and what else is there to consider?" says the chairman of MP Mining, Ahti Vilppula who has been engaged in the mining industry for over 40 years.

Since the first SY980H entered the site, it has won the trust of the customer with its excellent performance of 4000 hours of zero failure. It has also strengthened cooperation between Sany and Kopano Copper Mine.

Personalised equipment

As a one-stop solution provider, Sany is committed to providing customers with personalised and customised products. The SY980H excavator can be configured with a 5.5m³-6.5m³ bucket and is equipped with a 425 kW Scania engine and a Rexroth hydraulic system as standard, providing excellent digging and lifting capabilities.

It is further equipped with a three-stage filtration system and a large-displacement cooling system suitable for long-term work in the high-dust and high-temperature environments of Africa. The SY980H also features advanced control systems and ergonomic operator interfaces, ensuring precise and intuitive operation. It includes features such as joystick controls, multi-function display, advanced diagnostics, and customisable settings to enhance operator comfort and productivity.

Delivery period of three months

As a good option for ore transportation, the SKT105S provides a more economical choice for mining loads of 65 tons. Compared with RDTs or ADTs, the SKT105S reduces the cost of mining because it is half the price and has twice the loading capacity.

In addition, the SKT105S offers faster delivery. While ADTs or RDTs still take 6-8 months to deliver, the SKT105S can be delivered to the site within three months.

Sany prioritises operator comfort and safety. The oil-gas suspension and air suspension seat of the SKT105S improves the driver's comfort.

It incorporates safety features such as a full-hydraulic steering system and emergency steering system that can provide backup power in the event of steering power loss.

Branch expansion

As a world-leading mining equipment manufacturer, Sany understands, fundamentally, the importance of after-sales support to customers and is committed to providing customers with better service and better backup support than its competitors.

The company operates a 4,000m² parts warehouse in Boksburg, and will soon move to a new 12,700m² warehouse, where the value of spare parts reserves will increase from R90-million to R270-million. Apart from its Johannesburg headquarters, Sany also operates branches in Middleburg and Rustenburg and plans to build new branches in Durban and Kathu. 🌐

SMALL THINGS CAN MAKE A BIG DIFFERENCE



The JCB skid steer offers a significant advantage over the competitors. The side entrance cabs are much safer and ensure the operator doesn't need to climb over the bucket to get inside.

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A range of Baoli forklifts is available for different applications and should be selected according to current and future applications.

EFFECTIVE MATERIALS HANDLING REQUIRES KEEN PLANNING

Equipment selection is a major consideration in the movement of items in various processes and throughout the supply chain and has the potential to make or break an operation's effectiveness.

According to Devan Govender of Smith Power Equipment, the authorised distributor of Baoli materials handling equipment in South Africa, there are many considerations when choosing a forklift or reach truck that go far beyond the price and current applica-

tion of the equipment.

Factors such as future growth, product expansion, underfoot conditions and production hours can play a significant role in machine selection. Furthermore, weather and climatic conditions may play havoc with the best plans where temperature can affect charging times or traction of machines among other factors.

Trusted experts

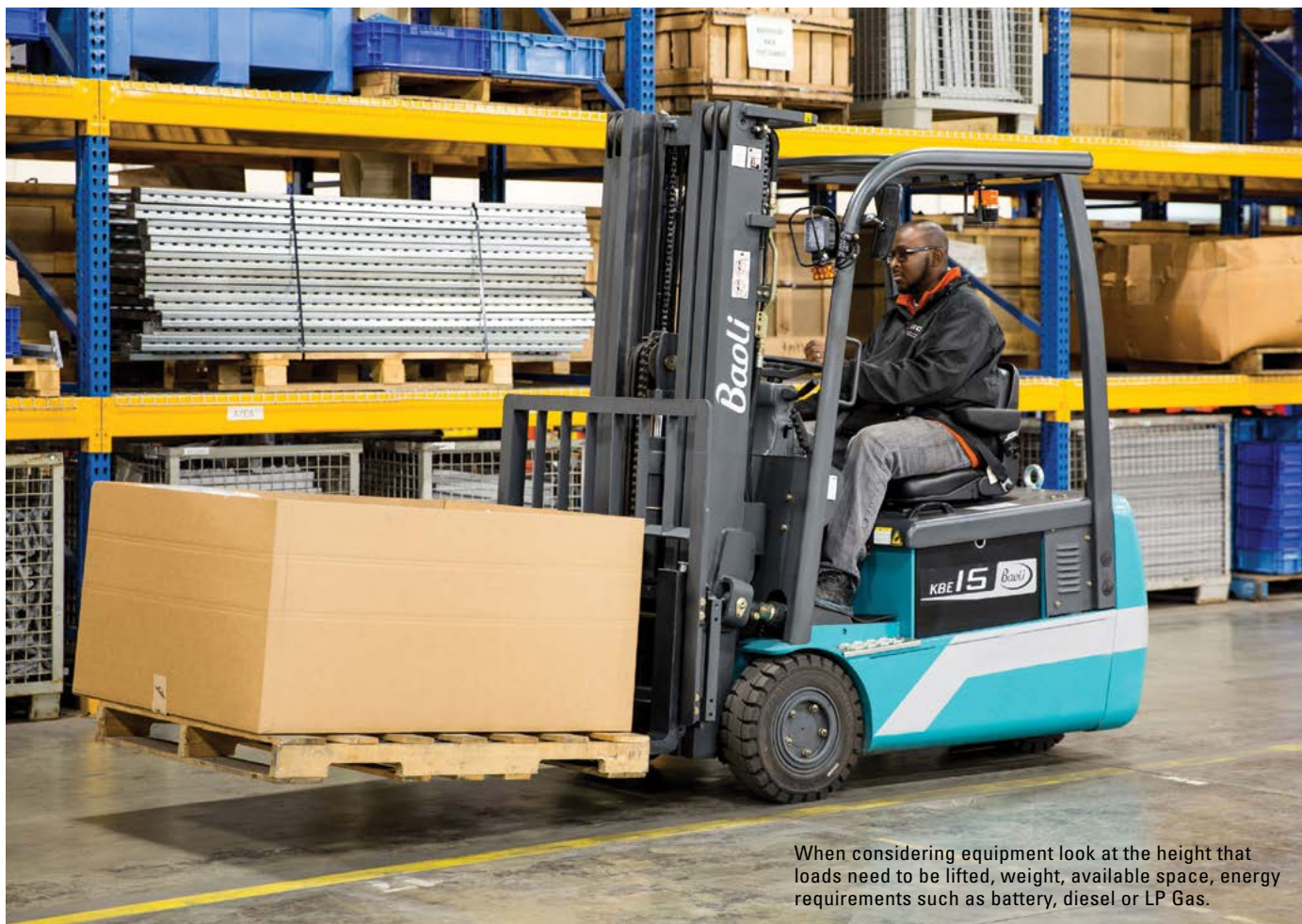
That is also the reason why Govender recommends working with companies that have the expertise and product range to ensure the right equipment for the job. "Proper planning in the selection of material handling solutions is the most important part of the process for businesses.

"It contributes to the optimisation of operational efficiency and productivity in a business. If the handling division

"We recommend gaining insight into the operation's future plans taking into consideration possible changes of premises, energy efficiency and other considerations. Proper health and safety planning also needs to be done as does understanding hour usage and site application to get the best results."

Devan Govender, Smith Power Equipment





When considering equipment look at the height that loads need to be lifted, weight, available space, energy requirements such as battery, diesel or LP Gas.



Baoli has a range of equipment designed to meet the diverse needs of businesses across various industries



The durability and manoeuvrability of Baoli forklifts have made them popular among fleet owners



Baoli South Africa promotes the building of longstanding relationships with customers



Baoli has a range of equipment designed to meet the diverse needs of businesses across various industries

can maintain high levels of operating efficiency, then it should be able to generate greater profits per project with the same resources.

"It all starts with current and future plans and the compilation of a comprehensive site survey document per application. This takes all the factors mentioned previously into account and looks at the height that loads need to be lifted, weight, available space, energy requirements such as battery, diesel or LP Gas etc and any other requirements such as floor surfaces, outside terrain including gradients and other factors.

"To make it even more challenging, we recommend gaining insight into the operation's future plans, taking into consideration possible changes of premises, energy efficiency and other considerations. Proper health and safety planning also needs to be done as does understanding hour usage and site application to get the best results," says Govender.

Machine selection

He explains that the last and most important requirement is to choose an equipment partner with the expertise and



When it comes to selecting a forklift look at requirements such as floor surfaces, outside terrain including gradients and other factors where the machine will operate.



Forklift options include diesel forklift trucks from 1,8T to 5T, LP gas driven forklifts from 2,5T to 3,5T and new generation battery-driven forklift trucks ranging from 1,8T to 2,5T.

product range to meet the unique needs of each site. Rather than just focusing on price, it is important to deal with a company like Smith Power Solutions with the infrastructure and nationwide dealer network to be able to provide parts and services wherever the customer needs them.

Its unique customer-centric approach extends to Baoli South Africa and promotes the building of longstanding relationships with customers and ensures personalised service from the point of

sale to aftersales service, support and ongoing advice and assistance throughout an operation's lifespan. Its strong product line-up means that there are machines available to meet customers' requirements.

Depending on the application Baoli has a range of equipment designed to meet the diverse needs of businesses across various industries. These include diesel forklift trucks from 1,8T to 5T, LP gas driven forklifts from 2,5T to 3,5T and new generation battery-driven forklift trucks



The stackers complete the line-up with 1T, 1,5T or 1,6T options available with lifting heights of between 1,6m to 3,5m.

ranging from 1,8T to 2,5T. a 2T reach truck with a mast height of up to 11m as well as a choice of 1,2T, 1,5T or 1,6T power pallet trucks are also available. The stackers complete the line-up with 1T, 1,5T or 1,6T options available with lifting heights of between 1,6m to 3,5m.

