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Nedbank partners with the automotive industry to drive competitiveness amid turbulence

By Amith Singh | National Manager: Manufacturing

The South African automotive industry, which generates around 18,7% of domestic manufacturing output, plays a significant role in our country's economy, with a GDP contribution comparable to that of mining and agriculture. The 2022 Automotive Export Manual, released by the Automotive Industry Export Council earlier this year, also revealed that vehicle and automotive component exports increased by 18,1% in 2021 to comprise 12,5% of total South African exports.

Unfortunately, the industry has been hit hard by recent global and local events, including global supply chain disruptions and operational levels at South African ports being at well below international standards, further exacerbated by riots and cyberattacks. More recently, the flooding in automotive-intensive KwaZulu-Natal and onerous load-shedding schedules resulted in the manufacturing production figures released for April 2022 showing a substantial decline of 7,8% year on year.

With most of these setbacks hopefully behind us, and efforts being made to stabilise electricity supply and improve the situation at our ports, savvy automotive manufacturing firms should consider the five trends that Deloitte's 2022 manufacturing industry outlook highlighted. With business agility critical for organisations to operate through unprecedented turbulence, the report identifies key strategies to drive competitiveness. These include embracing technology to create more connected, reliable, efficient and predictive processes; carefully reviewing cyberdefences and resilience in the event of cyberattacks; and closely monitoring the fast-evolving environmental, social and governance (ESG) landscape and adjusting operations accordingly. Proactive approaches to these challenges will help automotive manufacturers mitigate setbacks while creating a competitive advantage.

Nedbank's deep understanding of the manufacturing industry has enabled it to develop tailor-made solutions in this field, making it the expert strategic banking partner to grow its clients' businesses. The bedrock of our manufacturing portfolio is the deep, lasting and value-adding relationships we develop with our clients and key industry stakeholders. These solutions are underpinned by our continuous drive to innovate in our financial and administrative functions, enabling you to take your business to the next level.

Through this profound insight we provide bespoke, innovative financial solutions to help grow our clients' businesses and strengthen their competitiveness in the market. For example, because we know that current macroeconomic challenges coupled with power supply issues lead to having cash flow constraints that could prohibit delivery and growth, we have a range of solutions to mitigate that risk. Similarly, as the green bank, we offer a comprehensive range of solutions to promote the sustainability of our clients' businesses, giving them the competitive advantage that is so vital in the market.

Our vast experience in global trade enables quicker, more efficient crossborder transactions when importing and exporting, and easy access to funds smooths out cash flow fluctuations between production cycles, enabling clients to take advantage of discounts and bulk offers.

But the real value we offer is our partnership approach, which means clients benefit from a committed partner with industry expertise who will advise on growth, investment and financial strategies based on their deep insight into each client's unique financial situation.

For more information about our specialist manufacturing services, email us at manufacturing@nedbank.co.za.

Singh is Nedbank Commercial Banking's national manager for the manufacturing sector. He holds a degree in business management from the University of Cape Town, a postgraduate degree in sales management, and is a qualified Neethling Brain Institute practitioner. He has been in banking for 19 years.

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SA'S STABLE MANUFACTURING SECTOR COULD MEAN HOPE AS WE ENTER 2023 WITH ENERGY UNCERTAINTY

ne thing that is clear going into 2023 is that many businesses are not blindfolded by what is going on in the country. Loadshedding will of course be a major gripe as we start a new year, but even with an energy grid, perceivably in tatters, there is an air of positivity on how to continue operating.

According to one survey quoted by Absa at the end of last year, overall business confidence was unchanged by Q4. However, that was at the end of two-



Adriaan Roets - EDITOR



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Scan QR CODE to visit and read our latest news quarters of a decline where load shedding, water restrictions and transport constraints weighed on the manufacturing sector.

Justin Schmidt, Head of the Manufacturing Sector at Absa Relationship Banking believes that increased production costs and insufficient demand as consumers struggle with the rising cost of living are hampering a positive outlook.

His insight also points out that manufacturers would likely remain pessimistic this year due to soaring operating costs as productivity relies on alternative energy sources during load shedding.

This is likely something that is faced in every sector, and news reports do show that there is disgruntlement regarding the energy grid and all the other societal factors that are hampering confidence.

At the same time, there have been some positive outcomes that, in the global context, could place South Africa on a unique trajectory when it comes to investment in energy.

Manufacturers are investing in more energy projects and in machines that are more efficient. This is all an effort to curb the impact of load shedding on businesses, and to hedge against electricity costs that are seen, industry-wide, as too high.

In spite of the fact that the manufacturing sector might struggle to grow again, when the momentum was low, the sector managed to show its resilience and made a major, and positive, impact on the South African economy.

The rise in manufacturing's contribution to the Q3 GDP shows the ability of the sector to remain resilient and find solutions on how to operate when the odds are against it. Nedbank is also positive going into 2023. At the close of 2022, the bank took into account that there had been a 12,5% year-on-year increase in manufacturing and, as the country's fourth largest sector, there will be more opportunities for the sector to enjoy financial support due to its importance.

Nedbank's various government policies, industry master plans and strategic plans are creating a clear intent to increase investment in manufacturing and to provide circular-economy opportunities.

This circular economy has plenty of positive outcomes where waste is reduced or reused, materials are recycled and natural resources are not wasted. Years ago the "use and dispose of" model of business was prevalent, and that has changed significantly.

All of this matters when the country is racing to find alternative energy, or even just efficiently operate the current grid, and having a sector that is more conscious does have an effect on everyone. Whether it means load shedding is lowered or even suspended, or the fact that more natural resources are saved.

Financing from Nedbank is also aligned with the South African government's National Development Plan 2030, which asks for sustainable practises to become every day practice across industries.

To that effect, it could well mean that financing solutions where factories use sustainable energy will, in the long run, be beneficial, and more easily sought by role players, big and small, in the industry.

At the end of the day, South Africa in 2023 needs to keep the machine running, and it's important to know there are ways to do it. •

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FROM STRENGTH TO STRENGTH

For over 180 years, CASE Construction Equipment has been diligently crafting practical, user-friendly solutions that drive efficiency and productivity. With a global reach and a deep understanding of local needs, the brand keeps real-world challenges front and centre of its product development, making it a committed partner in helping customers achieve success, writes *Adriaan Roets*.



"Our goal is to get closer to the client, and with the recent acquisition that took place last year, where CNH Industrial bought over CASE Construction – it has allowed clients to deal directly with the OEM."

Graham Forte, Divisional Managing Director for CASE Construction Southern Africa



CASE Construction is set to expand its heavy line product portfolio to include a full range of Track Type Hydraulic Excavators and Wheel Loaders in 2023.

n 2021, CASE Construction Equipment entered the South African market through the acquisition of multiple entities in the industry by CNH Industrial. This has enabled South African customers to purchase directly from the global CASE factory line

KING POIN.





Key features of CASE 580T backhoe loaders are excellent performance and high torque delivered by fuel-efficient, turbo-charged, after-cooled Tier 3 engines.



CASE Construction Equipment will introduce more equipment in South Africa, and with dedicated OEM networks, buyers also have peace of mind when purchasing new and established models of equipment.

CASE SiteWatch is a telematics solution designed to gather critical information about your machine's performance and location.

through CASE Construction's own OEM main distribution branches.

With a sprawling network of dealers spread across the country, CASE Construction Equipment's on-the-ground support ensures their customers always have easy access to the parts and services



CNH Industrial has enabled end-users of construction equipment in South Africa to purchase directly from the global CASE factory line through CASE Construction's own OEM main distribution branches in Gauteng, Cape Town, KwaZulu-Natal, and the Eastern Cape.

they need, making them a true partner in their success. CASE Construction Equipment also recently showcased and launched the V-series Backhoe Loader, which has catapulted CNH as the market leader in Backhoe Loader sales in South Africa. Additionally, CASE is set to expand its



The CASE dealer network is always ready to support and protect its customers' investment and exceed expectations

heavy line product portfolio to include a full range of 50T track-type hydraulic excavators and wheel loaders in 2023, which will be integrated with the new SiteWatch Telematics Technology, allowing real-time monitoring of product statistics, and putting customers back in the driver's seat to ensure



Some CASE Construction Equipment on display in Kempton Park.

optimal profitability within their domain.

For customers

The merger of CNH and CASE in 2021 has unlocked a new world of possibilities for South African end-users, granting them direct access to the global CASE factory line through the company's main OEM branches in Gauteng, Cape Town, KwaZulu-Natal, and the Eastern Cape. This strategic acquisition has solidified CASE Construction's position as a marketdominating equipment giant.

According to Tim Boshoff, National Retail Manager at CASE Construction Equipment, Southern Africa, "Our customers are the real boss, and we make sure to keep them happy. In 2022, we nailed a Customer Satisfaction Index score of 80% among our South African customers across various industries, including agriculture, construction, mining, and forestry. And let's be real, who doesn't love happy customers?"

Strong roots

In 2022, CASE Construction Equipment celebrated 180 years of making heavy metal dreams come true. "We pride ourselves on providing practical solutions to real-world problems on job sites. And we'll go above and beyond to make sure our aftermarket support is top-notch, no matter where you are or what you're using our equipment for," says Boshoff.

With lightning speed, CNH Industrial has rocketed to the top of the leader board in backhoe loader sales in South Africa. And the brand shows no signs of slowing down. CASE Construction offers more than just backhoe loaders, also supplying motor graders, track-type dozers, and skid steer loaders. In 2023, CASE Construction is set to broaden its heavy line product portfolio to include a full range of track-type hydraulic excavators and wheel loaders, all fully equipped with cutting-edge SiteWatch Telematics Technology.

Trusted technology

The revolutionary CASE SiteWatch, a game-changing technology now available for new machines. With CASE SiteWatch, owners are given the ultimate control, whether they're on the job site or not. This telematics solution seamlessly gathers crucial data on machine performance and location, making it readily accessible to customers exactly when they need it, and giving them the power to optimise their operations.

You don't have to be a rocket scientist to know that keeping tabs on your machine's performance can save you a pretty penny. But with CASE SiteWatch, you don't have to be one to do it. The telematics solution tracks technical issues, patterns, and even fuel consumption, so you can avoid costly maintenance and ownership headaches before they happen.

Say goodbye to the days of playing maintenance roulette with your machines. With CASE SiteWatch's scheduled automatic alerts, you can customise reminders to keep your equipment running like a well-oiled machine. And with more consistent servicing, you'll maximise uptime and keep your machines working hard instead of hardly working.

