the bulletin

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Strong Reliable Machines
Strong Reliable Support

BELL


Strong Reliable Machines • Strong Reliable Support
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inside track



Our Mining & Construction Bulletin serves to present you with a collection of customer stories from around the world, showcasing our products operating successfully in a variety of applications. We trust you will find this edition an interesting and informative read.

Although market demand has eased considerably from the booming post-COVID years, it was pleasing to see that Bauma in April attracted around 600 000 visitors from over 200 countries. This is an important event on the construction calendar as it provides us with an opportunity to exhibit our innovation and, most importantly, to connect with customers, dealers, suppliers and our other partners. We appreciate the generous support that we received.

This year marked 21 years since we first debuted our 50-ton ADT at Bauma and we're proud of how this product has come of age, showing great product maturity and longevity. We were also thrilled by the excitement that was generated by introducing the Bell G140 Grader at this international show, even though we will only announce our launch plans for the Northern Hemisphere next year.

The Bell Motor Grader is a truly global product and marks a major milestone in our strategy to expand our Bell-manufactured equipment for the global construction and mining industries. We believe that, in time, this product will bring a step change in our journey from a global ADT specialist into a broader yellow metal OEM.

From a business outlook perspective, we still anticipate market conditions to remain relatively subdued through 2025, but we are encouraged by a few green shoots and signs of positivity seen by certain of our global operations during the first quarter of the year, including our UK dealership.

Originally designed for the USA oil and gas drilling industry, our cautious optimism that the second half of 2025 might see improved market demand for the Bell Tracked Carrier has unfortunately been tempered by the imposition of tariffs in this market. This concept is gaining traction in other regions as well, and you can read how the Mukona Group has customised a Bell TC7A to carry geotechnical testing equipment on remote African sites.

There will always be new challenges but what matters is how we adapt and provide 'Strong Reliable Machines, Strong Reliable Support' to our customers. We appreciate the continued trust placed in us and look forward to working alongside you to meet the challenges and opportunities that lie ahead.



Ashley Bell
Group Chief Executive Officer

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Advanced technological solutions for monitoring, accuracy and safety

Bell Motor Graders combine cutting-edge technology with seamless system integration to maximize productivity, grading precision, and on-site safety.

Grading System Integration
Bell Motor Graders are agnostic and can seamlessly integrate with a variety of third-party technologies, including 2D and 3D grading systems of the customer's choice. This versatility allows customers to connect the grader to their preferred precision grading solutions, enabling high levels of grading accuracy and operational efficiency.

Fleetm@tic® Monitoring & Efficiency Management
Bell Fleetm@tic® monitors and manages both the machine and the operator's performance. Machine operational data is collected, processed, and compiled into valuable production and performance statistics, which are accessible via automated reports or the Fleetm@tic® website.

Enhanced Safety Through System Connectivity
Bell Motor Graders support connectivity with third-party L9 pedestrian detection systems and collision avoidance systems through the ISO 21815-2 Interface. This advanced safety integration helps enhance job site awareness and reduce incidents, making the Bell Grader a safer, smarter machine.



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Bell Grader launches.

Read the full story on page 6.

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Great customer turnout at Bell Grader launches



The Bell Motor Grader has been in the limelight during the first half of 2025, in the lead up to the start of sales and full production, with three impressive customer demonstrations in South Africa and the official launch for employees at the Richards Bay factory where the machines will be manufactured.

In February, there was a fantastic turnout at the Grader Open Day held at the picturesque Constantia Wine Estate in Cape Town during the Mining Indbaba. In June, the Grader shone in Ballito's winter sun at the KwaZulu-Natal Grader launch at Sugar Rush Park and the following month upcountry customers attended the Gauteng Bell Grader launch at Huddle Park Golf & Recreation in Johannesburg.

These events were an ideal way for large groups of customers to see the Bell Grader in action, explore its features, and get behind the controls. Feedback has been overwhelmingly positive with customers noting how well built and balanced the machine felt, appreciating the strong power to the ground, the comfortable cab, and the impressive tight turning circle. At these events, our Head of Marketing, Stephen McNeill, explained why Bell chose the Motor Grader as its next major product: "We analysed the global market opportunity and then considered our strengths and shortcomings from a manufacturing perspective, design capabilities, and dealer network.