Various options

There are various options available for machines with different terrains, mast heights, and attachments. Customers can also request industry-specific modifications for cleanrooms, cold storage, and certain mining applications. In addition, there are numerous options available for common applications in logistics, warehousing, manufacturing and retail.

Baoli equipment is a part of Europe's market-leading Kion Group and has gained a strong reputation for its effectiveness in an increasing number of applications in South Africa since first being distributed by Smith Power in 2018. The durability and manoeuvrability of these machines have made them popular among fleet owners and operators ever since. 🌟

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Accessible on multiple platforms

One of the JCB 3DX Eco Backhoes in action at a site near Cape Town.



JCB 3DX ECO BACKHOES ARE THE BACKBONE OF AMANZI PLANT HIRE

Trusting Bell Equipment with their needs ensured Amanzi Plant Hire was able to have their backhoe needs met, and foster industry relationships.

Table View is a popular suburb on Cape Town's West Coast and is named after its view of the iconic Table Mountain.

Johnny Waters, a former mechanic and later a salesman of

earthmoving equipment, had the task in the late 1980s of de-bushing large sections of what is now a built-up Table View at a time when there were only a few houses standing as this area was considered rather remote by the people of Cape Town.

"My dad, Johnny, did that with a wheeled loader and worked under the name of Waters Plant Hire," says his son, Jonathan Waters, who now runs the business.

"At one point he had no less than 19 wheeled loaders."

In time, Johnny added two tipper trucks and an excavator to his fleet and served many clients in the Cape Peninsula working especially on mushroom farms and clay pits associated with clay brick plants, township development and civil construction projects.



"We've also learnt what an advantage preventative maintenance can be and with the way that JCB Backhoe Loaders are designed, they are so easy to maintain."

Jonathan Waters, MD of Amanzi Plant Hire



The JCB 3DX Eco's naturally aspirated 4-cylinder, 4,4 litre JCB Dieselmix 444 engine purrs along while working at the coast, which is where the bulk of Amanzi Plant Hire equipment is hired.

That is why we now run JCB Backhoe Loaders and focus a lot more on clients working in civil engineering and to a lesser extent on those working in agriculture. Excavators now do most jobs better than what wheeled loaders could and are therefore a better bet to have as plant for hire.

"I joined the business in 2017 after qualifying as a civil engineer at Stellenbosch University and gaining practical experience in order to register as a civil engineer," Jonathan adds.

"I had also worked for a while on our family's farm near Mossel Bay where we prepared the land to plant almonds."

The name of Waters Plant Hire changed over time to Amanzi Plant Hire, where 'amanzi' is the isiXhosa word for water.

From wheel loaders to TLBs

"We'd found that the market had changed, and people were not wanting to pay the higher rates for a wheeled loader when they really only needed a backhoe loader," Jonathan explains.

"That is why we now run JCB Backhoe Loaders and focus a lot more on clients working in civil engineering and to a lesser extent on those working in agriculture. Excavators now do most jobs better than what wheeled loaders could and are therefore a better bet to have as plant for hire."

Waters mentions that their first JCB Backhoe Loaders had been bought from another franchise holder before Bell Equipment became the South African distributor for this market-leading machine, but he recalls that both he and his father, Johnny, were very pleased when Bell Equipment took over.

"We have a policy on replacing machines



The Cape Town metropole is considered sandy, the backhoe has an easy task when trenching these soil conditions



JCB Backhoe Loaders are known for the fact that they handle housekeeping duties on construction sites with ease



The JCB 3DX is well suited for backfilling trenches, loading trucks with waste and rubble and stockpiling material on construction sites



Backhoe loaders now do most jobs better than what wheeled loaders could for Amanzi Plant Hire

QUICK TAKE



JCB Backhoe Loaders are known for the fact that they handle housekeeping duties on construction sites with ease.



after about 7 000 to 8 000 hours as they still have a good resale value," he adds. "After thoroughly researching the market, we bought two new JCB 3DX Eco Backhoe Loaders from Andre Jordaan, Bell Equipment's very experienced Sales Representative in Cape Town, and these

machines were delivered in February and March 2022 respectively."

The right equipment

According to Waters, the JCB 3DX Eco's naturally aspirated 4-cylinder, 4,4 litre JCB Dieselmix 444 engine purrs along

while working at the coast which is where the bulk of their equipment is hired.

Also, with a lot of the soils in the Cape Town metropole being so sandy, the backhoe has an easy task when trenching. The machine is also used for backfilling trenches, loading trucks with waste and rubble and stockpiling material on construction sites. JCB Backhoe Loaders are known for the fact that they handle housekeeping duties on construction sites with ease.

Machine maintenance

"We've learnt over time how important it is to check the machine before startup and to fill in daily checklists diligently," says Waters.

"We've also learnt what an advantage preventative maintenance can be and with the way that JCB Backhoe Loaders are designed, they are so easy to maintain."

"It would be amiss if I didn't mention that with Bell Equipment now the distributor of JCB equipment, we know that solid technical backup is only a phone call away and we can always speak to someone we know. That's what makes Bell Equipment the best and will keep us coming back for more machines."

"In fact, with current demand as it is, if I had the means, I'd buy another JCB 3DX Eco Backhoe Loader right now," says Waters. 🌀

HOW TO MANAGE CONSTRUCTION EQUIPMENT DURING WINTER

During winter, construction equipment and tools can also be affected. Lubricants can thicken; batteries can drain faster, and the risk of equipment failure can increase, leading to potential delays and interruptions.

By Roelof van den Berg, CEO of the Gap Infrastructure Corporation

As an industry, we are acutely aware of the problems that the cold weather brings, and each year we need to prepare and proactively address issues to ensure we don't go over budget, experience any substantial delays, or place our workers in danger.

Navigating the cold season in South Africa's construction industry requires a keen understanding of its inherent challenges, from extended project timelines to safety concerns and other project disruptions which may lead to substantial financial losses.

While South Africa may not often experience freezing temperatures, colder weather can still slow down various aspects of the construction process.

For instance, concrete takes longer to set in lower temperatures, adhesives may not bond as well, and certain types of paint may not apply or dry properly. This can cause delays as work either needs to be redone or postponed until conditions improve.

Additional time may need to be allocated for site preparation and maintenance, such as clearing frost in the mornings or dealing with potential flooding from rain.

Cold weather can also create slippery conditions, which may require additional safety measures to prevent accidents.

Worryingly, we may also see a considerable drop in worker productivity if the effects of extreme cold on the job site are not planned for and correctly counteracted.

The cold can lead to discomfort, fatigue, and a sharp reduction in concentration, all of which can slow down the pace of work. More frequent breaks may be needed for workers to warm up, and tasks may take longer to

complete due to reduced dexterity from wearing thicker clothing.

Lastly, the winter period often has fewer daylight hours, reducing the amount of time in which work can be safely carried out – particularly for tasks that require good visibility.

Construction companies need to plan and account for these potential delays in their project timelines during colder seasons to ensure smooth operations and timely delivery of projects.

Steps for companies to reduce cold weather risks

To mitigate the impact of colder weather on productivity and ensure timely project completion, industry leaders must proactively adapt their strategies to ensure ongoing productivity, safety, and operational efficiency.

Regular maintenance checks and using winter-grade lubricants and batteries can help to keep equipment running smoothly in the cold. Employing block heaters on diesel engines can also be beneficial in ensuring that vehicles start properly on exceptionally cold mornings.

Further employing outdoor heating mats on the construction site at key working points can help to quickly clear frost in the morning.

Additionally, good drainage systems are essential to preventing flooding from rain. To deal with slippery conditions, applying grit or sand to frosted or wet areas can provide extra traction and reduce the risk of accidents.

Special care should also be placed on enhancing worker comfort on the job site. Providing heated shelters for breaks, along with warm drinks, can help to keep the workforce comfortable and maintain productivity. Proper winter clothing, including thermal