Don't let your machines wander off into the night. With CASE SiteWatch, you'll always know where they are, and who's using them. This technology will send you a text or email if any unauthorised usage or movement takes place, and if the machine happens to leave the premises, SiteWatch will help you track it down and bring it back home safely.

Going strong

Last year, CASE Construction marked its rich history, and this year, the company's eagle will soar to new heights.

This is attributed to the unparalleled dealership network.

Think of it as a province-by-province powerhouse, with each area boasting its own extensive network of dealers. As the OEM, CASE has its own distributors strategically placed in every province, ensuring that customers have easy access to equipment and support.

"Having an expansive network is essential for ongoing service and maintenance. It also minimises downtime by providing easy access to after-sale services."

"Since the Covid pandemic, demand within the market has grown and we at CASE have equipped the team to meet these demands and challenges within the industry. Our goal is to get closer to the client, and with the acquisition that took place in 2021, it has allowed clients to deal directly with the OEM," says Graham Forte, Divisional Managing Director for CASE Construction Southern Africa.

The future looks bright for 2023 as the company sets its sights on expanding its line of equipment and building on the solid foundation they've established.

"As a competitive market, new products are constantly entering the industry, with a focus on Tier 4 equipment. In South Africa, our excavator range is now aligned with this trend, providing equipment across different tiers," states Boshoff.

"Reaping success in the agricultural



The CX 220C LC Heavy Duty excavator offers a robust design with increased plate thickness on HD structures to improve durability.



industry, we're now ready to branch out and make our mark in the mining and construction sectors," Boshoff adds with determination.

With CASE, you're not just buying a machine, you're buying into a network of support that will protect your investment, exceed your expectations, and give you the ultimate ownership experience. And we're not just talking about building strong machines, but strong communities too.

CX 220C LC Heavy Duty excavator

In terms of excavators, the CASE CX 220C LC Heavy Duty Excavator is one of the latest introductions to the market— and it's a juggernaut within the South African line-up.

This 22-ton excavator is powered by a

fuel-efficient FPT engine, designed to boost machine performance and optimise fuel economy by up to 10%. The 6-cylinder FPT engine delivers outstanding power and torque, which reduces the transient time, making the hydraulic system immediately reactive to any load. The operator can monitor the machine's fuel consumption with the new ECO gauge function, which displays energy-saving levels in real time.

The CX 220C LC Heavy Duty excavator is equipped with a 7-inch LCD colour monitor for parameter monitoring and setting, and a telematics system for real-time updates. Technology within the machine also lets operators store up to 10 auxiliary hydraulic flow and pressure settings to allow easy switching between different attachments. The market-leading high breakout force is due to a 1.9 dipper arm which enables continuous operations and up to 10% higher digging capability. Three work modes and auto power boost ensure faster work cycles and more efficiency on site.

The CX 220C LC Heavy Duty excavator offers a robust design with increased plate thickness on HD structures which improves durability. The long undercarriage offers increased stability in the toughest terrain. A sloped lower frame reduces the time needed to clean the undercarriage. A recoil spring increases stroke for better cushion performance. Track guards ensure that the chain is kept on the rollers in any condition.

580T and 570T TLB

This series has been designed for minimal downtime and reduced maintenance requirements. Daily check and fill points are accessible from ground level, to save time. The braking system uses the machine's main hydraulic oil reservoir, eliminating the need for a separate filler. Large-capacity fuel tanks ensure longer working hours between refills, increasing operational hours on site. The CASE electronic service tool enables rapid rail engine diagnostics for reduced downtime.

These machines, with a large cab for improved operator comfort, have also been designed for reduced internal cab noise levels. Fully adjustable control lever towers and a return-to-idle button enhance precision control.

The multi-purpose 6-in-1 and 4-in-1 loader buckets cope efficiently with different working conditions of digging, loading and unloading, flattening, and levelling applications.

Key features of CASE 580T backhoe loaders are excellent performance and high torque delivered by fuel-efficient, turbocharged, after-cooled Tier 3 engines.

The curved main boom increases digging performance and curved front loader arms improve truck loading and unloading, while mechanical self-levelling assists the operator. Boom, dipper, and swing cylinders have standard hydraulic end-stroke cushioning for smooth operation, enhanced precision and extended component life. Overlapping boom cylinders provide lower transport height, and the narrow boom width improves visibility for the operator.

The CASE 570T offers the new generation S8000 FPT engine, developed by Fiat Powertrain Technologies Industrial (FPT Industrial), which is a 3.9-litre 4 cylinders engine with high power and torque density that provides the best-in-class performances in any application.



EXPLORING SCREED OPTIONS

When shopping for new concrete equipment, people are bombarded with numerous options and making decisions can be overwhelming. For concrete contractors, screeds are an essential purchase and a critical tool for providing the smooth, level finish for concrete work.



"While enjoying the convenience of power, contractors must consider proper care to ensure the cords don't become tangled, unplugged or damaged while on the job site. And relying on a separate power source, like a generator, can come with its own worries. That can include staying on top of fuel availability, general maintenance or fume concerns."

Seth Ulmer, sales manager at Curb Roller Manufacturing



y carefully considering the screed types available, contractors can see maximum productivity from their investment when it comes

to choosing the equipment that will, at the end, lay down the screed. This is especially true in the construction arena where screed is used as sidewalks or walkways in and among buildings.

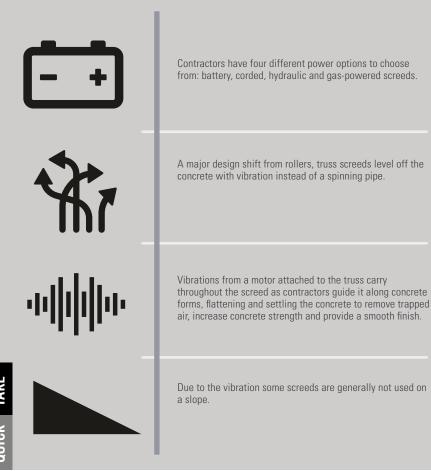
The most common screed categories include roller, truss, laser, power and hand screeds. Each screed has unique features that, when aligned with project goals, can improve ROI. Here is a breakdown of the features, benefits and drawbacks of the most widely available screeds on the market today.

Roller screeds for versatility

Roller screeds broadly consist of a detachable pipe connected to a drive head with an extended handle for upright, ergonomic operation. These screeds are known for their minimal setup, low learning curve and the consistent, quality results they provide, with less reliance on the operator's skill level. Roller screeds



Battery-powered roller screeds provide arguably the most convenient and manoeuvrable screed option available today, with some even providing cross-platform use by utilising the same rechargeable 60-volt lithium-ion battery that is found in common handheld power tools.



use a spinning motion to move concrete, a method that reduces operator fatigue and allows for improved integration of aggregate throughout the pour compared to vibratory methods that cause the aggregate to settle. These screeds are versatile and can be used for a variety of pours, often up to 22-30 feet wide, depending on the power source.

The roller screed's detachable design also makes for a highly portable option when compared to bulkier and heavier screeds like a laser screed. Some manufacturers even offer linkable pipe sections to increase portability and versatility. General features like a 3-way adjustable and lockable handle for improved ease of operation and a kickstand to keep the drive head and handle out of the concrete allow crews to quickly adapt to various job site needs. Contractors have four different power options to choose from: battery, corded, hydraulic and gaspowered.

Battery powered screeds

Battery-powered roller screeds are easily manoeuvrable and can handle pours that are remarkably wide. These versatile machines can be especially useful for contractors working in basements or factory settings indoors, at farms, or in



Some screeds, like this one from Curb Roller Manufacturing, provide a single push-button directional change — a convenient feature for special projects, such as circular pours. This allows contractors to easily and quickly change their screeding direction to avoid cold joints and the structural flaws that can occur when concrete cures unevenly.

communities in remote locations.

Depending on the slump and pipe length. a contractor can screed off 1,800 to 2,500 square feet of concrete with just one fully charged battery. Since the battery operation provides fume-free screeding for those working in any closed-off environment where fumes may be a concern, no additional power source such as gasoline, hydraulics or a generator is required. That means fewer transportation needs, reduced setup time and no cords or hoses in the way. Some battery-powered roller screeds can also provide cross-platform use by utilising the same rechargeable 60-volt lithium-ion battery that is found in common handheld power tools.

For special projects such as circular pours, battery powered roller screeds provide a convenient single push-button directional change. This allows contractors to easily change their screeding direction to avoid cold joints or other structural flaws that can occur when concrete cures unevenly. Other screed types may require a complete disassembly, drive head rotation and reassembly of the screed to reverse direction.

Despite all the conveniences batterypowered roller screeds offer, if power accessibility isn't a concern or portable jobsite generators are abundant, some contractors may opt for a corded screed.

Electric screeds

Corded electric roller screeds enjoy many of the same benefits and capabilities

as battery powered roller screeds. They are fume-free for indoor jobs and some provide a single push-button directional change for screeding unique pours. With a nearby outlet or reliable generator, contractors can have the reassurance and convenience of seemingly endless power.

While enjoying the convenience of power, contractors must consider proper care to ensure the cords don't become tangled, unplugged or damaged while on the jobsite. And relying on a separate power source, like a generator, can come with its own worries. That can include staying on top of fuel availability, general maintenance or fume concerns.

Battery and corded power can offer an immensely convenient and versatile screeding solution to any contractor's fleet. But some heavy-duty applications, like road drainage and ditch liner pours, require large custom drums and a screed powerful enough to drive them. This is where hydraulic roller screeds shine.

Hydraulic screeds

Hydraulic-powered roller screeds have the power to move up to six inches of concrete along a pour while the operator remains in a standing position. Additionally, most hydraulic roller screeds accept 6-inch tube length up to 30 feet while some manufacturers also offer custom drums made to various job specifications such as sidewalks, parking lots, residential streets, large highway ditch liners and more. Like corded screeds, hydraulic screeds require a separate power source. Look for a manufacturer that provides a portable hydraulic power pack to match its hydraulic screed's exact specifications. With this option, contractors don't have to tie up a host machine to power their hydraulic screed. To take on heavy-duty jobs, these screeds are also generally heavier than battery and corded roller screeds at 2-3 times the weight. Contractors should consider how to accommodate the additional weight before committing to these powerful screeds.