"As a global supplier of ADTs, we have a well-established dealer network in all the same key markets where motor graders are required, which means we are strongly positioned to sell and provide reliable support to these products in these markets, for example, our home market in South Africa.

"Manufacturing in South Africa isn't a walk in the park, but we've learnt how to do it well at a certain volume. Structurally the grader is a complex machine with detailed heavy fabricated steel structures, and difficult machining and assembly. We have the skills and infrastructure in our manufacturing facility to make this happen."











The Bell Grader range has an option of 15 different hydraulic functions, an advanced high torque drivetrain and the option of antler lever controls for some countries and electric over hydraulic (EOH) for other countries.

"Our Bell Articulated Dump Truck (ADT) is recognised around the world as a market leader in innovation, performance, and durability, and we believe we have been able to design the same core values into this new Motor Grader."

Addressing the Bell Richards Bay factory team of around two thousand five hundred employees at the factory launch at the company's test track in June, Chief Executive, Ashley Bell, said: "The launch of our range of Motor Graders represents the beginning of an exciting new era for Bell. Our existing network of dealers around the world has a product offering gap for a Motor Grader, which means immediate channels to market for us."

He added that as the Bell Grader gains market acceptance alongside the Bell ADT, which operates in over 80 countries around the world, Bell will have the opportunity to evolve from an ADT specialist to a broader 'yellow metal' manufacturer.

Commenting on the decision to manufacture the Grader locally, he continued: "Not only is this a commitment to our factory and the Bell team here in Richards Bay, but also a strong commitment to our local community, the City of uMhlathuze, the Province of KZN and our country, South Africa. As a homegrown, South African family company, we understand the critical importance of growing local business, contributing to our local economy and creating employment for South African people."

The Bell Motor Grader has a South African local content of about 70%, with over 1 000 local suppliers feeding into the factory daily.

Watch a short video of the Bell Richards Bay factory's Grader launch.

Saved by the BELL B40E ADT





Did you know our B40E ADT moves more tonnes using less fuel?

It just makes more CENTS!

- **Maximum Production**
- **Minimum Fuel Burn**
- **Ultimate Savings**

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Bell B30Es are a dynamic trio for FM Kitchens in Georgia, USA

Riverbrook Marketplace is an exciting, modern sixty-acre commercial development in Gainesville, Georgia in the United States comprising retail space, restaurants and anchor tenants, which include a large supermarket chain. Added to this is a residential component of twenty-two acres on which two hundred and twenty housing units are to be built in a smart design.



Corey Rogers (NED) with Fred Kitchens and Gabe Cunningham from FM Kitchens, and Justin Hopkins (NED) in front of one of the B30Es on site.

National Equipment Dealers (NED) is the appointed dealer for Bell Articulated Dump Trucks (ADT) in that area and their valued customer, FM Kitchens Construction Services, acquired three new Bell B30E Articulated Dump Trucks (ADTs) in January 2024 to assist with the bulk earthworks portion of the project.

FM Kitchens, based in Jefferson, Georgia was established by Fred Kitchens in 2013. Fred has over 24 years' experience in the grading and underground utility construction and site work industry, having started his career working as a project manager for his father where he was responsible for estimating and scheduling projects all over the Southern United States.

As a turnkey site contractor offering grading, site clearing, storm and sanitary sewers, waterlines, underground detention/retention systems, demolition, and asphalt and concrete construction, FM Kitchens has a good reputation with clients and has established some long-term relationships. This has seen FM Kitchens grow and today the company employs over 50 people and has an annual turnover of about $20 million. Fred remains actively involved and is responsible for overseeing the day-to-day operations including estimating, scheduling, and project management.

FM Kitchens' Project Manager, Gabe Cunningham, explained that the company has a 17-acre site at Riverbrook Marketplace comprising two portions that are across the road from one another. The site he's working on is about seven and half acres and FM Kitchens is tasked with moving 70 000 to 80 000 yards of dirt [98 000 to 112 000 tonnes] on site

> ***What I've noticed is the cycle times. When I'm loading these trucks they're back usually before I can get the next one loaded. So, they're running and dumping and it's moving very seamlessly right now since we've had these new trucks.***

to make way for the shopping centre.