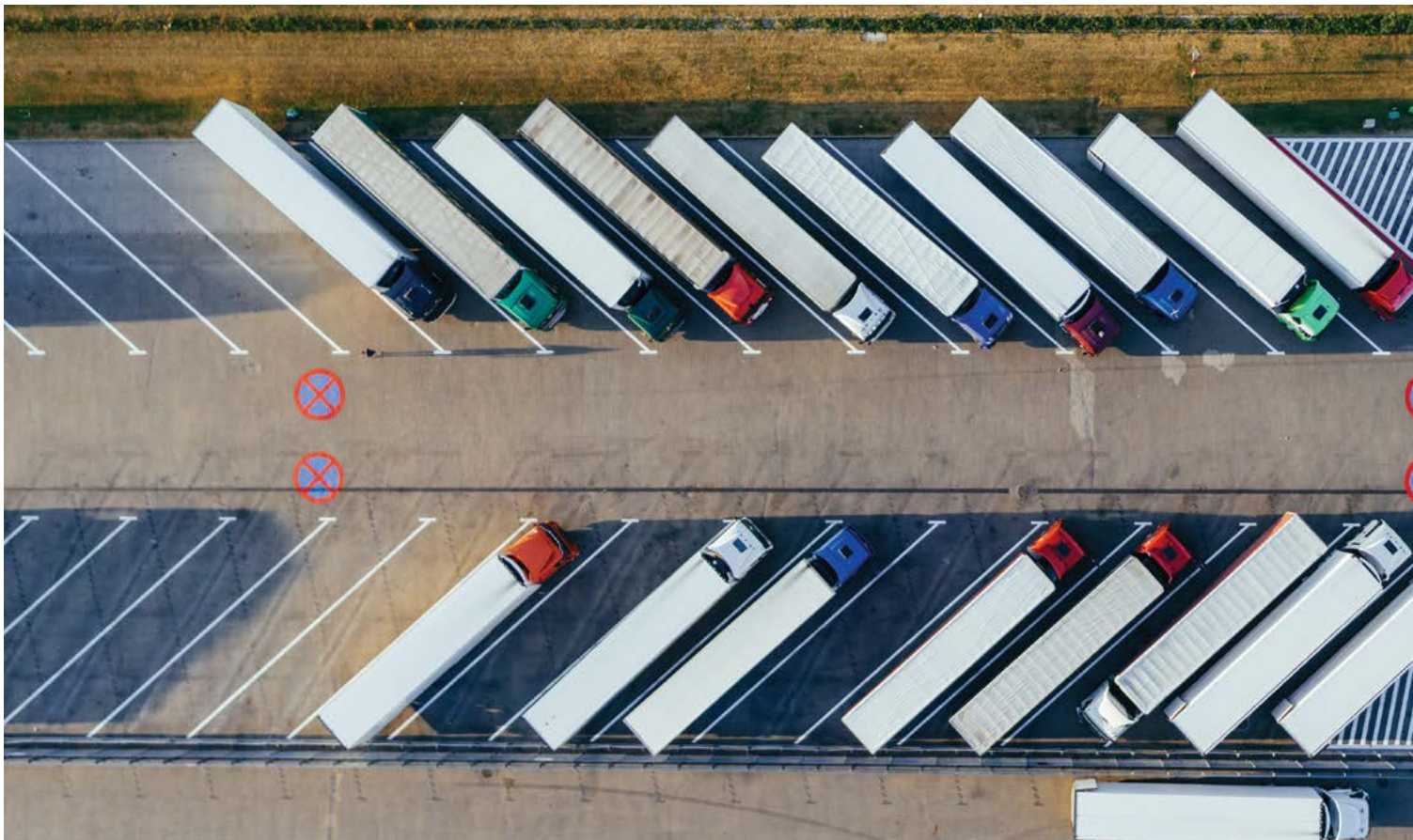
Roelof van den Berg, CEO of the Gap Infrastructure Corporation.

gloves that allow for normal dexterity, can also help workers stay warm without hampering their ability to work effectively.

To maximise daylight hours, project planning needs to prioritise outside tasks during daylight, while indoor or well-lit tasks can be saved for early mornings or late afternoons. In certain situations, the use of additional lighting may be required to ensure the safety and quality of work at or around dusk, which often occurs earlier on winter days.

The colder season can pose significant challenges to the construction industry in South Africa, and even though we don't often experience freezing temperatures, it's still important to be mindful of the change.

But despite the difficulties posed by colder temperatures, the industry remains committed to delivering high-quality projects, thus continuing to support economic growth and development in South Africa. 🌟



TELEMATICS WITH THE POWER TO PREDICT

Ctrack, a leading player in the telematics business, is transforming its business with the slogan 'The Power to Predict' at the nucleus of this new strategy as they look to meet its customers' high demands in a changing and challenging environment.

Ctrack has a long history of market leadership in telematics, fleet management and technology development that facilitated industry disruptions throughout their 38-year history. Highlights include developing the technology behind the first multi-box tracking unit in 1997, Discovery Insure's usage-based insurance in 2011 and the launch of Crystal in 2022.

"With the emergence of big data, Ctrack realised that we needed to offer our clients solutions that allow them to utilise this data to their advantage in the most efficient way possible," says Hein Jordt, Chief Executive Officer of Ctrack.

Intelligence first

Ctrack's brand transformation reflects its commitment to providing cutting-edge data and telematics solutions that stretch beyond traditional fleet management capabilities. Ctrack recognises the immense potential that lies within harnessing data to drive actionable intelligence and optimise business operations.

"This is more than a cosmetic change, it signifies Ctrack's dedication to innovation and commitment to staying at the forefront of technological advancements. The revamped brand reflects our belief in the transformative potential of data insights and predictive power," adds Jordt.

The power to predict goes hand in hand with the core pillars that have always been the motivating factor for Ctrack's ongoing research and development efforts as they aim to assist customers in reducing risk and minimising safety

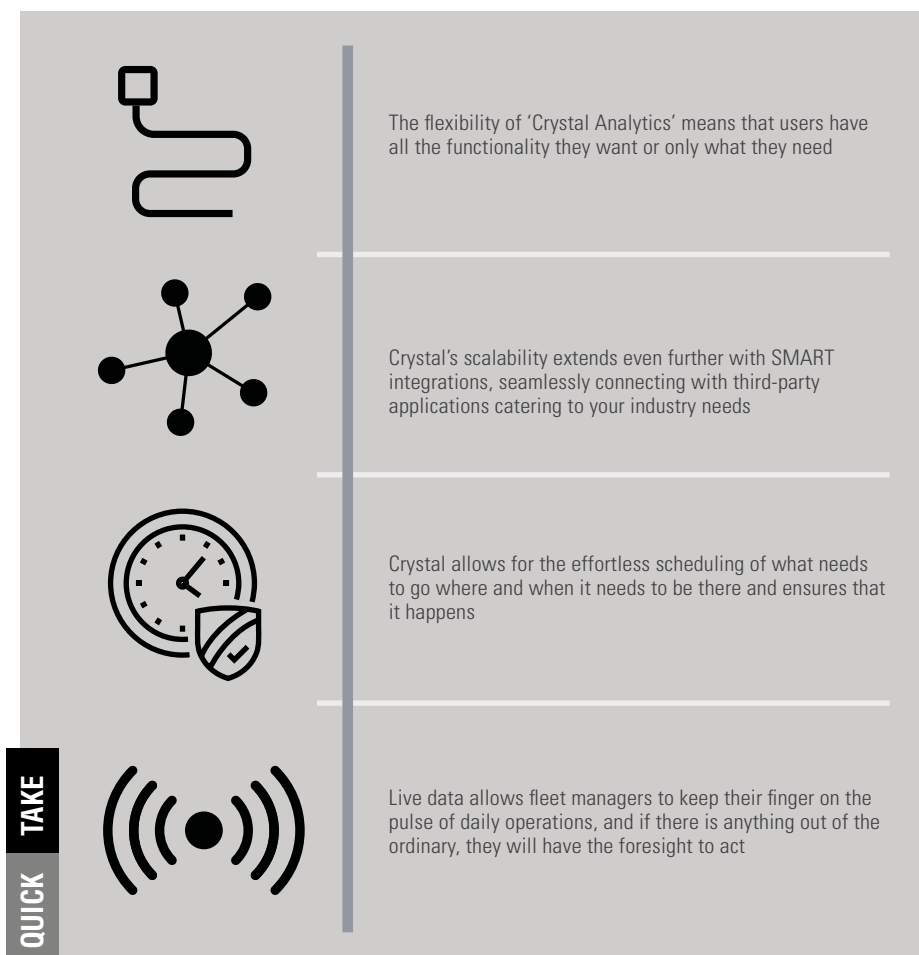


"Owners have less time to manage fleets, but Crystal allows them to do so much more and gain a deeper understanding of data, as well as clear predictions with a limited number of clicks."

Hein Jordt, Chief Executive Officer of
Ctrack



Ctrack's brand transformation reflects its commitment to providing cutting-edge data and telematics solutions that stretch beyond traditional fleet management capabilities.

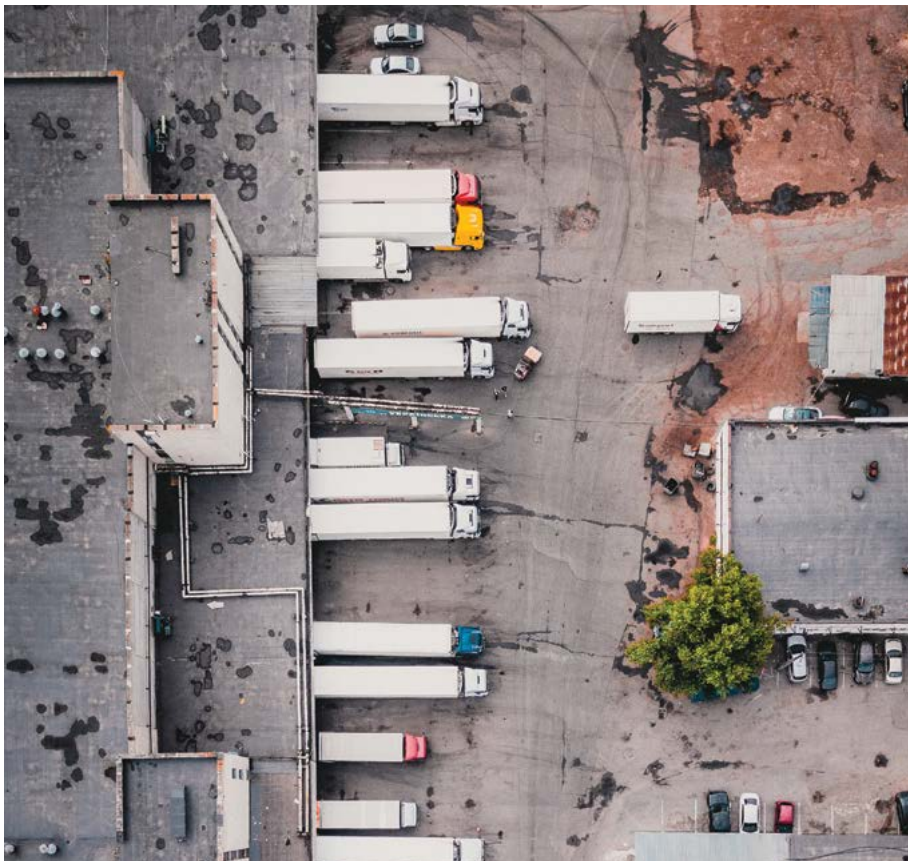


hazards, optimising fleet productivity and efficiency, improving asset management and tracking, managing, and improving driver behaviour and automating and streamlining compliance. These pillars along with a sense of urgency have allowed Ctrack to develop flourishing long-term business relationships.