Gas-powered screeds

Gas-powered roller screeds have a similar setup as the other roller screeds but with a motor attached to the drive head. These screeds offer another option for contractors who typically screed large pours that require a longer pipe, often up to 30 feet wide. The motor produces screeding power that rivals that of hydraulic screeds and offers a viable, familiar alternative for those preferring a gas engine.

Unlike the other screeds, more care is required as a gas-powered screed motor needs to be in an upright position to prevent gas and oil from leaking out. This can prove even more challenging due to the heavy weight of the engine on the drive head. These screeds have location limitations as well, as they cannot be used indoors due to the exhaust and fumes from the engine.



Hydraulic-powered roller screeds have the power to move up to six inches of concrete along a pour while the operator remains in a standing position. Some manufacturers also offer custom drums made to various job specifications such as sidewalks, parking lots, residential streets, large highway ditch liners and more.

Engine vibrations present another area of concern. The high vibration from the engine can cause the throttle cable to slip and need continuous readjusting.

Truss screeds for length

A major design shift from rollers, truss screeds level off concrete with vibration instead of a spinning pipe. These screeds are expandable and come in multiple sections that resemble a truss design to help maintain rigidity for longer lengths, even beyond 60 feet. Truss screeds can be an excellent option for the largest jobs, like screeding an entire roadway.

Vibrations from a motor attached to the truss carry throughout the screed as contractors guide it along concrete forms, flattening and settling the concrete to remove trapped air, increase concrete strength and provide a smooth finish. However, due to the vibration, these screeds are generally not used on a slope. The aggregate in concrete tends to settle with vibration and unevenly dispersed aggregate can create spots of varying strengths that can result in structural flaws and damage over time.

Hand screeds for lower cost

Classic hand screeding, which traditionally uses a wooden board, might cut it for the one-off small concrete job, but any serious contractor knows the life-long pains that come from years of stooping over a heavy board and sawing it back and forth along forms to screed concrete. Although the materials have evolved over time from hefty two-by-four lumber to lighter-weight aluminium alloy bars, the design and method have largely remained unchanged.

In addition to the back-breaking labour, hand screeding methods using boards require the skill of an experienced professional to remain true to grade and achieve consistent results since there's no assistance from vibration or a spinning pipe. This can prove challenging on large pours, even with decades of experience.

A case for quality

Jobs in a concrete season can vary as much as the tools themselves. Contractors should carefully consider the advantages of each type of screed, which screed will work best with the majority of their jobs, and how a screed will pair with existing support equipment as well as their crew's skill level.

No matter the method, choosing a manufacturer that offers not just options, but high-quality construction, parts and service will help limit problems to small, logistical inconveniences.





BIGGER PAYLOADS CAN REDUCE FUEL EXPENDITURE

With the constant fluctuation of fuel costs experienced over the past year, operators are now, more than ever, focused on the fuel economy of their fleets. Added to this challenge are considerations like the safety, productivity and efficiency of their trucks.



"These days the key to efficient transport is increased payload. Not only will a lowered tare weight increase payload, but also the productivity and profitability of your operations."

Reytjie Laubscher, Managing Director of UD Trucks Lichtenburg uel expenditure, which makes up to 80% of total operating costs
 and approximately 60% of the total cost of ownership, depending on the application, can be

alleviated with the ability to carry more payload to maximise the productivity and efficiency of a fleet.

The UD Trucks Quon extra heavy truck range solves this problem by a reduction of weight in the physical truck that allows operators to carry more payload. Fewer trips mean less fuel is used.

KING POINT



QUICK TAKE

The Quon has been refined to realise an overall lighter vehicle, while achieving gains in load-carrying capacity of up to 200kg.

An operator can now typically transport a 36.5-ton load of cargo legally using an interlink with twin bin side tipper trailer.

Fuel expenditure makes up to 80% of total operating costs and approximately 60% of the total cost of ownership.

There is an increase in payload of about 700kg on average on the new generation trucks, compared to any other competitor in the market. This is the ideal set-up for fleet owners that specialise, for instance, in the coal transport industry.

Bigger and better

"The Quon is a highly productive range of vehicles optimised for the business needs of today, and tomorrow," explains Reytjie Laubscher, Managing Director of UD Trucks Lichtenburg.

"These days the key to efficient transport is increased payload. Not only will a lowered tare weight increase payload, but also the productivity and The Quon is a highly productive range of vehicles optimised for the business needs of today, and tomorrow," explains Reytjie Laubscher, Managing Director of UD Trucks Lichtenburg.

profitability of your operations."

Every component on the Quon has been refined to realise an overall lighter vehicle, while achieving gains in load-carrying capacity of up to 200kg, depending on the model.

Improved loading

The Quon GW26 460 - TT HR, for instance, has a low tare weight of 8 418kg. This is achieved by using disc brakes and high tensile steel rails for the main frame to reduce vehicle weight. In addition, the reduced height of the main frame cross section further reduces weight while maintaining strength, to further improve the Quon's



There is an increase in payload of about 700kg on average on the new generation Quon High Roof Truck Tractor compared to any other competitor in the market. This is the ideal set-up for fleet owners that specialise, for instance, in the coal transport industry. loading performance.

Laubscher explains that this, for instance, means that with a reduced tare weight, an operator can now typically transport a 36.5-ton load of cargo legally using an interlink with twin bin side tipper trailer.

"There is an increase in payload of about 700kg on average on the new generation Quon High Roof Truck Tractor compared to any other competitor in the market. This is the ideal set-up for fleet owners that specialise, for instance, in the coal transport industry," says Laubscher.

Improved ease of loading, bodybuilding efficiency and smoothness at creeping speeds for approaching loading docks, also reflect UD Trucks' commitment to boost productivity for fleet owners.

Quon's air suspension features an increased adjustment range. This enables optimal height adjustment for loading docks and connecting the trailers, with an adjustment width of +140 mm upward from the neutral position. The uneven load adjustment function automatically adjusts any lateral differences in height on trucks, which improves handling when loading from the side of the truck.

Efficiency first

The new Quon range boasts a fuelefficient, powerful, and clean $11-\ell$ GH11 engine.

It generates powerful torque from low revs up through a wide RPM range, making the Quon a pleasure to drive. To further support fuel-efficient driving, the Quon also features UD Trucks' Nenpi Fuel Coach – a system that displays real-time driving advice to help drivers achieve further improvement for the vehicle's fuel economy.

"Our customers' definition of the essentials needed in a truck, has changed. Our focus therefore is to give customers reduced operating costs as related to things like fuel efficiency, payload ability and uptime. Secondly, we are concentrating on the people factor within the transport business, making our trucks even safer and environmentally friendly," says Laubscher.

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A NEW YEAR TO PRIORITISE FORKLIFT Safety

By Shaun Collins, Chief Operating Officer of Masslift Africa





Shaun Collins, Chief Operating Officer of Masslift Africa

s the new year begins, now is the perfect time for industries using forklifts to prioritise safety and prevent common mistakes made by forklift operators. At Masslift Africa, the sole distributor of Mitsubishi forklifts in Southern Africa, we are committed to providing our customers with high-performing, cost-efficient, and robust forklifts they can trust. But we also know that safety is a top priority, which is why we are dedicated to educating our customers on best practices and helping them avoid common mistakes made by forklift operators.

Some simple steps that industries can take to improve forklift safety in the new year include:

1. Load Test Compliance Certificate must

be valid and passed.

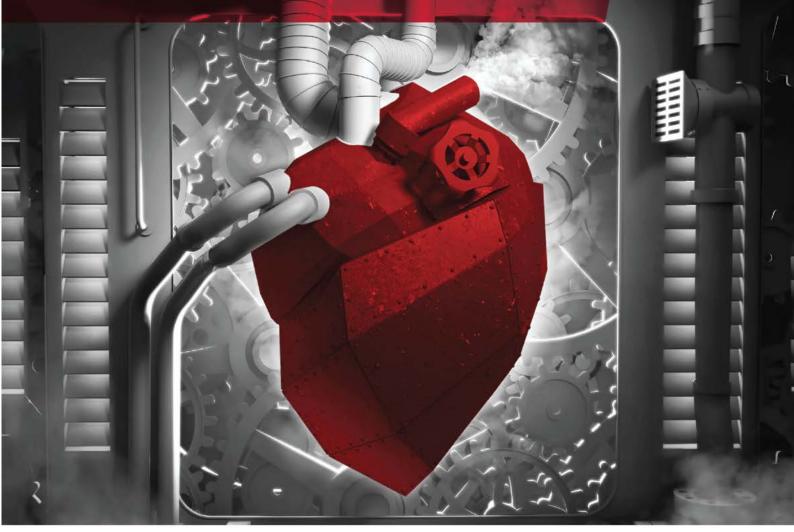
- 2. Operators must have a valid license to operate the equipment.
- 3. Ensure the full daily checklist is completed between each shift.
- 4. Perform a daily check of all tyres to ensure they are in good working condition.
- 5. Follow recommended speed limits set by your company to reduce the risk of accidents.
- 6. Check the battery levels and cables regularly to prevent issues.
- 7. Ensure the brakes are always in proper working condition.
- Use indicators to signal turning direction and using hand signals as a backup if necessary.
- 9. Know the maximum capacity of the

forklift, and the weight and length of the load, so as as not to overload the forklift.

- 10. Wear protective gear like hard hats, safety glasses, and high visibility clothing.
- 11. Avoiding distractions like texting or using a phone while driving.
- 12. Follow proper operating procedures, such as securing loads properly, driving with the load against the front face of the forks so as not to 'tip handle' and never drive with the forks more than 30 cm off the ground.

By implementing these safety measures and being mindful of common mistakes, industries can create a safer work environment, reduce the risk of accidents, and improve productivity in the new year.

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HAUL TRUCK OF ALL TRADES

In mining, as in any industry, selecting the right tool for the job is the key to efficient operation. Using a screwdriver to hammer in a nail might work, eventually, but only after a lot of wasted effort. For a number of primary applications, such as drilling, screening or hauling ore, single-purpose machines help producers maximise productivity and output by doing one task and doing it well.

> hile select underground operations realise the value of reareject haul trucks for moving ore, many large-scale coal producers might consider these machines a one-trick pony – suitable for haul road maintenance, but not much else.

However, rear-eject bodies offer a number of productivityenhancing benefits. And when paired with the right combination of attachments, they can revolutionise applications such as reclamation, haul road maintenance, stemming and more. Additionally, low-maintenance designs from select manufacturers make rear-eject bodies a versatile support equipment solution for both open pit and underground mining operations.