The company took delivery of two new Bell B30E ADTs at the end of 2023 from NED, a Bell dealer in the United States. Six weeks later, a third B30E was added to the fleet and deployed to his site. According to Gabe, their arrival has increased production, which was being negatively impacted by breakdown issues on their older equipment. "What I've noticed is the cycle times. When I'm loading these trucks they're back usually before I can get the next one loaded. So, they're running and dumping and it's moving very seamlessly right now since we've had these new trucks."

Gabe highlights Tip Safe as one of his favourite safety features on the Bell B30E saying: "We've always had an issue with drivers, especially young, inexperienced operators. Even after they've been properly trained, they always somehow manage to tip a truck over. It never fails."

However, they have not had a single incident since introducing the Bell ADTs because the trucks won't allow the bin to tip if it's over 15 degrees, or whatever limit has been programmed into the computer. "I love that feature because I don't have to worry about them flipping over, hurting someone, or tearing something up, causing downtime."

Hill Assist, whereby the truck automatically applies the park brake when on a hill and the gearbox is in neutral and ensures a smooth, safe pull away, is another impressive feature that prevents rollback. "There's a lot of good safety features on the trucks that I do enjoy; it makes my job much easier because I don't have to watch everybody like a hawk. I can focus on what I'm trying to do on the job."

Paul Parziale, a Bell ADT Operator at FM Kitchens, spends up to 10 or 11 hours a day behind the wheel of his ADT and says: "As an operator I can tell that they spent the time on the interior, the cab, and the operation of the vehicle with the operator in mind. There's not a lot of equipment, I feel, where the operator is truly being considered."

He mentions the operator seat and power steering as two standout features. "I love the seat. Any of the other trucks will blow the spine out of your back. And power



The operator comfort of the Bell B30E ADT is appreciated by the operators at FM Kitchens, who spend up to 10 or 11 hours a day in the cab.



The Riverbrook Marketplace project will see FM Kitchens moving 70 000 to 80 000 yards of dirt (98 000 to 112 000 tonnes).

steering is something to behold. The other trucks I've driven were all full tension, there's no power steering, so I'd get one of those knobs that mount to crank the steering wheel…It's the nicest truck I've been in."

FM Kitchens' Senior Project Manager, Westin Gittens, is responsible for estimating and project management on several of the company's projects. He describes what FM Kitchens looks for in an equipment supplier: "We're looking for a partnership, someone who can be honest and do what they say they're going to do. A partnership that helps get us what we need, keeps us running, and keeps production on our jobs moving. NED, so far, has been very proactive…They've had quick response times anytime we've had something go on these trucks. They're new trucks so there were some safety features we had to adjust, gear ratios and stuff."
He also appreciates the comprehensive handover process when the machines were delivered. "They [NED] brought Bell's main product support out here to teach us and they did a whole day of training on these products. That was big that they invested the time to make sure that we were trained properly on the Bell trucks."



Benefits of a new Bell 4x4 stack up for Brookland Sand & Aggregates



Cornwall, a county on the southwestern tip of England, is perhaps best known for its towering cliffs, picturesque beaches, and Cornish pasties but it is also home to some of the world's largest deposits of china clay, or kaolin.



Brookland Sand & Aggregates uses a Bell B45E 4x4 to carry processed aggregates around site either to stockpiles for resale or to the crushing operations.

These deposits, formed about 280 million years ago and discovered in 1745, gave rise to the English porcelain industry. By 1910, the area was producing 50 percent of the world's china clay. While production has somewhat reduced, the industry continues to be a significant employer in the region and has fostered complementary businesses such as Brookland Sand & Aggregates, which specialises in processing secondary waste from china clay mining.

Founded in 2010 by the late Barry Cleave and his son Marshall, Brookland Sand & Aggregates is now an independent family-run enterprise under Marshall's leadership. As the third generation in the industry, Marshall carries on the proud tradition started by his grandfather, Norman Cleave.