Power of prediction

The power to predict is possible thanks to Ctrack's well-developed hardware and software solutions that give users the ability to know what is happening with their vehicles, drivers, and cargo at any time of the day via a single platform. That software solution is Crystal, an all-encompassing, cloud-based platform. Crystal is a single platform where AI telematics meets data intelligence and offers all the functionality that consumers have come to know and love in one location. The result is a business tool that offers so much more than simple reporting.

Live data allows fleet managers to keep their finger on the pulse of daily operations, and if there is anything out of the ordinary, they will have the foresight to act before they are forced to react.



The Ctrack Bureau service facilitates the use of AI technology that works along with the camera systems to automate the process of identifying transgressions, significantly reducing the leg work required by fleet managers in managing driver behaviour more efficiently.

Any sized fleet

Whether you are a small business owner with a single delivery vehicle or are managing a fleet of hundreds of trucks across the continent, you are guaranteed to move better when you have the power to predict.

"We are passionate about empowering our clients using cutting-edge technologies to transform quality data into actionable insight and foresight that allows our customers to predict the future with certainty, optimise efficiencies and make informed decisions based on good quality data," adds Jordt.

Crystal is fully customisable, so there's no limit to what you can have sight of and keep tabs on. A multitude of data is collected, interpreted, and packaged, allowing customers to make informed decisions and continuously refine their operations. With data and insights at their fingertips, Ctrack can predict scenarios and put measures into place to negotiate these situations as safely and efficiently as possible.

"Owners have less time to manage fleets, but Crystal allows them to do so much more and gain a deeper understanding of data, as well as clear predictions with a limited number of clicks," says Jordt.

Management and tasks

Crystal allows for job management, assigning tasks and planning routes in the most efficient manner. Alerts ensure that the right people are informed ahead of time, every time. At any point in the day, fleet managers can rely on a snapshot summary that gives them an instant real-time view of crucial, relevant data. High-quality data is packaged in the simplest format possible, facilitating the reporting and insights that allow for swift, well-informed decision-making.

Crystal allows for the effortless scheduling of what needs to go where and when it needs to be there and ensures that it happens. The power to predict is beneficial to your clients too. Communication down the supply chain has been optimised with the addition of powerful modules such as 'Electronic Proof of Delivery', which ensures that all parties are automatically kept up to date with objective and transparent evidence that operational milestones are achieved, with the foresight to make changes ahead of time, if need be.

Users are now able to add camera and video technology to the Crystal suite, offering a live feed into the inside of the vehicle and of the person operating it, granting unprecedented insight into

what is happening at that exact moment. Crystal video gives fleet managers eyes everywhere, accessible from any smart device at any given time, from one platform.

Using AI for business needs

In addition, the Ctrack Bureau service facilitates the use of AI technology that works along with the camera systems to automate the process of identifying transgressions, significantly reducing the leg work required by fleet managers in managing driver behaviour more efficiently, with deeper insights that allow for better decisions in a tough trading environment. Crystal's scalability extends even further with SMART integrations, seamlessly connecting with third-party applications catering to your industry needs. This includes activating bespoke SMILE scripts, monitoring trailers, implementing breathalysers or keeping an eye on the temperature in the cold chain. Ctrack's unique differentiators can be applied to any industry.

Flexible and simple

The flexibility of 'Crystal Analytics' means that users have all the functionality they want or only what they need. Users can add and customise modules according to their specific needs. Crystal will gather all the information required to equip you with the insights to make better business decisions. Crystal presents this information in a way that is easy to access, simple to understand and practical to apply.

"One single platform allows for the management of fleets as well as a wide variety of insights into how to improve. Crystal can predict what will happen based on previously captured historical data, ensuring optimal use of vehicles, and limiting downtime by proactively taking action such as ordering parts or making workshop bookings," adds Jordt.

The Crystal mobile app, available in both Google and Apple stores, completes the loop as it is designed to provide valuable information about daily operations in the simplest way possible and facilitate the optimal running of fleets and vehicles for both drivers and fleet managers.

"The Power to Predict vision relies on historical and predictive data to digitally transform our business to ensure that we are future-proof. With our wide variety of hardware solutions working in conjunction with Crystal, and our constant investment in research and development, we look forward to offering our customers world-class products for many more years to come," concludes Jordt. 🌟



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When dealing with heavy loads or large equipment, it is crucial to make sure that your load distribution per axle is correct.



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TO READ MORE



A GUIDE TO CHOOSING THE RIGHT TYRES FOR YOUR HEAVY-DUTY TRAILER

Selecting the correct tyres for your heavy-duty trailer goes beyond just performance, safety, and durability—it's also about achieving the lowest cost per kilometre (CPK) and ensuring sustainability.

When choosing a tyre for your trailer, making the wrong choice can lead to increased fuel consumption, premature tyre failure, reduced efficiency, frequent breakdowns, or accidents.

These issues can cause extra expenses and inconvenience, which nobody wants when relying on a workhorse like a trailer.

To help you navigate this important decision, Sumitomo Rubber South Africa, distributor of Dunlop, Sumitomo, and Falken tyre brands, provides these helpful tips.

Research and expert assistance

Start by evaluating your workload and conducting thorough research to determine your trailer tyre requirements.

Don't hesitate to reach out to your tyre partner or dealer for valuable assistance in selecting the most suitable brand and

"The four local tyre manufacturers in South Africa will continue working on reducing the impact of their operations on the environment."

Nduduzo Chala, Managing Executive of the SATMC





The Falken RI 128 tyre in size 285/70R19.5 is ideal for regional to long-haul and highway transport applications.

RECOMMENDED TYRES FOR HEAVY-DUTY TRAILERS

Sumitomo ST791 tyre in size 275/70R22.5

Features a four-rib, unique zigzag groove pattern with deep sipes for strong traction in wet and dry conditions. It includes a sidewall protector to resist curb scuffing and an 18mm deep tread with a special low-heat generation tread compound that ensures a longer tread life.

Dunlop SP581 in tyre size 275/70R22.5

An all-wheel position tyre designed to enhance wet grip for on and off-road operations. The special tread compound enhances cut and chip resistance, as well as retreadability. Tapered tread grooves and ejector ramps help resist stone drilling, while the all-position tread design enhances traction on both road and off-road surfaces.

Falken RI 128 tyre in size 285/70R19.5

Ideal for regional to long-haul and highway transport applications. This tyre is suitable for volume load trailers, low-bed trailers, and car carrier trailers. The RI 128 offers high mileage, wet stability, and good retreading capabilities which makes the RI-128 an ultra-efficient tyre choice for heavy-duty trailers.

Sumitomo ST719 tyre in size 245/70R17.5

A premium truck radial tyre with a high load capacity for heavy-load trailers. It ensures even wear, better fuel efficiency, and enhanced ride comfort. This tyre is an excellent choice for low-bed trailers and car carrier trailers.

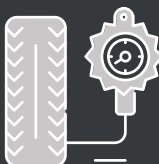
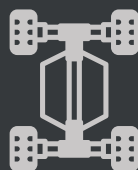
QUICK TAKE

Tread depth plays a crucial role in a tyre's performance, especially in wet conditions

For heavy loads or large equipment, the load distribution per axle needs to be correct

Pressure maintenance is crucial in reducing rolling resistance and optimising fuel efficiency

Factors that affect fuel consumption include cold inflation pressures, wheel alignment and the trailer's mechanical condition



product. Sumitomo Rubber SA has an In-field Technical Services (ITS) team located in different regions, including Africa, dedicated to advising customers on tyre selection, application, and performance.

Their expertise can make a significant difference in your business growth and help you maximise the performance of your tyres. Additionally, consider doing a scrap tyre analysis to identify the reasons behind their failures or removal due to operational damage.

Fleet surveys can offer valuable insights, including a detailed examination of tyre wear patterns and potential mechanical irregularities in the vehicles causing tyre wear.

Check load capacity

Heavy-duty trailers demand tyres that can handle substantial weight.

Before making a purchase, make sure to check the maximum load rating of your trailer and choose tyres accordingly.

When dealing with heavy loads or large equipment, it is crucial to make sure that your load distribution per axle is correct. This ensures proper weight distribution onto the tyres, resulting in optimal tyre performance.

This can be done by conducting a load study on the truck and trailer, which will determine the weight of each axle.

Once this has been done, the correct



All four local tyre manufacturers in South Africa have committed to achieve carbon neutrality by 2050 in line with their global targets.



Select trailer tyres with low rolling resistance to minimise fuel consumption, especially during long-distance travel with heavy-duty trailers.

cold inflation pressures can be determined for the truck tractor and trailers. The load study can be done at the end user's premises. Using the incorrect tyres in the application will reduce traction and performance.

Evaluate tread depth

Tread depth plays a crucial role in a tyre's performance, especially in wet conditions. Tyres with deeper treads offer better grip, which is essential for heavy-duty trailers operating in various weather conditions.

Consider fuel efficiency

Select trailer tyres with low rolling resistance to minimise fuel consumption, especially during long-distance travel with heavy-duty trailers. To achieve lower rolling resistance, it is essential to maintain the correct tyre pressure. When a tyre is underinflated, it increases rolling resistance because of the additional drag caused by the tyres. Proper pressure maintenance is crucial in reducing rolling resistance and optimising fuel efficiency.



The Dunlop SP581 in tyre size 275/70R22.5 is an all-wheel position tyre designed to enhance wet grip for on and off-road operations.

Recycling tyres

Globally, an estimated one billion tyres reach the end of their useful life every year. Thus, reducing the negative environmental impacts of waste tyres is high on the agenda for the South African Tyre Manufacturers Conference (SATMC).