Keeping it level

In certain underground mining applications, such as gold, oil shale, aggregate or salt, rear-eject haul trucks are an essential link in the production line. Producers simply drive the vehicle into the mine, load, and return to the surface. This much could be done with a traditional end-dump vehicle, if size allows. But it's the next step, offloading, that sets the rear-eject apart in terms of productivity.

As the name implies, rear-eject bodies use an ejector blade to discharge material. Without moving or raising the truck bed, the blade pushes material toward the rear of the truck. As the blade moves to the rear of the body, the unit's tailgate lowers. To reduce maintenance and the risk of breakdown, some rear-

eject models incorporate the tailgate mechanism on the sides of the body.

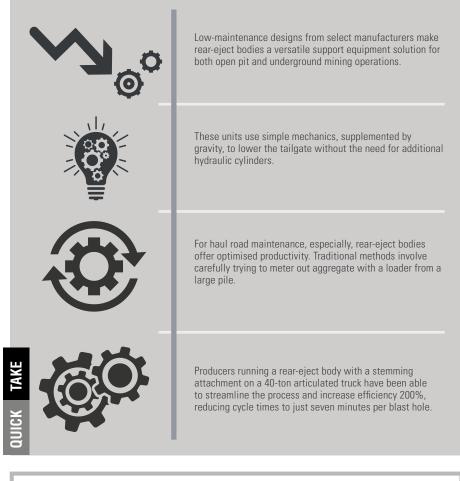
These units use simple mechanics, supplemented by gravity, to lower the tailgate without the need for additional hydraulic cylinders. Some manufacturers also design their rear-eject bodies to feature a unique sweeping action that virtually eliminates carryback – even with materials prone to sticking to the sides or floor of the truck bed. This effective dumping action makes rear-ejects an ideal solution for increased productivity in a number of challenging hauling applications.

When considering the efficiency benefits of a rear-eject body in hauling applications, time savings is probably the most obvious. It takes roughly 12 seconds for an end-dump body to lift, a few seconds for the material to flow out, and another seven seconds to drop back down. With a rear-eject, there is no need to lift the body, saving producers at least 19 seconds per offload.

The rear-eject's stationary body also provides an even greater benefit for both underground and open pit mining operations – consistent clearance. In both operations, there are a number of overhead obstacles. Room height, legacy structures, bridges, conveyors and other equipment can all make access difficult – or impossible – for traditional enddump bodies. In situations where height restrictions rule out raising an end-dump body – such as offloading materials inside a building, near existing structures, or underground – operators must rely on loaders and other smaller support



To reduce maintenance and the risk of breakdown, some rear-eject models incorporate the tailgate mechanism in the sides of the body. These units use simple mechanics, supplemented by gravity, to lower the tailgate without the need for additional hydraulic cylinders.





"When considering the efficiency benefits of a rear-eject body in hauling applications, time saving is probably the most obvious. It takes roughly 12 seconds for an end-dump body to lift, a few seconds for the material to flow out, and another seven seconds to drop back down."

Josh Swank, Philippi-Hagenbuch vice president of sales and marketing equipment to move materials, which significantly reduces efficiency for these tasks. Additionally, operations that use end-dump haul trucks risk accidents while moving around low-clearance structures if the bodies are not completely lowered every time.

A rear-eject body, however, removes the height variable, allowing operators to safely access limited-clearance areas and manoeuvre around the mine. This boosts productivity for applications like reclamation, both above and below ground, where large amounts of material need to be moved. Now producers are able to quickly deposit overburden materials right where they need them, without worrying about lifting the body of the truck. This saves valuable time and can increase efficiency for these support tasks by up to 25%.

Even spread

In addition to opening up access to more areas of the mine, rear-eject haul trucks can also increase efficiency for tasks where materials need to be evenly and precisely distributed, such as haul road maintenance or certain drving applications like spreading salt, diatomaceous earth or lime onto leech beds. Rear-eject bodies provide the operator with complete control of discharge and the ability to dump materials on the go — something highly discouraged with end-dump trucks due to increased safety risks such as tipping or material bridging. The ejector blade pushes material out of the tuck body at a steady rate, even while the vehicle is moving, offering a uniform distribution of material to fall behind the truck.

For haul road maintenance, especially, rear-eject bodies offer optimised productivity. Traditional methods involve carefully trying to meter out aggregate with a loader from a large pile. This tends to leave an uneven spread of material that needs to be smoothed either by the loader or additional support equipment. In the winter, when icy haul roads occur and grit must be regularly applied for safe and efficient use and much-needed traction, a crew of two to four workers might spend their whole day spreading sand. This reduces the mine's overall efficiency as labour and resources must be reallocated for this task. With a rear-eject body, on the other hand, a single operator can effectively distribute sand, grit or other aggregates from the comfort of the vehicle's cab, resulting in better workforce utilisation and increased productivity.

For many producers, the addition of a rear-eject haul truck with a material spreader attachment eliminates the



Adding a material spreading attachment to a rear-eject body provides maximum equipment versatility in every season. These attachments are available from industry-leading equipment manufacturers and are designed to integrate seamlessly.

need for a dedicated piece of sanding equipment, increasing efficiency throughout their operation and providing fast return on investment.

Stemming lost productivity

Stemming is another time-consuming task where the right attachment can revolutionise productivity and increase rear-eject versatility.

Like haul road maintenance, many operations rely on side dump buckets or loaders to fill blast holes after the explosives have been packed in the bottom. Using a single 3-ton loader, operators might only be able to fill two holes per load before travelling back to aggregate piles. Depending on how close the stockpile is, this can result in cycle times of 15 minutes or more. With each blast averaging 100 or more holes, stemming could take several hours to several days and from two to four crew members, creating a significant drain on productivity.

Using the rear-eject body, producers are able to transport large amounts of stemming material – up to 60 tons, depending on the truck's capacity – to the individual blast holes. The stemming attachment's arm is then positioned over the hole to precisely deposit material. The ejector blade pushes material to a cross auger, which loads the stemming arm. The ejector blade speed, in-cab controls, stemming conveyor and operator controls at the stemming arm all precisely control the flow of stemming material for even distribution. Producers running a reareject body with a stemming attachment on a 40-ton articulated truck have been able to streamline the process and increase efficiency 200%, reducing cycle times to just seven minutes per blast hole.

When stemming is complete, the attachment can easily be removed, and the rear-eject body can be rerouted for other hauling and dumping applications.

Minimising downtime, maximizing productivity

Switching to a rear-eject body for applications like reclamation, haul road maintenance or stemming can boost productivity and streamline an operation's entire process by reducing the need for additional support equipment and labour. With so much reliance on a single piece of equipment, though, durability and maintenance requirements must be key considerations when selecting a manufacturer.

Anytime equipment is unavailable due to maintenance, productivity suffers. But when that piece of equipment is responsible for several jobs, maintenance downtime is especially detrimental.

Staying up to date on routine maintenance is essential, and rear-



A rear-eject body offers a consistent clearance, allowing operators to safely access limited-clearance areas and maneuver around the mine. This boosts productivity for applications like reclamation, where large amounts of material need to be moved, saving valuable time and can increasing efficiency for these support tasks by up to 25%.

eject equipment that requires little maintenance goes a long way to minimising costly downtime.

When selecting a rear-eject manufacturer, producers should keep in mind less is more. Rear-eject bodies constructed with a single hydraulic cylinder to operate both the ejector blade and the rear tailgate mechanism, minimise maintenance and maximise uptime. Ejector guides integrated into the inside of the body also decrease overall maintenance requirements on certain rear-eject designs. This feature eliminates rollers that typically break or bind while providing smooth operation. Additionally, bodies constructed of high-strength, abrasion-resistant steel can withstand vears of use with little maintenance for optimum longevity.

Multiplying opportunities

Support equipment might not be doing the heavy lifting when it comes to mining operations, but there's no denying the role these machines play in overall efficiency. With the right attachments, rear-eject bodies are capable of a few more tricks than just haul road maintenance. Their versatility offers producers an opportunity to streamline small-scale hauling operations with a single piece of equipment for increased productivity and long-term success. www.revaro.co.za

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NEW VOLVO ELECTRIC Screeds heat up largescale paving

Electrically heated fixed screeds by Volvo Construction Equipment (Volvo CE) have now been introduced to make large-scale paving even more costeffective and to boost the productivity and efficiency of major road projects.

> ith the launch of the MB122 and VTD121 Electro Thermo Controlled fixed screeds for its large tracked pavers, Volvo CE is not only growing its range of screeds but empowering customers to produce the high-quality finish they come to expect, now in less time with less effort.

Thanks to their ability to produce speedy, consistent and evenly spread heating from a single source of power, electrically heated screeds are an incredibly convenient solution. Powered by a 55kVA onboard generator, there is no longer a need for customers to refill gas bottles to heat the screed, as would normally be required with gas-heated screeds. The result is a fast start-up, maximum uptime and a more efficient work site.

These fixed screeds are now available on the Volvo P6820D ABG, P7820D ABG and P8820D ABG models and benefit from an expansive paving width of 2.5-13m. They have been designed to lay everything from hot asphalt through to dry lean roller-compacted concrete and cement-bound materials, all the way to railway ballast and graded mineral mixes.

Hot screed at top speed

The new electric heating function enables start-up in just 40 minutes. When combined with one heated tamper bar and two heating elements per screed section for optimised heat distribution, precise thermo-controlled heating with an automatic temperature adjustment and individual temperature sensors per section, customers can be guaranteed a speedy and efficient screed heating process.

Maximised pre-compaction

Maximised pre-compaction is paramount to achieving a greater density in the finished mat, resulting in a longer-lasting pavement and lower operating costs. The new vibratory and tamping fixed screeds provide just that, delivering the smoothest possible finish for any job. Featuring variable vibration speed and tamper stroke, they can be specified with a single or double tamper bar solution.

Volvo-fixed vibratory screeds with double tampers are the best partners for paving thick layers. Their double tamper technology delivers a 5-7% higher degree of compaction than with a single tamper and can achieve a 98% Marshall density, substantially reducing rolling work requirements and associated costs. They also provide the best possible even surface due to the feeding effect of the first tamper.