Norman Cleave, established Norman Cleave Plant Hire in 1972 and built up a fleet of earthmoving equipment that helped to construct many of the motorways and roads throughout the country that are in use today.

Marshall recalls: "In the mid-nineties the company switched focus from purely muck shifting to aggregate processing. The plant hire market had become saturated and the rates weren't what they used to be. The quarrying of secondary waste in the clay pits was starting to take off, so we switched to that."

This decision laid the foundation for the family's lasting connection to Cornwall's mining industry. Brookland Sand & Aggregates initially worked at Gunheath Pit crushing granite to produce aggregates for the construction industry.

A continued focus on product quality and customer service resulted in steady growth and the company relocated to Littlejohns Pit in 2014 to satisfy customer requirements and serve projects in the southwest of England.

Interestingly, every ton of china clay that is produced generates nine tons of granite waste. According to Marshall, Littlejohns Pit has enough secondary waste above ground for the next 50 to 60 years, "and the mine is still producing and generating the waste that we take, so there's a long way to go yet".

Brookland Sand & Aggregates processes this granite waste to produce between 1,2 and 1,5 million tons of finished product per annum. "Basically, we supply anything from 30t rock down to fine mortar sands and everything in between," says Marshall.

Production of 10mm, 20mm and sand is consistent, but the other products are largely dependent on what projects are being undertaken locally. For example, Brookland has just completed the last of the big dual carriageways in Cornwall, which was a 7,5 mile (12km) stretch of road in conjunction with Highways England.

On the processing side, the company has a fleet of 12 jaw and cone crushers, a dozen screens and a wash plant. This is complemented by a fleet of 18 wheeled loaders, six excavators, two 40t rigid dump trucks, and a new Bell B45E 4x4 Articulated Dump Truck (ADT), delivered in July 2024, which replaced one of the older rigid trucks.

In time, Marshall plans to order another B45E 4x4 to replace the second aging rigid. He explains: "We went through our options. We looked at the cost to rebuild our rigid trucks, but that became cost prohibitive. When comparing a slightly larger, new Bell ADT against the cost of having the older, slightly smaller rigid rebuilt, the Bell presented a better option."

Marshall had confidence in the Bell brand having previously run Bell B25C ADTs over 20 years ago when they were still muck shifting.

The B45E 4x4 is used to carry processed aggregates around site either to stockpiles for resale or to the crushing operations. The truck usually works one shift from 7:00am to 4:30pm but two shifts are implemented, when necessary, like for the road project with Highways England. Cycles vary from between 800m to two miles (3,2km) but gradients are "quite steep" and although the gravel haul road is of good quality, it is slippery in the wet.

Marshall explains his preference for 4x4s in his quarrying operation: "Because we're not muck shifting, we don't need the six-wheel-drive, and the 4x4s suit the quarry best because we run road lorries on the same roads. The 6x6 tend to make bigger ruts when they turn corners and tear the roads up, which is fine if you're only running 6x6s but when you have cars and lorries on the same roads then the 4x4s don't damage the roads."

Apart from the benefits in terms of reduced haul road maintenance, Marshall believes his Bell 4x4 will deliver lower operating costs due to having fewer tyres and moving parts.

While Marshall does use Bell Fleetm@tic®, he says: "I wouldn't say I'm a big user, but I do like to keep an eye on the hours the machine has worked to monitor productivity and keep the servicing on time." The onboard weighing has highlighted the need to fit a tailgate onto his Bell truck to get the full capacity, which has been useful. "My fault for not specifying it in the build," he points out.

Fleetm@tic® also allows Marshall to monitor fuel consumption and he's pleased with the 18,7 litres per hour, which is a welcome improvement compared to the fuel economy of his two 2007 model rigid trucks.

Brookland Sand & Aggregates burns between 35 000 and 40 000 litres of fuel on site per week so "any fuel savings are sought after" and fuel economy plays a role when purchasing new equipment.

> ***"The operators all love the comfort of the truck and it's proving its worth."***



Bell dumpers impress with performance and driving comfort

For many years, Hartsteinwerk Loja in Lower Austria has relied on Hitachi large excavators from Kiesel Austria. This spring, the company's existing 60-tonne articulated dump trucks (ADTs) were replaced by two Bell B60E 4x4s, allowing them to benefit from the comprehensive system solutions offered by Bell Equipment's Austrian partner.