Bridgestone South Africa, Continental Tyre South Africa, Goodyear South Africa, and Sumitomo Rubber South Africa are members of SATMC, and the industry body is collaborating with the Tyre Importers Association of South Africa (TIASA), the Tyre Equipment Parts Association (TEPA) and the government to ensure that steps are taken to drive improvements and sustainability in both collection and processing of tyre waste. SATMC members have committed to carbon net zero by 2050.

"As we inch closer to 2050, we know that only a collective and collaborative spirit will enable us to see a healthy future for us all. The four local tyre manufacturers in South Africa will continue working on reducing the impact of their operations on the environment," says Nduduzo Chala, Managing Executive of the SATMC.

Trailer tyres need to be considered in the circular economy to reduce and eliminate waste, which is an additional step to reaching net-zero targets. 🌱

MITIGATE RISKS AND REWARD SAFETY IN FLEET INSURANCE

By Rhys Evans, Managing Director at ALCO-Safe

If driving under the influence is a reason for insurers to reject claims for vehicle accidents, can drug and alcohol testing programs be used by businesses to reduce cover premiums for their vehicle fleets?

Insurance companies are always looking for ways to reduce their risk. One way to do this is by charging higher premiums to businesses that have a higher risk of accidents.

Any organisation with a large fleet of delivery vehicles is a greater risk, purely from a number's perspective and while the risk of driving under the influence is not currently a weighting factor when calculating business insurance premiums, it should be.

Workplace testing can reduce the risk of accidents caused by drivers who are under the influence and by regularly testing drivers for drugs and alcohol, businesses can identify and remove drivers who are a risk to themselves and others. This will naturally reduce the number of accidents that occur - leading to enhanced overall fleet safety and efficiency. In turn, surely this should then translate to lower insurance premiums?

The legislative context for workplace testing

When considering commercial drivers, the Occupational Health and Safety Act requires employers to take all reasonable steps to ensure the safety of their employees, which includes ensuring that employees are not under the influence of alcohol or drugs while working. The Road Traffic Act (RTA) defines "driving under the influence" as having a Blood Alcohol Concentration (BAC) of 0.05% or more while prohibiting driving while under the influence of drugs that impair a person's ability to drive safely. The National Road Traffic Act (NRTA) has a number of provisions that are designed to improve road safety, including stricter penalties for driving under the influence of alcohol or drugs.

Severe legal and commercial consequences

Liability for a road accident caused by an occupational driver under the influence

of alcohol or drugs will depend on the specific circumstances of the accident but in general, the driver can be held liable for the accident if found to be under the influence of alcohol or drugs. Additionally, the employer can be held liable for the accident if they knew or should have known that the driver was under the influence of alcohol or drugs and failed to take steps to prevent the accident. Furthermore, accidents caused by drivers under the influence can have significant business consequences. These include financial losses due to liability for damages, potential legal fees, and increased insurance rates. Furthermore, the business's reputation can also suffer, leading to customer loss and productivity may decline if a driver is injured or suspended. In this regard, the business can be held legally liable for such accidents.

From awareness to action: practical risk mitigation

To mitigate these risks (and avoid these costs) businesses should have a strict workplace policy that clearly outlines their stance on driving and consuming intoxicating substances. Employers must consistently enforce their policy while providing training on the dangers of driving under the influence and promoting responsible driving practices. One of the most practical ways to do this is by investing in workplace testing for alcohol and other intoxicating substances.

At their dispatch hubs, a number of significant South African logistics and delivery companies have started a pilot program for mandatory testing, and before drivers are permitted to leave the site with a delivery, they must submit to a breathalyser test. This process is repeated each time the driver returns to the depot to collect



Rhys Evans, Managing Director at ALCO-Safe

a new order for delivery. Such testing is unmanned and automated, simply requiring the mounting of a testing device to a wall near the access control point at a depot location. The access control system can be linked to the results of the breathalyser test - if the driver fails, they are not permitted to proceed. Such testing apparatus can be used to conduct hundreds of tests daily, storing all the data results in a cloud-based platform which makes for easy driver fleet management reporting.

Safety is in the numbers

Using these analytics, it is possible to identify problematic drivers for rehabilitation purposes and to get a clear indication of the overall safety performance of the business. This data can be used for auditory purposes by the relevant labour inspector checking safety compliance and can just as easily be presented to an insurance provider to petition for and justify a reduction in insurance premiums. Just as insurance companies reward individual consumers for driving well (through the placement of vehicle monitoring devices), so too should insurance providers reward businesses with lower premiums in return for proactively mitigating their risk by ensuring driver safety through workplace drug and alcohol testing. 🌱



Babcock's line-up includes three TLB models; the HD76, HD96 and HD100 are designed to match the needs of digging, trenching, lifting and loading applications.

BABCOCK SA WELCOME BULL CONSTRUCTION EQUIPMENT TO THEIR OFFERING

While not new to South Africa, BULL Construction Equipment is new to the Babcock Equipment line-up.

With the new partnership BULL is reintroducing their world renowned TLBs and skid steers.

Babcock is the exclusive regional distributor for leading international brands and construction equipment including Volvo and SDLG construction equipment, Sennebogen cranes, and Winget concrete handling machinery, and BULL joins these ranks.

David Vaughan, Managing Director for

Babcock's Equipment business, is excited to be providing BULL TLBs to the southern African market.

Babcock has supplied, sold and maintained various brands of TLBs in southern Africa for over 20 years, which allowed for a natural and easy integration with BULL.

"We are experts in construction equipment distribution and have in-depth

technical understanding of these machines," says Vaughan.

Babcock is equipped to offer comprehensive construction and earth-moving solutions, and this is strengthened by adding BULL to address the evolving needs of customers.

Globally renowned

BULL is considered a leading international construction equipment brand based, in India and owned by the AV Group.

They have a well-established footprint that spans across the globe and is noted to have two state-of-the-art manufacturing plants. In India BULL is the subcontinent's foremost tractor attachment manufacturer and its range of backhoe loaders and skid steers maintain world-leading standards in efficiency, comfort and safety.

BULL is not new in South Africa, and as a result the partnership isn't an introduction of BULL, but rather a new way to experience the ethos of the brand.

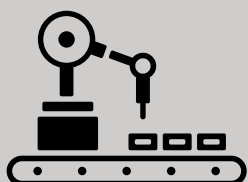


"Our door is always open and BULL's customer-centric, solution-driven ethos makes them an ideal fit."

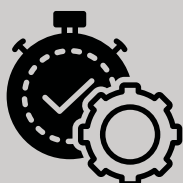
David Vaughan, Managing Director for Babcock's Equipment business



The AV490 skid steer is designed for fuel efficiency and features a rear-view camera to reduce blind spots.



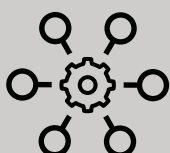
In India BULL is the subcontinent's foremost tractor attachment manufacturer



Spare parts are already on hand to ensure minimal downtime for clients



Every BULL loader aims to be competitively priced



The AV490 skid steer is ideal for agriculture, construction and under-conveyor mining

While the BULL brand has been available in South Africa since 2017 through previous dealers, previously mainstream construction and plant hire sectors were not always familiar with the brand.

Now with Babcock's weight behind BULL, this could change.

Vaughan adds that besides the machines' superior quality, innovation and reliability, BULL's business philosophy aligns with Babcock's.

"Our aftersales service and approachability set us apart from our competitors. Our door is always open, and BULL's customer-centric, solution-driven ethos makes them an ideal fit," he says.

Business as usual

Vaughan believes with the BULL range of products in Babcock's portfolio, the business is now better equipped than ever to provide reliable and efficient machines to diverse customers across various sectors.

These include agriculture, construction, plant hire, contracting, as well as sand, stone and waste management.

Existing Babcock customers, such as those in the mining sector, also benefit from a choice of smaller, cost-effective machines to supplement their fleets of heavy earth-moving equipment.



The Bull HD100 available in either a general or a multi-purpose variant. The TLB features power steering and smart technology hydraulics.

Support network

Babcock is providing aftermarket and technical support to all new and existing BULL customers in southern Africa, with product manager Mark Senyard at the helm. Senyard has long been associated with BULL equipment and brings with him years of construction equipment knowledge and product expertise. He will be playing a key role in facilitating the seamless transition of the brand into the Babcock fold.

Senyard puts his full support behind the BULL range, which is competitively priced, mechanically reliable and technically superior.

"BULL is globally renowned for its impressive equipment, proactive approach and commitment to continuous research and development. I am looking forward to new and existing BULL customers benefiting from these exceptional machines, and the Babcock team is ready to create value and provide solutions for our customers," he says.

Vaughn is also placing trust in Senyard to further expand BULL locally.

"Mark's years of experience and BULL product knowledge, together with our extensive regional footprint and established parts and maintenance network, means we are well equipped to provide comprehensive aftermarket support to all BULL customers throughout southern Africa," says Vaughan.

"Spare parts are also already on hand to ensure minimal downtime for clients."

BULL is dedicated to producing reliable construction equipment that performs consistently and efficiently on the harshest of job sites, making them well suited to tackling African terrain. As an in-house

research and development company, the business can respond to market feedback, and incorporate the latest technology into its equipment, giving customers the benefit of enhanced productivity and performance.

The TLB lineup

Every BULL loader is aimed to be competitively priced. Babcock's line-up includes three TLB models; the HD76, HD96 and HD100. These machines are designed to match the needs of digging, trenching, lifting and loading applications, with the HD96 and HD100 available in either general or multi-purpose variants. Their rugged reliability doesn't compromise on operator comfort, with features such as power steering and smart technology hydraulics.

Skid into action

To get the job done in tight spaces, the compact and easily manoeuvrable AV490 skid steer is ideal for landscaping, agriculture, construction and under-conveyor mining. This cost-effective all-rounder is designed for fuel efficiency and features a rear-view camera to reduce blind spots. Babcock supplies this machine in two variants, giving customers a choice of canopy or cab with air-conditioning.