Great flexibility

With a crown adjustment of +4% to -2% and extension boxes to work across a variety of paving widths, the new screed solutions provide great flexibility for any job at hand. Vario extensions, with an extension range of 0.75m on each side, allow the screed to extend or retract as needed in order to adapt to irregular





In action, the capabilities of the new MB122 and VTD121 Electro Thermo Controlled fixed screeds are timesaving and revolutionary.



The new onboard diagnostic function.

QUICK TAKE	
The Volvo P6820D ABG, P7820D ABG and P8820D ABG models can benefit from an expansive paving width of 2.5-13m.	ζÕζ ζ
They have been designed to lay everything from hot asphalt through to dry lean roller-compacted concrete and cement- bound materials.	
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Volvo fixed vibratory screeds with double tampers are the best partners for paving thick layers. Their double tamper technology delivers a 5-7% higher degree of compaction than with a single tamper and can achieve a 98% Marshall density	

edges, while manual or hydraulic end gates are an optional feature to control the flow of material on either side.

Minimised downtime

The new onboard diagnostic function helps to check the condition of the heating bars and detect if and where a replacement is needed, ensuring minimised downtime. Uptime is also secured with easy screed assembly and straightforward maintenance. The possibility for an easy lift of screed sections is supplied through two central lifting eyes per section, while an integrated hose and cable routing provide a clear path for assembly. In addition, hydraulic connecting points and easily accessed electric connections, as well as service points and tamper bars that are within easy reach, make assembly and maintenance quick and easy

A screed for all jobs

As with all Volvo screeds, these new electrically heated solutions benefit from decades of experience and close collaboration with our customers to best suit their needs.

If versatility is required, Volvo offers Variomatic screeds which can be extended to double their basic width. ③



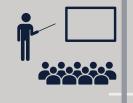
CHANGING THE NARRATIVE OF GENDER BIAS IN The mining sector

Many studies now show that diverse workforces are inherently more successful. As a result, the mining industry is shifting the gears of inclusion, and a group of 14 ADT drivers are now ready to drive their way to change.



"This training showcases to the industry that women are more than capable of performing jobs that have long been considered out of their scope and are another step forward in addressing ongoing gender bias in the mining industry."

Carol Brandt, Metallurgy Training Manager at Prisma he importance of gender diversification is becoming clear and changing the narrative around women in mining is an essential component of this. Prisma Training Solutions completed training of an allwomen group of 14 women, who were taught and licensed to drive Komatsu HD785 dump trucks, a skill that has traditionally been the domain of male workers.



As part of its skills development initiatives, a mine in Springbok in the Northern Cape nominated 14 existing female employees for training on the Komatsu dump trucks.

QUICK TAKE



Prisma Training Solutions supports women in mining through community skills development, theory, practical experience, mentorship, and coaching, and by helping mines themselves to put the right systems into place to support gender equality



One of the female trainees at Prisma.

Breaking the norm

The legacy of the mining industry highlights the disparity between men and women. In the past, gender roles were assigned where males were fit for work while women stayed at home to tend to family life.

However, this has changed dramatically, and women have found their strength in the workforce, mining included.

The challenge that is often faced, however, is that pre-existing stereotypes persist. There is still a belief that women are not strong enough to perform some jobs, as well as patriarchal attitudes and bias against women, who are frequently judged on their gender and not their job performance.

"There is an ongoing perception that women are physically incapable of many of the technical or more physical roles in mining, and typically women in the mining industry have thus been assigned softer roles. It is becoming increasingly evident, however, that women are not only capable of performing jobs that were considered men's jobs, but that they bring a whole new perspective to the roles that can be immensely valuable," says Carol Brandt, Metallurgy Training Manager at Prisma.

Steps in the right direction

As part of its skills development initiatives, a mine in Springbok in the Northern Cape nominated 14 existing female employees for training on the Komatsu dump trucks.

Not only was this an unusual request in that all the individuals to be upskilled were women, with the trainer being a woman too, but it was also notable because the role of dump truck driver is another one that is traditionally assigned to men. The trucks are large and heavy and require significant skill to operate.

The training includes psychometric testing to judge reaction time and visual acuity, as well as theory and practical applications.

"All 14 women successfully completed the assessments and training, and the sense of pride when they were found competent to drive these machines was a highlight of the initiative. This training showcases to the industry that women are more than capable of performing jobs that have long been considered out of their scope and is another step forward in addressing ongoing gender bias in the mining industry," says Brandt.

Changing the narrative

Gender bias continues to be a challenge in the mining industry in general, but there are more and more women paving the way by taking on traditionally male roles, including that of driving dump trucks. Despite this, women face an uphill battle. Prisma Training Solutions supports women in mining through community skills development, theory, practical experience, mentorship, and coaching, and by helping mines themselves to put the right systems into place to support gender equality.

"Women are often judged on their gender rather than their actual ability and must work harder and often sacrifice their femininity to be taken seriously. We need to change both the narrative and the mindset around women in the mining industry, and this is an ongoing process. Women have many positives to contribute and can add diversity and innovation into an industry that risks becoming stale and outdated. They should be empowered to do this without changing who they are at the core, and this is the key to true gender equality. Prisma Training Solutions is proud to be playing a role in achieving this," Brandt concludes. ©



SOUTHERN AFRICA OEMs TAKE ON 2023

Following a seven-year hiatus, Wirtgen South Africa recently held its dealer conference at its Johannesburg headquarters, bringing together several OEMs within the group and dealers from the region, including Zimbabwe, Namibia and Botswana.

aving last congregated with its dealers a few years ago, Wirtgen Group South Africa held its annual dealer conference at the end of November 2022. Following the appointment of new regional dealers in recent years, the conference was largely aimed at bringing the new distributors up to speed with the Wirtgen Group strategy and processes, explained Heinrich Schulenburg, MD of Wirtgen Group SA.

With all group OEMs represented – including Wirtgen, Hamm, Kleemann, Ciber Benninghoven and Vögele – the conference was also a perfect platform for dealers to learn more about the new product and technological developments from the various brands.

"In recent years, we have appointed new dealers and the conference allowed us to introduce them to our processes and new focus. The new approach to our business will help them identify additional markets to exploit, thus providing them with tools to generate additional turnover and profits," says Schulenburg.

Waylon Kukard, sales manager at Wirtgen Group SA, says one of the key focus areas was to educate dealers about the wide market reach and opportunities offered by the complementary ranges within the Wirtgen Group.

"After our interactive three-day conference, our dealers now understand that Wirtgen is a lot bigger than just one or two products that we are traditionally known for. They are starting to realise that there are more growth opportunities available when you focus on the whole product portfolio – all the way from road construction to surface mining, and everything in between," says Kukard.

Machines across the border

For Machinery Exchange, the Zimbabwean dealer, the conference was an important

platform for knowledge sharing.

"We often get caught up in hectic schedules and day-to-day running of our businesses, without spending enough time to reinforce our knowledge of the product. It was great spending time with product experts from the various factories, learning more about the range, the specifications and the opportunities available to deploy the various products," says Brendan Reilly, MD of Industrial Exchange Group.

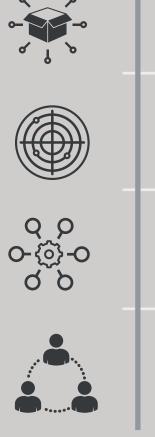
Named the Dealer of the Year at the conference, Machinery Exchange is enjoying a buoyant market in Zimbabwe, driven by the government's ongoing infrastructure development programme, which is anchored by the development of the 600-km Beit Bridge-Harare Road.

Here, several Wirtgen products are busy at work, including but not limited to recyclers, asphalt pavers and crushers and screens.

"We sold several firsts on that project, such as the first Kleemann crushers and



Named the Dealer of the Year at the conference, Machinery Exchange is enjoying a buoyant market in Zimbabwe.



One of the key focus areas during the meeting was to educate dealers about the wide market reach and opportunities offered by the complementary ranges within the Wirtgen Group.

Machines from the Wirtgen Group are widely used within SADC and, as a result dealers play an important role in infrastructure development.

The group offers equipment under the Wirtgen, Hamm, Kleemann, Ciber Benninghoven and Vögele brands.

The 2022 Wirtgen South Africa dealer conference hosted dealers from South Africa, Zimbabwe, Namibia and Botswana.

the first Ciber plant in Zimbabwe. We also sold the first asphalt pavers in nearly 15 years. Before the Beit Bridge-Harare Road project, there were only two asphalt pavers operating in the country because of lack of infrastructure development," says Anthony Dube, national sales and rental manager at Machinery Exchange.

Building Africa

David Denbury, sales director at Parts Sales Botswana, has hailed the dealer conference as a critical informationsharing platform for Wirtgen dealers in the region. "We have taken away with us some new ideas and experiences from other markets, which we can implement in our own market," he says.

"Because we haven't had a dealer conference for a number of years, this year's gathering has given us an opportunity to acquaint ourselves with new products and solutions from the different brands within the Wirtgen stable," adds Craig Denbury, export director at Parts Sales Botswana.

Commenting on the state of the market, David says Botswana enjoyed a strong infrastructure development spell some four years ago, driven by the government's road infrastructure projects. Armed with the full range of Wirtgen products, Parts Sales Botswana enjoyed over 70% market share during the road construction boom.

"However, the road construction programme has slowed down in the past three years, resulting in a drop in equipment sales. The government is now putting more focus on water infrastructure projects such as pipelines to provide water to water-stricken areas of the country. We, however, expect a turnaround in the next few years as new development funds come in," says David.

Marius Cronje of Hoffmann's Farm Implements, the Wirtgen dealer in Namibia for the past year, says the dealer conference was critical in educating the team about the full range available and how this can benefit customers.

"While the construction industry is not at its best at the moment, there is scope for growth in Namibia in the next few years. We believe that the construction industry will soon benefit from the government's drive to boost economic growth," says Cronje.

In conclusion, Kukard says the comprehensive range of equipment in the Wirtgen Group stable is now augmented by the John Deere range of construction equipment to provide value-adding solutions to contractors' equipment choices.



A MOBILE COAL CRUSHING SOLUTION

Designed and manufactured in South Africa by Pilot Crushtec, the DR400 has proved itself over the past decade. Now, at a time when South Africa's coal mines need to boost output while meeting size and quality specifications, Pilot Crushtec's DoppiaTrac DR400 mobile crusher fits the bill.



"The safety features on the DR400 ensure that it is compliant with demanding safety protocols applied by mining companies."