Satisfied project partners at the handover in April 2024 (from left): Walter Michels, Kiesel ADT Production Manager; Andreas Huber, Sales Manager Kiesel-Austria; Christian Häusler, Head of Technical Purchasing Loja Hartsteinwerk, Loja Plant Manager Robert Wöhry and Uwe Herber, Kiesel Division Manager Quarrying & Mining.

For almost 120 years, natural stone has been extracted from the Loja quarry high above the Danube near Persenbeug in Lower Austria and processed into high-quality coarse and fine aggregates thanks to the excellent properties of the kersantite and granite porphyry found there. Today, under the management of Alexander Habsburg-Lothringen and Kurt Bernegger, the Loja quarry on the property of the Habsburg-Lothringen Persenbeug estate is run jointly with Bernegger GmbH, which operates throughout Austria. Thirty employees produce around 650 000 tonnes of rock per year, which is supplied as base course for civil engineering and road construction, as well as high-quality aggregates for asphalt and concrete, as far away as Linz and the greater Vienna area. As a high-quality railway ballast, Loja stone is in demand throughout Austria thanks to its convenient location and the company's integration into the Bernegger Group's road/rail container logistics.

Following the transfer of the company to the current partners in 2011, massive investments have been made to modernise the production facilities and re-organise the main processes: In addition to a step-by-step renewal of all processing and refining stages, the transport chain in the quarry, which is more than 450m wide and around 160m high, was also rebuilt. Previously, after blasting, all the raw material from the various extraction levels was dropped by excavators to the primary crusher level at 290m above sea level, where it was transported by large wheel loaders to the 100m³ primary crusher feed. From 2021, a loading level was set up at 370m above sea level. Large excavators are now loading the debris still being

“High above the Danube lies the Loja quarry where the 60-ton Bell B60Es safely cope with gradients of up to 25%”



After blasting, the raw material from the upper extraction levels is dropped to the central loading level at 370m above sea level.

dropped from the upper berms (up to 470m above sea level) into large ADTs for transport to the primary crusher.

Long-standing partnership

Kiesel-Austria delivered the first two 90-ton Hitachi excavators to Persenbeug in 2017 and supported the conversion of the Loja transport chain in close co-operation with the mining experts at Kiesel's German headquarters. In 2021, a 90-tonne excavator was replaced by a Hitachi ZX890LCH-6, and in 2023, the responsible Kiesel branch in Vienna delivered a 70-ton Hitachi ZX670-LCH-5 as another key machine on the wall.

Last year, the supply partnership was extended to include large ADTs from Bell Equipment as a supplement and medium-term replacement for the two 6x6 sixty-ton ADTs previously used for production, overburden and return loading. "In fact, we no longer had to convince the decision-makers of the highly flexible concept of a large all-wheel articulated truck. We were able to concentrate fully on the advantages of the Bell B60E 4x4 as a real alternative in the 60-tonne range," says Walter Michels, Kiesel's ADT Product Manager.

Kiesel has already placed the Bell flagship several times in numerous quarries in Germany, Poland and Austria. Medium-sized companies with challenging topography or difficult weather conditions appreciate the high availability that the all-wheel drive two-axle Bell B60E 4x4 offers compared to conventional 4x2 rigid frame tippers. With a 35m³ rock bin, 55 tonne payload and 430kW engine power, it usually fits seamlessly into existing transport chains and ensures high traction and safe braking performance thanks to the highly efficient retarder function with oscillation joint, adaptive front suspension, and full-suspension rear axle.

In direct comparison to rigid trucks, the Bell B60E 4x4 consumes up to 20% less fuel, and performs well compared to the classic earthmoving ADTs, which often operate at their performance limits in hard rock: the only slightly higher consumption is directly offset by the substantial increase in payload – if several 6x6 40-ton trucks are replaced by one or two 60-ton ADTs, the operating costs are reduced many times over thanks to fewer drivers and less machine and tyre wear. This is also the case at the high-altitude Bernegger Schützenstein quarry near Spital am Pyhrn, where two Bell B60E 4x4s have replaced a fleet of four 40-ton trucks since the beginning of 2022.