Expertise guaranteed

Babcock is the exclusive regional distributor for leading international brands and construction equipment including Volvo and SDLG construction equipment, Sennebogen cranes, and Winget concrete handling machinery. Working closely with its customers, Babcock has a proud history

BULL is globally renowned for its impressive equipment, proactive approach and commitment to continuous research and development. I am looking forward to new and existing BULL customers benefiting from these exceptional machines, and the Babcock team is ready to create value and provide solutions for our customers,"

he says.

of sales and servicing of construction equipment that spans more than six decades.

"This exciting collaboration brings together Babcock's expertise in construction equipment distribution and BULL's reputation as a leading brand in the industry, offering customers in the region access to an exceptional range of machinery," says Vaughan. "With our extensive national network and unwavering commitment to exceptional support, we will ensure that BULL customers' needs are met with optimal uptime and operating effectiveness." 🌟

A LOOK AT THE IMPACT OF TRUCK ATTACKS ON VAN REENEN'S PASS

The Road Freight Association (RFA) cannot accept the scenes that played out on the N3 in July as anything but a coordinated attack on the road freight sector. Both the specific spot on the N3, as well as the timing, were chosen to cause the best outcome in terms of mayhem and disruption.

By Gavin Kelly, CEO, The Road Freight Association

The road freight sector (trucks) carries 80% of the goods that are moved in and around South Africa, as well as for those countries that trade with international markets and use South African ports for import and export.

Those who attack the road leg of logistics supply chains need to understand that the long-term effects will bring greater destruction to employment levels, and will result in further job losses, as businesses and supporting sectors shrink and trade moves away from South Africa.

However, about freight and the economy of South Africa: Without trucks, South Africa stops. As noted earlier, the scene that played out on the N3 at Van Reenen's Pass was a ruthless attack on the road freight supply chain – and the effects (economic, business confidence, security, law and order and corridor movement) are far-reaching. Whilst the immediate short-term losses will run into millions, the long-term impact will be felt in terms of increased security costs into the cost of logistics, higher insurance premiums, higher SARIA cover premiums, higher toll fees, less freight movement through South Africa, closure of freight companies and the loss of jobs. Some damning results can include:

- Depending on the category of vehicle, the type and value of the cargo, and the specialised equipment required for the cargo: this can be anywhere between R3 to R10-million.
- The cost of loss of income through businesses closing is far greater: If any of the trucks belonged to a small business – it will have lost its only truck or trucks: This means loss of earnings/revenue for the business, loss of salaries paid to staff who would no longer have jobs (due to business shutdown), and loss of revenue through the services and support the business uses.
- Cargo owners and customers will choose to move cargo through neighbouring

countries. This has already been happening as South African ports become inefficient and the surrounding ports develop, improve and drive efficiencies up. South Africa's "Gateway to Africa" status has been lost and these attacks will further cement the move of transit freight from South Africa to neighbouring countries. Port revenues will drop, as will income through all support and related freight logistics users.

- Some 7 000 container deliveries are done through the South African ports per day (the Port of Durban does roughly 4 000 containers a day).
- Depending on the configurations of the vehicles, delays in moving (for trucks) costs the transporter between R5 000 and R7 500 a day (rough estimate of a loss of revenue to the 7 000-odd vehicles from various destinations who would be affected for one day delay at various points of entry, and along the N3 corridor) would be around R35 million – this is the broad road freight sector impact.

The N3 is probably the busiest corridor in South Africa, carrying far higher volumes of traffic (freight, passenger and light motor vehicles for commercial, tourism and private use) than any other corridor.

Once again, the cost to the South African economy, considering all the above, will run into high losses, as business confidence from foreign investors plummets, and those who use South Africa as a transit hub, turn away from us and move to other countries that are safer and more efficient.

However, the more important questions to be answered are: Who is behind this attack, and why?

There was no looting of vehicles (therefore not cargo theft in intent), and thankfully none of the drivers or staff on the vehicles were injured or killed.

The targeted precision of the attack is worrying. This was well-planned and efficiently implemented.

At this point, no group has acknowledged



Gavin Kelly, CEO, The Road Freight Association.

that they are responsible.

If this is the same grouping that has been behind such attacks across the country over the past six years, then action needs to be taken against those who promote, plan and implement such criminal actions. We have heard the Minister of Police refer to economic sabotage and many other forms of description, but it would seem that this behaviour continues unabated.

If this is, indeed, the work of the All Truck Drivers Foundation (ATDF-SA) and its counterparts relating to the employment of illegal foreigners in the road freight (or any other) sector, then the responsible Department of Employment and Labour, and its inspection structures, must ensure that their responsibility to protect employees and employers from non-compliant labour practices is strictly and swiftly applied.

Whilst the Road Freight Association (RFA) is currently unaware of which companies were targeted and attacked (and whether this was a random choice of trucks or an actual specific set of transporters), it is always those who are compliant and innocent of the complaints or issues raised by others, that get caught up in these activities, and ultimately pay the price of closed businesses and severe cost increases to operations. 🌐

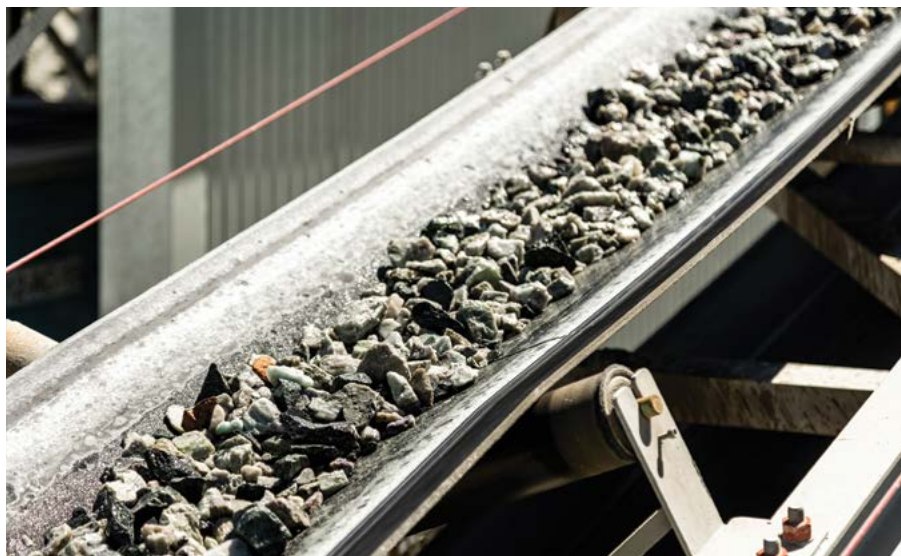
Sensor-based sorting at mines comes full-circle

The main challenge in lithium mining comes from basalt contamination. This high-iron, barren material has a high density very similar to that of spodumene. It means that when dense media separation (DMS) is used as the primary spodumene concentration process, basalt is concentrated with spodumene, contaminating the final product.

Mining operations under pressure to meet the soaring demand for lithium need to maximise the efficiency of their processing plants, using their capacity effectively to extract as much valuable lithium from their mines as possible.

The solution to this challenge is available from TOMRA Mining, the leader in sensor-based sorting with a proven track record in designing and building the largest, high-capacity sorting plants in the world.

TOMRA's industry-leading sensor-based sorting solutions rely on colour cameras, X-Ray Transmission sensors, and multi-channel scanning lasers to sort the ore before the downstream wet processing. The sensors analyse every single particle, identify the ore and waste in milliseconds, and high-speed air jets direct the particles accordingly to the product or waste chutes, processing at a capacity of up to 350t/h in a single sorter.



With sensor-based ore sorting solutions, mining operations can improve the efficiency of their processing plants.

These high-speed sensor solutions can sort a wide size range – from around 6mm to around 200 mm – to maximise the removal of iron and basalt from the feed. With these technologies, it is possible to minimise the unsorted fines that are discarded or stockpiled, and it has been extensively proven that they are effective in consistently reducing the contamination of the ore to less than 4%.

With TOMRA's sensor-based ore sorting solutions, mining operations can not only improve the efficiency of their processing plants, but most importantly unlock value from stockpiled materials and even expand their resources, exploiting ore bodies with higher contamination or searching for new mining opportunities in areas with higher iron or basalt content. 🌱

The value of good equipment warranties

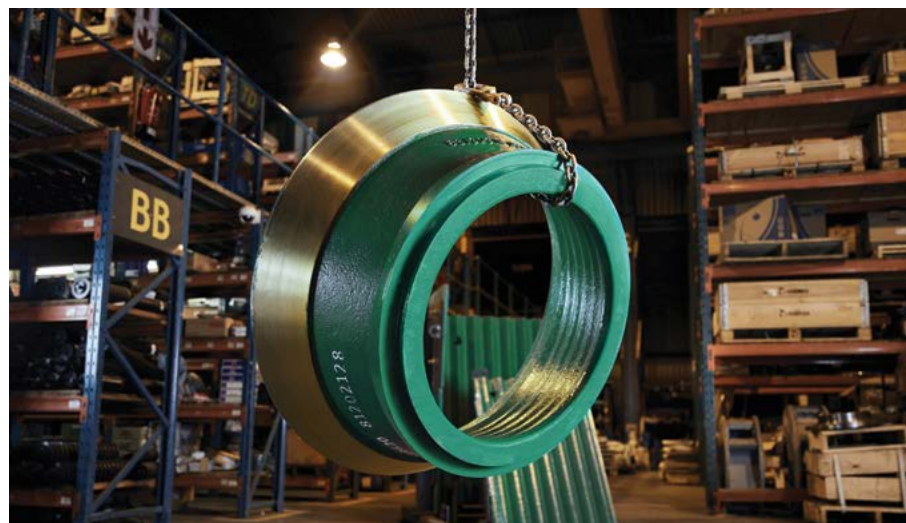
Metso and Pilot Crushtec's five-year or 10,000-hour EPS warranty on its equipment ensures mining or construction operations are safeguarded.