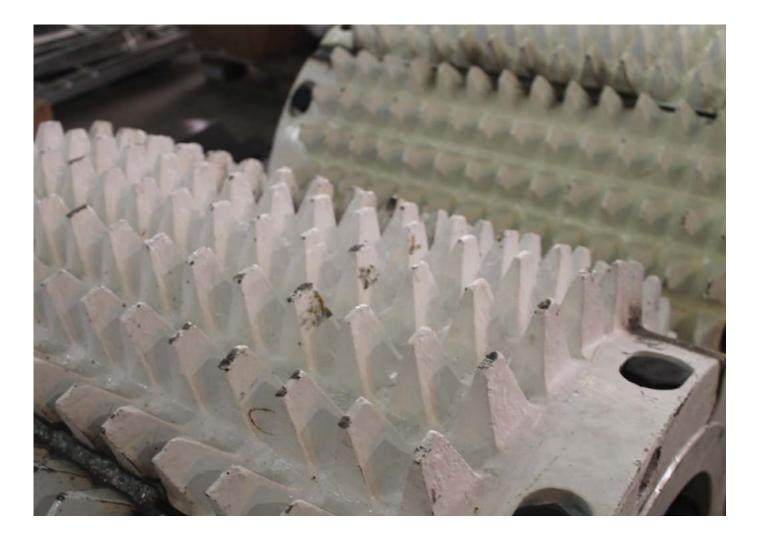
Ben Armitage, Sales Engineer at Pilot Crushtec n the highly competitive world of mobile coal crushing, Pilot Crushtec's DoppiaTrac DR400 is a triumph of local design and engineering, with a decade of success in the field.

"We designed the DR400 from the ground up to give us the flexibility to produce a truly great crushing solution," says Jorge Abelho, director technical support at Pilot Crushtec.

"It has proved itself through its combination of throughput, reliability and economy."

Indeed, it is Africa's only locally manufactured, fully mobile double-roll crusher – capable of averaging production rates from 300 to 350 tonnes per hour and reaching 400 tonnes per hour. Its ability to reduce the generation of fines is thanks to the double-roll crusher. While a horizontal shaft impact crusher creates more coal fines due to impact energy, the double-roll crusher forces material through a constant gap.

"The crusher uses just enough energy to break the material down to the size of the gap," explains Pilot Crushtec sales engineer



▼ -

Pilot Crushtec's DoppiaTrac DR400 is designed and manufactured in South Africa.

The DR400 generates less than 5% of 0 to 6 mm fines, compared to around 12% created by impact crushers – depending on coal hardness and crushing ratios.

Its ability to reduce the generation of fines is thanks to the double-roll crusher.

Depending on coal characteristics, the engine's 160 kW output can convert to a ratio of just 0.4 kW per tonne.

Ben Armitage.

"The DR400 generates less than 5% of 0 to 6 mm fines, compared to around 12% created by impact crushers – depending on coal hardness and crushing ratios."

The DR400 boasts a large hopper that is readily fed by loaders or excavators. To increase the average production rate, the unit can be interlocked as part of a crushing train. Connected with a Metso LT106 jaw crusher, the two units can communicate to synchronise the feed-rate. This optimises throughput by automatically adjusting the rate of material moving between the machines. The on-board hydraulic rock breaker on the Metso LT106 also allows oversize material to be quickly broken, avoiding blockages and preventing downtime.

Crushing efficiency is enhanced by feeding material into the crushing chamber at exactly the same speed that the drums are spinning. This minimises attrition and friction, even at high throughput rates.

"The safety features on the DR400 ensure that it is compliant with demanding safety protocols applied by mining companies," says Armitage.

"These include full guarding around all moving parts, access points, nip points and crushing points – as well as pull cords and



"We designed the DR400 from the ground up to give us the flexibility to produce a truly great crushing solution."

Jorge Abelho, director technical support at Pilot Crushtec.





emergency stops to quickly isolate the unit when necessary."

He explains that the efficient Volvo engine delivers the lowest kW per tonne of any mobile double-roll crusher working in the coal sector. Depending on coal characteristics, the engine's 160 kW output can convert to a ratio of just 0.4 kW per tonne.

"The fuel consumption is also a significant factor for operators, and this crusher can run on as little as 17 litres per hour," he says. "This is achieved with a hydraulic load sensing system and an optimised crusher chamber design, which reduce the power needed to crush the coal."

The quality and simplicity of the DR400 is demonstrated by the fact that over 25 of these machines are currently in operation around South Africa – one of which exceeds 22,000 hours of operation. Pilot Crushtec supports the DR400 through its legendary service levels, massive stock holding and unrivalled after-market offerings.

At a glance

- Guaranteed product sizing in one pass as small as 35mm without the need for post screening
- Feed size up to 180mm
- Fully site mobile with a quick set up time
- Unique crushing action which minimises fines generation
- Can work independently with loaders or interlocked as part of a crushing train with upstream and downstream communication
- Highly efficient, latest generation Volvo engine
- Effective crushing method that consumes low kilowatts per ton produced
- Low transport weight and compact transport dimensions
- Designed and manufactured to suite mining conditions
- Fully guarded with all the latest safety features.



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ELECTRICITY + CONTROL



SCREEN EXPORTS



SCREEN AND FEEDER Orders Stream in For Kwatani

South African based vibrating screen and feeder original equipment manufacturer (OEM) Kwatani reports that orders for its equipment have surged in recent months to record levels, with orders coming not only from South Africa and the southern African region but also overseas markets.



"Being part of Sandvik Rock Processing Solutions, which in turn is a business area within the Sandvik Group, we've also been able to outsource some production to other Sandvik factories overseas, including Sandvik's Indian factory."

Jan Schoepflin, General Manager Sales & Service at Kwatani he current level of business is the best we've ever seen since the company was founded nearly 50

years ago and every month now is turning out to be a record month," says Jan Schoepflin, General Manager Sales & Service at Kwatani.

This comes after Kwatani equipment experienced a surge in orders.

He adds that Kwatani is currently producing around 60 machines a month.

"To keep pace with demand, we've rented an additional 3 000 m² of factory space to complement the 17 000 m² we already have," he says.

"Being part of Sandvik Rock Processing Solutions, which in turn is a business area within the Sandvik Group, we've also been able to outsource some production to other Sandvik factories overseas, including Sandvik's Indian factory."

Order's up

One of Kwatani's current orders involves the supply of over 70 screens and associated equipment to a large copper mining operation in Central Asia.

This is the largest order in Kwatani's history and probably the largest single screen order ever to be won by a screen





A motor driven single deck Kwatani screen for the zinc mining industry.



An export order of single deck Kwatani screens for Central Asia.



Kwatanti rented an additional 3 000 m² of factory space to complement the 17 000 m² to be able to keep up with demand

Some of the orders includes the supply of over 70 screens

and associated equipment to a large copper mining

operation in Central Asia.



Due to low manufacturing costs in South Africa, the equipment is competitively priced.

Kwatani forms part of Sandvik's crushing and screening division within Sandvik Rock Processing Solutions.

manufacturer based in Africa.

Kwatani is also busy with big contracts in southern Africa, one for a major platinum mine in South Africa and the other for a zinc project in the Democratic Republic of Congo.

According to Schoepflin, the surge in sales reflects not only more buoyant conditions within the global mining industry but also Kwatani's membership of the Sandvik Group.

"We became part of Sandvik at the end of 2021 and this has opened many doors to us," he says. "We've always been big in Africa and were, in fact, already ranked as the biggest screen manufacturer on the continent prior to being acquired by Sandvik but were less strong in certain other parts of the world. Being part of Sandvik has given us improved access to many markets, particularly in South America where Sandvik is the dominant supplier of mining equipment."

Schoepflin also points to the quality of Kwatani's products as another reason for the skyrocketing demand for its equipment.

He adds that the fact that Kwatani's equipment is manufactured locally is another major plus for the company.

"Our manufacturing costs here in South Africa are low by global standards and our exports also benefit from the fact that South Africa's currency, the rand, is very weak. The result is that our machines are very competitively priced." ۞

Mining Indaba interest not slowing down

Key government leaders and policymakers from every corner of the world are signing up for the 2023 edition of Mining Indaba.

The global event, rooted in Africa, is returning to Cape Town in February 2023 with an impressive speaker line-up comprising thought leaders and decision-makers from across the mining industry.

"We saw a record-breaking Indaba in May 2022 that really set the tone for the industry and for post-pandemic events as we lead up to February 2023. We are seeing a lot of early commitment and we are encouraged by the interest we have already received. This really reaffirms the importance of the Indaba, that it is given the upmost attention and support by state officials and is really driving positive policy change across the continent." said Simon Ford, Portfolio Director, Investing in African Mining Indaba.

Leading the charge of government leaders

that will be in attendance are South African Minister of Mineral Resources and Energy, Gwede Mantashe and Minister of Trade and Industry, Ebrahim Patel.

Government leaders from mining producing countries in Africa include the Nigerian Minister of State for Mines and Steel Development, Gbemisola Ruqayyah Saraki; Ghanaian Minister of Land and Natural Resources, Samuel Jinapor and the Ghanaian Deputy Minister for Lands and Natural Resources, George Mireku Duker; as well as the Zambian Minister of Mines and Minerals Development, Paul Kabuswe.

Investing in African Mining Indaba continues to garner significant support across the continent, with government officials from Chad, Ethiopia, Botswana, Central African Republic, Mali, Mauritania, Namibia, Somalia and South Sudan having also made early commitments. On the global front, United States of America Under Secretary of State for Economic Growth, Energy and the Environment, Jose W. Fernandez, will be in attendance. He will be joined by Special Presidential Coordinator Amos Hochstein. Fernandez last visited South Africa in August 2022 where he participated in the US-South Africa Strategic Dialogue and co-chaired sessions that explored ways to deepen bilateral cooperation on climate and energy issues, as well as strengthen economic ties between the two countries.

The theme for 2023 is 'Unlocking African Mining Investment: Stability, Security, and Supply' and will feature speakers who will consider the challenges and opportunities facing the continent's mining industry as it seeks ways to bolster its economic power amid the global rush to secure supply for greener energy transition.

Australian mine hauls more than 100 million tonnes autonomously



Western Australia's largest gold mine, Newmont Corporation's Boddington Mine, surpassed the 100 million tonnes milestone for material safely hauled using Cat MineStar Command for hauling with the gold industry's first autonomous haulage system (AHS) fleet.

Boddington, a deep open pit surface mine, delivered 19.7 million grams (696,000 oz) of gold and 4.6 million gold equivalent grams (163,000 ounces) of other metals in 2021.

The mine's fleet includes 36 Cat 793F autonomous and four 793D staffed mining trucks to haul material, and the conversion to AHS was one of the fastest in the industry, spanning approximately seven months to roll out all 36 trucks equipped with Command.

Newmont invested \$150 million in its autonomous haulage project with goals to improve mine safety and productivity, while extending the life of the mine.

The first 231-tonne (256-ton) Cat 793F was converted to autonomous operation in March 2021. A total of seven trucks from Newmont's existing fleet were retrofitted with Command for hauling, while 29 trucks were new models. In October 2021, the last of the 36 autonomous trucks were in operation at the mine. The mine reached the 100

million tonnes (110 million tons) of material autonomously hauled benchmark by the end of October 2022.

Including the autonomous trucks, equipment equipped with MineStar Terrain, and site autonomous vehicles and trucks, the mine has 200 connected assets.

An entirely new AHS intelligence office, where all the autonomous trucks and connected assets can be viewed and collected data analyzed, was also completed and dedicated in October 2022. The new workspace brings together all AHS team members in a single space with tiered seating and screens at the front of the room.

A bid to make natural resources more inclusive

Transformation within the resource sector, coupled with holistic perspectives is needed within the copper industry.

This is the root of Copper360's chair Shirley Hayes manifesto.

The copper producer launched a project to develop a white paper specifically to measure current levels of inclusion in the mining and resources sector. The intent is not only to troubleshoot but to interrogate potential solutions that could overcome hurdles preventing full integration of genders and people with disabilities into the sector.

"Not enough is being done in terms of inclusion, and transformation also means more than redressing injustices of the past. It also means addressing inequalities that people still experience every day, particularly in areas like resources," says Hayes.

The white paper on Inclusion will be

shaped as a study and headed by former Ms. Wheelchair South Africa Tamelyn Bock, a Nababeep local with Copper360's ESG officer Jennifer Barnard.

Hayes says that the study, expected to take several months, will be published in the third quarter of 2023.

Hayes mentions that role players in the resources sector are welcome to join in and extended an open invitation.

"This is about all of us and is for everyone. This is a project that aims to benefit all role players in the resources sector, from copper producers such as us to mining giants. We all need to take heed of inclusion on a greater scale than what has been the case until now," she adds.

Hayes lists people with physical disabilities as a particular focus.

"When I looked at our own infrastructure,



Copper360 chairperson Shirley Hayes.

I realized that it must be incredibly unfriendly for anyone facing a physical challenge, visitor or potential employee. And while not every aspect of an industrial operation may be conducive to rehabilitating into a friendlier environment, a lot of it can be," she concludes.

Digital systems adds value to mines



Judging from interactions with mining customers at Electra Mining Africa 2022, Weir Minerals Africa notes that there is a growing demand for digital integration, which provides mines with data to develop strategic improvements to their operations.

To respond to this growing need for digital solutions, Weir Minerals Africa showcased its Synertrex intelligent platform which provides mines with insights into actual costs of running their plants, data to develop strategic improvements to mining operations and the opportunity to performance benchmark every part of their operations.

As part of Synertrex condition monitoring,

she adds, sensors are applied to processing equipment and the data they provide is captured and continuously analysed. Customers are therefore able to eliminate guesswork from their operations by having detailed real time insight into how their equipment is performing. Information is displayed on a simple, easy to understand dashboard which can be accessed via any device or integrated into existing operational systems. It will convey real time fact-based insights into machine performance and health, remaining useful life and other crucial operational indicators.

"As mining companies redefine their investment strategies, the Synertrex intelli-

gent platform can help customers transform their operations. This is because it also assesses their machinery's performance, including potential improvements, such as optimising the equipment's energy efficiency or throughput," says Tiisetso Masekwameng, General Manager – Comminution at Weir Minerals Africa.

"The Synertrex intelligent platform remotely manages maintenance from monitoring wear and tear, to scheduled servicing and repairs, to keep mining equipment at its most productive, thus ensuring maximum equipment uptime and profitable operations for mining companies," concludes Masekwameng.

A voice in the local steel industry

Southern African Institute of Steel Construction (SAISC) is setting out to start 2023 with a drive to gain new members, by creating a more holistic offering by widening the membership pool

Denise Sherman, SAISC marketing and management consultant, says: "The Institute has built up an extensive pool of international knowledge, which we gladly share across the steel value chain. This includes our original member body, made up of steel mills, merchants and steel fabricators born out of the South African mining industry. Over time, we have noted that many engineers are also making use of our resources, but without necessarily being members of the SAISC."

As a result SAISC would like to encourage prospective members, engineers, the steel construction industry, and individuals involved with and interested in steel construction to become members of the Institute in order to be able to tap into an even rich source of available knowledge.

Engineers are especially seen as valuable members. Sherman adds that South Africa's

engineering capacity has dwindled over the last decade. While factors such as emigration were cited, so was the need for increased mentorship, problem-solving skills and depth of knowledge from the engineering sector.

"This underlines an urgent need for the supportive and inspirational resources such as those which the SAISC can offer to the engineering sector," she comments.

"In addition, we believe it is important for engineers to become members of the SAISC, as they are already an integral part of the steel construction landscape - for example offering design and technology input - and as specifiers of the products used by a number of our other members. A greater percentage of engineers as members would allow the creation of a more comprehensive and holistic industry body."

With access to over 60 years' worth of local steel industry project case studies, the SAISC is well-known as a custodian of steel industry knowledge and standards. This includes the creation and sale of popular technical publications, training, and helping



Denise Sherman, SAISC marketing and management consultant.

with technical queries relating to steel construction and structural engineering.

Being able to broaden the membership of the Institute to include more engineers would also benefit the SAISC as an industry body, notes Sherman.

"We are very keen to engage with more engineering members in order to access the market intelligence they are able to offer," she explains. •

An additional 9 540 construction jobs in Coega

There must be something in the water at Coega, after announcing that its Skills Development Centre (SDC) is accelerating skills training and coaching of young learners to help address the high rate of unemployment in the province.

The Coega SDC is situated in the Coega SEZ facility that is adjacent to the Motherwell Community strives to create sustainable job opportunities and training and development for local communities, with a focus on the youth, women, and persons with disabilities.

During the 2021 and 2022 financial year Coega reported 9 540 additional construction jobs, 9 659 operational jobs in the SEZ, and trained over 3 296 people, making a lasting impact on the lives of young people and surrounding communities.

According to David Lambaatjeen, Coega's Training Manager, the Shielded Metal Arc Welding at NQF Level 3 training programme is one of the top choices for learners.

Successful learners receive a Statement of Results (SOR) and Learner Achievement is uploaded on the National Learner Record Database (NLRD) with the South African Qualifications Authority (SAQA). This offers multiple employment opportunities.

One Coega SDC learner, Kwayiyo Mavuso (33), from Motherwell says: "With this training programme, there is a significant



amount of work one can do even in their neighborhoods, and Coega SDC has really helped me obtain a skill that will open doors and make me employable."

The SDC is built on Coega's two decades of expertise in providing distinctive and

bespoke socio-economic development solutions. Coega SDC continues to position itself as the people's empowerment Centre of excellence through facilitating education, training, skills development, and ancillary services.

Reliable funding is key for construction SMEs

South Africa's construction sector has shown resilience post-pandemic.

In 2023, the same resilience will be needed, even during mass uncertaintly coupled with power supply and an economy that fluctuates.

However, a recent report painted a positive outlook for the construction sector. It found the sector would stabilise at an annual average growth rate of 3% from 2023 to 2026, supported by investments in transport, renewable energy, housing, and manufacturing projects.

"Growth over the past 11 months was largely supported by the restart of projects that were delayed due to the pandemic and its restrictions, together with an increase in the number of building plans passed in 2021," says Tom Stuart, chief marketing officer at SME funding provider Lulalend. According to Stats SA, the total value of recorded building plans passed by larger municipalities rose by 28% year on year.

Stuart says SMEs need to be ready to tap into the opportunities that exist in the coming months. A key aspect of this forward planning is securing one's cash flow. Access to working capital allows SMEs in this industry to cover fixed costs and overheads.



The appropriate capital levels will also help increase opportunities for small and mid-sized construction businesses. They can then better grasp opportunities created by diversification, for example, when a company decides to tap into the solar energy and renewables market.

"Small construction businesses are under

renovation and need access to funds that will help them adapt and grow."

"It's essential for small construction businesses to have access to a reliable line of funding that enables them to plan for future growth with confidence while being able to face any challenges that may arise," says Stuart.

A boost in hydrodemolition

Water that cut shapes and removes concrete is becoming more popular, as advancements in hydrodemolition technology increase.

Aquajet, a global leader in the design and manufacturing of hydrodemolition technology, announced the delivery of its 100th Aqua Cutter in North America.

The milestone marks the growing demand for the hydrodemolition method in applications ranging from road and bridge repairs to dam and parking garage rehabilitation.

Hydrodemolition equipment has evolved over the last 30-plus years. Aquajet's first robot was built on the base of a small drilling rig and featured snowmobile tracks cut into two narrower tracks. At that time, the technology only worked horizontally.

Today's Aqua Cutter robots are highly sophisticated, with the ability to cut shapes, to remove material at different depths in the same pass and to reach horizontally, vertically, overhead, over bridge rails and more.

Aquajet's newest innovation, launched in 2022, is the Aqua Cutter 750 V with patented infinity oscillation. The lance moves the water in an infinity, or Figure 8, pattern that removes more concrete in a single pass than previous models while



significantly reducing the pipe hole effect.

"We attended our first World of Concrete in 1989 as a young company with innovative new technology that offered a faster way to remove large amounts of concrete," said Roger Simonsson, Aquajet managing director.

"Over time, the use of the Hydrodemolition method has become more widespread and customers, including many from North America, have offered feedback to help the technology advance. It's gratifying to see how the Hydrodemolition industry has taken off in North America and around the world."

"This is a memorable and important milestone for Hydrodemolition in North America," said Aquajet business development manager Keith Armishaw.

"What once was seen as a niche application has grown to be a viable solution for a variety of applications and industry challenges. Aquajet robots get the job done and help address the shortage of labor with state-of-the-art capabilities. We're excited to see what the future holds." •

Water transport on the move

Municipalities struggling with potable water distribution and waste water control issues can get assistance this year.