"A warranty is much more than just a promise - it's a demonstration of a company's confidence in its products and, for us at Pilot Crushtec, it is also a testament to the product's durability and our commitment to stand by the equipment's performance," says Francois Marais, Sales and Marketing Director at the crushing and screening equipment.

"Take the Metso Lokotrack LT120 crusher as an example," he says. "The assurance of a significant warranty such as the one we provide gives customers the peace of mind they need to invest in the product and use it to its fullest potential."

Pilot Crushtec's EPS warranty covers five years or 10,000 hours of operation, whichever comes first. Marais says that this level of support is unparalleled in the industry, setting Pilot Crushtec apart from the competition.

"In a sector where downtime can result in substantial financial losses, this warranty's importance cannot be



Pilot Crushtec stocks only genuine OEM wear products which ensure the right fit, first-time and premium wear performance.

overstated," Marais continues.

This extended warranty reflects Pilot Crushtec's confidence in their products' quality, reliability and longevity. It shows the company's belief in the LT120™'s design, the robustness of the Nordberg® C120™ crushing unit and the efficiency of the engine powering the crusher. It also

demonstrates the company's commitment to its customers' success and its willingness to stand behind its products.

The power of a robust warranty should not be underestimated. It not only showcases a company's confidence in its products but also its commitment to customer satisfaction. 🌱

Digital twin modelling can optimise equipment used at mines

Proximity Detection System (PDS) specialist Booyco Electronics has highlighted how data can be leveraged to improve safety in mines while making it more productive and efficient.

"For many years, our PDS have allowed customers to collect data on the movements of their mobile trackless machinery and their personnel," says Graeme Jardine, Chief Sales Officer at Booyco Electronics.

"As the mining sector embraces the power of the digital twin approach, the value of this data is further enhanced as it can now be used to virtually model the optimisation options on a surface mine."

Jardine explains that modelling allows the benefits of any operational improvements on a mine to be evaluated in advance of implementing them. Changes to existing systems and processes can introduce risks and costs, so it is important for mines to pre-test options as far as possible – quantifying their potential benefits in advance.

"Using a digital twin – the virtual equivalent of the machine in the field – mines can model many proposed scenarios and choose the one that is optimal for their operation," he says.

To illustrate this point, he uses the example through heat maps created via Booyco's Electronics Asset Management System (BEAMS) software suite a scenario depicting haul trucks experiencing excessive standing time waiting to be loaded.

The mine can use digital twin modelling to investigate the detailed implications and costs of diverting some trucks to an added excavator or shovel.



The Booyco CXS solution provides a comprehensive and integrated response to Level 7, Level 8 and Level 9 safety levels – as defined by the Earth Moving Equipment Safety Round Table (EMESRT).

By quantifying costs and benefits more accurately, an informed decision can be made, making the best use of the available capital and resources – and positively impacting the bottom line.

For Booyco Electronics customers, their years of collected data through PDS and the Booyco Electronics Asset Management System (BEAMS) software suite, which is a central information hub linking the proximity detection hardware products with monitoring devices, e.g. control room environment, positions them well to advance with digital twin technology – as this data can now be used to populate a modelling system.

"The modelling process may require an extended period's worth of data to be input before the results can be regarded as representative and meaningful," says Jardine. This means that they will not have to wait months or years to generate the necessary data from scratch. As a leader in this field since 2006, Booyco Electronics can leverage its technology to harness the potential of digital twin modelling.

"We have taken many mines through the process of applying PDS technology and are now well positioned to walk a similar journey with them towards a digital twin value add," he says. 🌐

Online parts allow the mining industry to make a smart connection

Atlas Copco Power Technique supports its portable range of generators, air compressors, light towers, pumps and hand-held tools with several online solutions that enable customers, with the click of a button, to connect with their machines and equipment, access essential product information and make online purchases around the clock.

The online platforms, which include Parts Online, Shop Online, Power Connect, FleetLink and Learning Link, can all be easily and conveniently accessed by Atlas Copco customers and distributors on any smart device.

"We have developed these smart online solutions to promote customers' sustainable productivity by boosting product performance and efficiencies, and extending life cycles, while also trimming carbon footprints," states Douw van Schalkwyk, Business Line Manager for Power Technique's Service Division.

Douw unpacks the online portfolio. "First up is our interactive, up-to-date spare parts catalogue system, Parts Online, which enables customers and distributors to find the right spare parts and consumables for their Atlas Copco portable machines and equipment. Once customers have selected the spares they need, they can order straight away by transferring the items to our e-commerce platform, Atlas Copco Shop Online (soon to become Spare Parts web-shop). This system offers all the benefits typical of online shopping - checking of price and availability, tracing of deliveries, etc. anytime, from anywhere."

Going hand in glove with these two user-friendly platforms is Atlas Copco Power Connect. This portal links customers directly to their machines' spare parts catalogues (hosted on Parts Online) where they can choose their products before proceeding to Shop Online to place their order. 🌐



Atlas Copco Power Connect portal links customers directly to their machine spare parts catalogues.

Major upgrades for Gauteng highways

WSP in Africa is actively involved in several major strategic highway projects across the economic heartland of South Africa, Gauteng. The firm continues to forge strong relationships with key stakeholders to execute large-scale provincial road projects strategically aimed at unlocking the potential for socioeconomic growth and development in the region.

"We've managed to build a resilient relationship with the Department, leveraging our proven track record and expert consulting services to contribute to Gauteng's infrastructure development," says Same-shan Naidoo, Principal Associate, Transport & Infrastructure, WSP in Africa.

A prominent aspect of WSP's strategy involves working closely with the province and developers to actualise these projects.

WSP's agile approach ensures smooth operations despite fluctuating local government structures. The firm also provides consistent oversight throughout the project lifecycle, ensuring all infrastructures are built according to current best practice design, complemented with construction quality control and quality assurance.

To enhance transparency and efficiency, WSP uses cloud-based BIM-enabled soft-

ware, enabling all stakeholders to monitor the project's progress in real-time. "Our approach allows developers, contractors, and clients to stay informed about all on-site activities without physically being there, enabled by a fully digital construction management environment," Naidoo explains. The Gauteng Major Strategic Highways Projects currently underway include:

- K46 William Nicol project.
- K56 and Erling Road project.
- K174 – Riverwalk Interchange in Vanderbijlpark, where WSP is working closely with the Gauteng Province, which is expected to conclude by March 2024.
- K73 – Allandale upgrade aims to unlock numerous development opportunities and is expected to be completed by October 2023.
- The first phase of the K155 Linksfield project is anticipated to start construction later this year.
- D483 Rehabilitation project which includes the upgrade of the road to Cullinan, is due for completion in July 2023.

As WSP continues its work on these transformative projects, it reinforces its commitment to playing a critical role in developing the Gauteng region's infrastruc-



The K73 bridge, part of the Allandale Road upgrade, aims to unlock numerous development opportunities and is expected to be completed by October 2023.

ture and enhancing the lives of the local communities.

"Additionally, we are focused on attracting, developing and retaining talented engineering, project delivery and construction management staff. We do this by providing relevant construction experience for young engineers to obtain their professional registrations and also attract talent by working on major road projects such as these," adds Naidoo. 🌟

Transport Evolution Africa Awards celebrates African innovation

As the Transport and Logistics sector evolves, there is a need to celebrate the innovative solutions that are happening in the sector, such as companies championing women working in transport or logistics to individuals advocating for progress and representing futureproofed solutions for the sector.

The Transport Evolution Africa Awards are set for 21 September with awards categories like Technology Innovator, Best Equity, Diversity and Social Inclusion Programme, Sustainability and ESG Programme and Women Excellence in Leadership Award, Best Port and Terminal Operator and awards for Best Rail and Road Operators.

"The Awards provide a powerful networking opportunity, facilitating connections with government representatives, high-profile industry leaders, CEOs and some of the most influential professionals working in African transport and logistics. Finalists will boost their brand credibility and benefit from a wider audience through marketing initiatives around the Awards," says Le-Ann Hare, Portfolio Director at dmg events.

Andre Ciseau, Secretary General, of the Port Management Association of Eastern and Southern Africa (PMAESA), will be

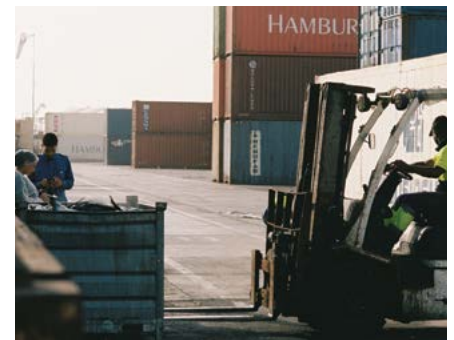
among the expert judging panel this year. "The transport and logistics sectors are poised for growth, and we need to identify the frontrunners in the industry who are leading positive change and inspiring innovation," Ciseau says.

Other judges include Mavis Mhlanga-Mochadibane, Chairperson of Tshwane Women in Transport, Mamoudou Bocoum, Vice President: West Francophone Africa at CPCS, Hendrik Malan, Partner and Africa CEO of Frost & Sullivan, Dr Juanita Maree, CEO of The South African Association of Freight Forwarders (SAAFF) and Trudie Nichols, Legal Consultant, who is looking forward to the Awards.

The Transport Evolution Africa Awards is open for nominations and entries close at the end of July.

"The Awards bring together Africa's most renowned transport and logistics industry professionals, many of whom have been longstanding attendees of the Transport Evolution Africa Forum & Expo," Hare adds.