KSB Pumps and Valves in South Africa made its expertise available to local municipalities and water authorities following a fact-finding visit by KSB's global specialist, Emilio de Paz, who visited and assessed a number of plants and sub-stations across the country. Where possible the team also provided input to overcome some of the problems faced at the sites through easy-to-implement preliminary solutions.

"We visited a number of sites across the country over two-month and culminated the trip with a two-day conference including role-players from disaster-hit eThekwini and further afield in KwaZulu Natal. Municipal and consulting engineers, as well as specialists from a number of water and waste water utilities were also in attendance.

"The conference took place from 22-23 November at the Coastlands Hotel in Musgrave. We covered many topics and shared the latest finding from operations across the globe, including complex systems in countries like China, Indonesia and Mexico among others. Topics ranged from general topics to highly technical issues such as water hammer, cavitation and free passage



of pumping systems. The design of pump stations and sumps etc for maximum efficiency, and reliability was also covered.

KSB Pumps and Valves' Hugo du Plessis, acting Market Area Manager – Water, Wastewater and Irrigation, says the twoday conference was attended by more than 100 people with 85 onsite and 24 online participants on day one with nearly all returning the following day, which indicates the quality of the information shared. "Emilio delivered a hard-hitting technical presentation on 'Wastewater Pump Station Design' on day one and followed-up with an equally informative presentation on 'Water Transport Systems' on the last day. This type of knowledge is hard to find and visits like this help us to share knowledge across the country and helps ensure our customers have access to the highest possible expertise when dealing with water distribution and waste water issues." ©

Time to combat road fatalities

South Africa has one of the highest road fatality rates in the world and this led Justin Manson, sales director at Webfleet Telematics, to look at what traffic officials can do to reduce road incidents and save lives.

With an estimated 800 000 road crashes on South Africa's roads every year, road users have emerged as the leading cause of incidents, according to the recently published inaugural Webfleet Road Safety Report. The report covered 14 000 commercial vehicles representing various companies across South Africa. It recorded 1 253 collisions (8.9%), with the highest cause being other road users, followed by distracted driving, driver fatigue, speeding, reckless driving, poor road conditions, drunk driving, and pedestrians.

All but one of these factors relates to human behaviour. This means that South African motorists and even pedestrians have collectively developed bad habits that consistently result in harm, for themselves and others. Drunk driving, speeding, ignoring signs, stopping beyond solid lines, drinking into oncoming traffic, and a host of other minor and major infractions, are some of the things one can expect to see on South African roads every day.

Sometimes offenders are so brazen, they will violate clearly defined road statutes and regulations in front of road traffic law enforcement officers. They do this knowing that our officers are more likely than not to ignore their conduct, and in the rare case that someone is caught, the implied offer of leniency in exchange for a bribe can be expected.

"Corruption aside, traffic authorities need to relook their resourcing, training, and performance metrics if they hope to start making a difference. From a resourcing perspective, putting the right people in the right places with the right tactics is essential. Budget allowing, more digital assets and a higher human presence will ensure that road users are more closely monitored and when violating, fairly and consistently prosecuted," says Justin Manson, Sales Director at Webfleet.

"Training should go beyond just how to do the job, but must encourage strategic, creative thinking, so that each officer makes a significant contribution, even at the lowest level of enforcement. Consistent training and retraining in a changing environment are essential. Incentivising officers with realistic, measurable performance indicators should be



Justin Manson, sales director at Webfleet Telematics.

linked to the environment. This includes the rate of road incidents in their coverage areas, as well as congestion and overall driver (and pedestrian) behaviour," concludes Manson. When road users know that there is a consistent presence of technology and traffic enforcement officers, they will inevitably and quickly conduct themselves more in line with the law, bringing down the level of road accidents and save lives of millions.

Local assembly plans for electric panel van and bakkie



Enviro Automotive, the importer and distributor of Dongfeng Sokon Automobile (DFSK) battery-electric vehicles, announced local production plans to reduce its products' acquisition cost and make transport operators' investments in commercial electric vehicles (CEVs) more affordable and sustainable.

DFSK (Dongfeng Sokon Automobile), a leading vehicle manufacturer in China, extended its popular C-Series delivery vehicle range in 2007 with battery-electric panel vans and bakkies. Both the EC35 panel van and EC31 one-tonne bakkie soon became very popular in the lastmile delivery environment in the markets where they were sold. "The battery-electric EC-Series has an operating cost of only 25 cents per kilometre, a fraction of its rivals featuring internal combustion engines," says Gideon Wolvaardt, Managing Director of Enviro Automotive. "It also offers reduced maintenance costs because of fewer moving parts and reduces your carbon footprint, which lately, has become an important social- and community-related concern."

After extensive research into the CEV market, Enviro Automotive was set up to import affordable electric vehicles and to make transport operators' investments in electric vehicles a sustainable longterm solution. One of the first business scenarios Enviro Automotive investigated was to determine the feasibility of a local assembly programme to create additional value for its customers.

Enviro Automotive's first DFSK test units, customised for harsh African conditions, arrived in the country in June 2022. Since then, they have been on trial at various transport operations to collate data about the vehicles' performance in the local delivery environment.

More information about Enviro Automotive's local assembly programme will be announced at the opening of the company's new dealership at its head office in Pretoria.

RMI and Automechanika is building momentum

The 8th edition of Automechanika Johannesburg will take place at the JHB Expo Centre this September.

As the largest business platform for the automotive aftermarket on the African continent, it is the ideal meeting place for stakeholders. It will bring together suppliers and buyers and will showcase rapidly changing technologies and processes. The event will be a host to multiple sector-related conferences, that will pave the way for the sector in the short to medium term, making it a must-attend event for those involved in the automotive aftermarket sector.

The fundamental impact a trade show can have on the growth and development of an industry depends on the wide support from all market segments.

Through its portfolio of trade shows, Messe Frankfurt has always aimed at providing platforms where all market participants join to nurture, grow, and present their industry. The Retail Motor Industry Organisation, (RMI), the largest organisation of employers and businesses in the South African retail motor industry – with almost 8 500 mem-



bers including businesses across all sectors of the retail motor industry, including vehicle bodybuilding and component manufacturing, is a vital partner to ensure that our broad customer base understands and values the services and products being offered in the sector.

Messe Frankfurt, the organiser of Automechanika, is pleased that the RMI and its various associations will once again endorse the 8th edition in 2023.

Jakkie Olivier, CEO of RMI, says it is an absolute honour to be once again part of a worldwide professional show that values the industry as much as RMI does. "We fully appreciate the importance of networking and the important role it plays in our business. We thus welcome the opportunity presented by Automechanika to interact face-to-face with other business owners and product suppliers." An attractive display of an entire industry can also have many long-term effects, including appealing to the younger generation for career opportunities, which is key to ensuring the sustainability of the sector, and the broader economy as a whole. \bigcirc

ALCOHOL TESTING VITAL IN THE TRANSPORT SECTOR

A sober workforce is the most effective risk management tactic a company can take.

By Rhys Evans, MD at ALCO-Safe

mployees that abuse alcohol and other substances cost their company time and money, while putting their livelihoods at risk. Employers have a duty to provide a safe working environment for all workers, which includes preventing employees from entering the workplace under the influence of substances.

Employees have an obligation to accept the workplace policies regarding alcohol and drugs, as well as a duty to confirm that they are abiding by all applicable policies and laws pertaining to substance-free programmes.

While it is for employers in the transport sector to decide whether their workplace policies will involve drug testing (along with routine alcohol testing) as well as how and when these will be carried out, it is recommended that these policies be carefully relooked and brought up to date.

Occupational health and safety

Transport companies should already be accustomed to testing their drivers before they are permitted to get behind the wheel of any truck or transport vehicle. Testing drivers once they have arrived at their destination is an effective way of ensuring that such drivers have not consumed any intoxicating substances during their journey. This is important particularly for long-distance trips. For many drivers who have come under disciplinary action due to the fact that they were found to have consumed intoxicating substances or found with a breath alcohol level above the level permissible by the Occupational Health & Safety Act, it is important to remember that the workplace does not have to be a physical location for the driver. Their workplace is their vehicle, and as such, there can be no argument that the National Road Traffic Act allows for a higher permissible alcohol level with public road users.

Testing starts at the depot

Transport drivers are considered professionals, their vehicles their

workplaces, and as such, the Occupational Health & Safety Act trumps the National Road Safety Act in requiring the strict enforcement of rules relating to workplace intoxication by their employers. While such drivers could not be prosecuted by the national traffic police in terms of the Occupational Health & Safety Act, their employers certainly can take zero tolerance disciplinary action within the full ambit of the law. Breathalyser tests at the vehicle depot are useful tools within the transport company's arsenal when enforcing workplace substance abuse policies. Saliva-based drug tests are useful for picking up a variety of substances (depending on what companies are looking for) that have been consumed within the previous two or three days.

Technology takes testing on the road

Additionally, testing technology has advanced to offer employers more effective safeguarding measures on their vehicles, to prevent intoxicated drivers from being a danger to themselves and others on the road. Many trucking companies are now making use of a device called an InterLock, which is a breathalyser that works with the ignition system of a truck. This ignition interlock device (IID) is a form of electronic monitoring that requires the driver to blow into a mouthpiece on the device before starting or continuing to operate the vehicle. If the resultant breath-alcohol concentration analysed results exceed the programmed blood alcohol concentration, the device prevents the engine from turning on. At random times after the engine has been started, the IID will require another breath sample, known as a rolling retest, which is done to prevent someone other than the driver from providing a breath sample.

Trucking companies can now also make use of an app-controlled breathalyser test management platform for regular,



Rhys Evans, MD at ALCO-Safe.

remote capturing, sharing and tracking of breathalyser test data. This empowers fleet operators to facilitate the remote testing of drivers. Drivers can be prompted to perform breathalyser tests on themselves, making the data instantly available for analysis and sharing, in real time. Tests are matched with photographic identity, GPS position, date, time, device serial number and test result, in order to eliminate the possibility of tricking the system.

Making IIDs compulsory

If the government were to make it compulsory for such electronic monitoring devices to be installed in 18-wheeler trucks and vehicles used for long-distance haulage, this would be effective in reducing intoxication-related accidents and fatalities. This would take the responsibility of monitoring driver intoxication out of the ambit of traffic police, and place it squarely with their employers. These electronic monitoring devices would have additional riskreduction benefits that would result in lower insurance premiums and safer roads for all users.

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