Co-located with the Awards, the 11th annual Transport Evolution Africa Forum and Expo takes place from 20 to 22 September at the Inkosi Albert Luthuli ICC Complex in Durban and serves as the only African



Co-located with the Awards, the 11th annual Transport Evolution Africa Forum and Expo takes place from 20 to 22 September at the Inkosi Albert Luthuli ICC Complex in Durban.

hub where international public and private stakeholders working within the development and maintenance of Africa's ports, rail and road infrastructure gather to discuss trends, challenges and opportunities across the sector.

"From knowledge sharing to addressing top trends, challenges and innovations, while recognising outstanding achievements, this year's Awards and co-located events are a calendar highlight for industry professionals in transport and logistics, and not to be missed," Hare concludes. 🌟

Trucks that aim to keep pedestrians safe

Aiming to increase the safety of cyclists and pedestrians, and facilitate the truck drivers' work, Volvo Trucks is now introducing a range of new safety systems across its range. This comes after Volvo Trucks South Africa raised local awareness of its Stop, Look and Wave road safety campaign for children in May this year.

"Safety is one of the driving forces behind every decision we make. Our vision of a zero-accident future covers all road users, guides the way to a better future and drives us towards our goal of making the world's safest trucks," said Waldemar Christensen, MD of Volvo Trucks South Africa.

Among the features that will be available as an option to local fleet owners, is the new Front Short-Range Assist. The system is designed to detect if a cyclist or pedestrian is within the risk area in front of the truck, using a front radar and camera, and warns the driver if there is an imminent risk of a collision. Another feature is a new door-opening warning system. This system is designed to warn if a pedestrian, cyclist, or car is

approaching the truck from behind, on the same side of the truck where the door is opened.

"We're constantly developing and introducing additional safety systems that can enhance the driver's capabilities, helping to protect both them and the people they share the road with. With these new systems we take important steps to accomplish these objectives," says Christensen.

Some of the new features have been developed to – already meet or even exceed – the EU's updated safety legislation, the General Safety Regulation (GSR), which will come into effect in July 2024. GSR, which makes several advanced driver support systems mandatory, aims to increase road safety and improve protection for drivers, pedestrians, and cyclists. By introducing the legislation, the EU expects to save over 25 000 lives and avoid 140 000 injuries by 2038.

"Although these regulations do not apply in South Africa, our smart safety systems are designed to monitor truck behaviour and surrounding traffic not just



Intelligent Speed Assist (included in the GSR) keeps the driver informed about speed limits by detecting road speed signs and displaying the limit on the instrument panel.

to protect, but to predict safety hazards and react. The systems may be out of sight, but they are engineered to activate and support the driver in a wide variety of conceivable situations. And by doing so, they make the trucks as safe as possible for the driver, as well as all other road users," says Christensen. 🌱

Hino 700-Series Project reaches its completion

The completion of the Hino 700-Series project was celebrated with a line-off ceremony at Hino South Africa's production facility in Prospecton, Durban.

This marked the return of Hino to the extra-heavy segment of the South African truck market after a break of two years.

Hino production moved into the current plant in 2013 after having shared a facility with Toyota Hi-Ace minibus production between 1972 and 2012. The new plant has a maximum production capacity of 5 000 trucks a year, with planned output for 2023 set at 3 500 trucks. The plant works a single shift and has a staff complement of 114 people.

The plant now assembles four Hino models and 35 derivatives on a semi-knocked-down basis. There is one 200-Series, which is in the light commercial vehicle segment (under 3 500 kg GVM), 13 300-Series medium trucks, including crew cab models, five 500-Series, 12 Wide Body Hino 500-Series and now four 700-Series derivatives.

The new facilities and equipment installed for the 700-Series project include chassis assembly dollies, improved chassis alignment equipment, fastening equipment for the improved huck-bolt fastening system used on the 700 chassis and a set-up zone for the radar and



The ceremonial line-off ceremony at the Hino production plant in Prospecton included a ribbon cutting.

cameras required for the pre-collision and lane departure warning equipment, which is standard fitment on this model.

"The Hino 700 project had some major challenges for us, with a major one being that we did not have hands-on assistance from Hino Motors in Japan due to COVID travel restrictions," explained Bennett Mlambo, Vice President – Toyota Components Manufacturing (TCM), speaking at the Hino Prospecton plant line-off function.

"We did have the benefit of two of our team members spending time working

in the Hino 700 plant in Japan, so they brought back valuable experience. However, the successful implementation of this project, with all quality targets being met, is a tribute to the efforts of all our staff and the support teams."

The two team members from the Hino plant in Prospecton who went to Japan were the production team leader and master trainer and production engineer. Others involved with the 700 project who accompanied them were two quality control engineers, a project engineer, and a facility engineer. 🌱

WILL EXCAVATORS BECOME THE BEST OPPORTUNITY FOR OFF-HIGHWAY COMPONENTS?

The amount of profit for the off-road electric vehicle market will approach a similar ballpark as that for on-road vehicles.

Excavators present a great opportunity for off-road vehicle component vendors since there are already some electrified mini excavator models on the market. The technology used in these machines can then be adapted and transferred to larger types of excavators, and possibly bulldozers, backhoes and other loaders.

By Jamie Fox, Principal Analyst at Interact Analysis.

As a component manufacturer that may already have sales for passenger cars, buses or trucks, it's only natural to want to expand your business. Eventually, the amount of profit to be found off-road may approach that of on-road segments.

For the total available market of all vehicles, including diesel, forklifts and tractors have the highest shipments, with both segments seeing over 2 million vehicles shipped in 2022.

Tractors, however, have been very slow to electrify due to duty cycle, cost, availability of models and a lack of charging infrastructure, amongst other things.

For electrified components, tractors are only worth investing in now if you're willing to play a very long, patient game that pays off years or even more than a decade later. At Interact Analysis, we forecast 4% of tractors globally will be fully electrified in 2030 and it will take several years from now to reach even 1%.

For electric vehicles rather than total vehicles, forklifts have a much more promising market size. This will continue to grow steadily from 1.2 million electric forklifts sold in 2022 (63% of total sales).

However, forklifts are a commoditised, mature market that many suppliers can serve, which might lead to lower profit margins. Trying to enter the market now, when other suppliers are already established, could be tricky.

Forklifts are also small machines, with smaller, less expensive components. The powertrain value per machine is therefore low.

Large excavators and other large machinery have the highest cost involved. The powertrain value per machine is much higher in large machines, such as large excavators, larger loaders and bulldozers, and underground load haul dumps, among others. While the total number of electric vehicles is not very large, especially in the short term, customised designs offer an



Jamie Fox, Principal Analyst at Interact Analysis.

opportunity for suppliers that specialise in working closely with customers to provide just what they need, rather than churning out huge, commoditised volume. However, some markets, such as Hauler Dump Trucks and Underground Load Haul Dump, will never have many shipments even with 100% electrification.

So, some machines are too commoditised, others have a low percentage of electrification, and others just are not a large enough market. So where is the sweet spot? Could excavators be a good target?

Anyone who has visited recent major trade shows can see that electric model releases are more common for excavators than for most other off-highway machine types.

Here, a range of different machine sizes can help. Suppliers can get started with sales of components to mini excavators, which have more machines on the market

already. Suppliers then have time to adapt their components, technology, and software to larger excavators at a later date, progressing to larger sizes as market demand increases and more models are developed. Over time there should be a sustainable business model where smaller machines provide a larger market, while larger machines provide a stronger contribution given the greater dollars per unit sold.

The technology used in excavators might also be, at least partially, transferable to other similar machines such as bulldozers, backhoes, and other loaders.

The answer to the question of what vehicle should my company focus on will be different for every company. Depending on the specific components, target regions, existing customer relationships, and other factors, we're aware that any conclusion we draw could be different for others. 🌱

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

A Legacy of Excellence

John Deere's venture into the motor grader market began in the early 1920s. Leveraging their expertise in agricultural machinery, the company recognized the need for efficient grading equipment in construction and took on the challenge. The first motor grader introduced by John Deere was the M-1, a compact machine designed for small-scale grading tasks. It featured a simple, rigid frame and a single-blade grading system. While it was a significant step forward, it lacked the articulation and power needed for larger-scale construction projects.

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

Technological Innovations

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

Automated Blade Control

John Deere's motor graders are at the forefront of this revolution. Automated blade control systems use sensors and advanced algorithms to automate blade movements, allowing for consistent and accurate grading results. This technology simplifies the operator's task while maintaining high-quality work. The John Deere 770G, for example, features a rear-mounted blade, allowing operators to achieve precise grading and leveling results.

Telematics and Connectivity:

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

Comfort

Operator comfort is a key consideration in the design of John Deere motor graders. The machines are equipped with ergonomic seating, adjustable controls, and advanced suspension systems to reduce operator fatigue. The John Deere 770G, for example, features a spacious cab with large windows for excellent visibility. The machine also includes a variety of ergonomic features, such as adjustable seats and controls, to ensure operators can work comfortably for long periods. The integration of telematics and connectivity has revolutionized the industry, enabling precise grading, enhanced productivity, and optimized machine performance.

Ergonomics:

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Sustainability and Fuel Efficiency:

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

efficiency, lowering operating costs and reducing carbon emissions.

The Future Beckons

As technology continues to advance, John Deere remains committed to pushing the boundaries of innovation in the motor grader industry. With a rich history and a reputation for excellence, the company is well-positioned to meet the evolving needs of the construction industry. The John Deere Motor Grader has come a long way from its mid-frame origins. With the introduction of an articulated frame, hydrostatic front-wheel drive, advanced transmissions, and precision control systems, John Deere has continuously pushed the boundaries of innovation to meet the evolving needs of the construction industry.

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

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

Book a Demo.

Contact your local John Deere Dealer



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