Successful debut

"At Kiesel, we always work as a team, react very quickly to our customers' wishes and look for the best solution for our customers. This has paid off with Loja," explains Andreas Huber, Kiesel Austria's Sales Professional responsible for Hartsteinwerk Loja. Even before the two new Bell machines were delivered, a Bell B60E 4x4 from Spital had already made a "guest appearance" at the Loja hard rock quarry and impressed with several decisive details compared to the existing 6x6 ADTs. When it comes to excavator loading of the piles with a maximum size of approximately 1 200mm, the Bell rock bin with a flat body floor offers a better filling level than the long V-shaped earthmoving counterpart from the



Good filling rates in the coarse heap ensures high transport batches of the 4x4 ADT.



Perfect match: In just four to five loading cycles, the 85t Hitachi Excavator with its 6,6 m³ bucket loads the Bell B60E 4x4 and is supported by the real-time loading light on the cab roof.

competition. The Bell B60E 4x4 transports up to 1,5 tonnes more per cycle – and scores at the primary crusher with its smooth discharge and even filling of the feed hopper. When driving, the operator benefits from the greater manoeuvrability of the Bell two-axle truck, which is more than a metre shorter, and from the extensive standard driver assistance systems, such as the automatic speed limitation when driving downhill with a load.

After a detailed assessment of the up to 670m-long routes with gradients of up to 25%, Kiesel Service, in consultation with the Loja plant management, set the maximum downhill speed under load at 9km/h. The fully loaded ADT, which weighs a good 100 tonnes, now automatically maintains the specified limit via the retarder function (engine brake plus wet multi-disc brakes), allowing the driver to concentrate fully on the route.

Mid 2024, after six months of operation, with daily peaks of almost 2 000 tonnes per vehicle and an average consumption of 21 to 22L/h, Christian Häusler, Head of Technical Purchasing at Loja, was also satisfied. "From the award of the contract in 2023 to the handover, the process ran smoothly as usual, with comprehensive training for our staff. As an operator, we even see it as an advantage to be able to obtain support for our transport chain from a single source in the future."

Article published courtesy of Kiesel



The manoeuvrable all-wheel drive two-axle ADT masters tight bends on abrasive ground without high tyre wear on the twin-tyred rear axle.



The rock bin with flat outlet ensures fast and even feeding at the primary crusher.

Mukona Group customises Bell Tracked Carrier for geotechnical testing



Originally designed for the oil and gas industry in the United States of America, the Bell Tracked Carrier has since generated interest in the African drilling industry due to its ability to access remote, difficult to reach areas, and minimise environmental damage with its low ground pressure.

One such African company benefitting from the versatility of the Bell Tracked Carrier is the Mukona Group, an accredited Level 1 South African owned engineering company based in Midrand, Gauteng. The Group's geotechnical and geo-environmental division, Mukona In-Situ Testing, has customised a Bell TC7A Tracked Carrier to accommodate their Cone Penetration Testing (CPTu) equipment to enable them to test on remote mine sites.

Established in 2017, the Mukona Group has two additional divisions allowing them to provide a complementary and holistic offering to clients. Mukona Consulting Engineers provides civil, structural, and geotechnical services to contractors, private companies, public-sector clients and other engineering firms. Mukona Geotechnics provides specialised geotechnical construction services including site investigations, piling and lateral support to industrial customers and state owned companies (SOC) including the mining sector.

Mukona In-Situ Testing, established in partnership with UK-based In Situ Site Investigation, specialises in cone penetration testing (CPTu) techniques, electronic vane shear testing (eVST), seismic testing, Marchetti dillatometer, MOSTAP sampling, installation of vibrating wire piezometers, inclinometers, and pressuremeter testing to determine and characterise the in-situ properties of the soil. CPTu is used most frequently on mines to check the in-situ properties for stability analysis and design of geotechnical structures.

As part of its comprehensive geotechnical services, Mukona In-Situ Testing has various rigs, which vary from small, medium and heavy rigs capable of pushing up to 22 tons and carries out cone penetration testing, seismic Marchetti dilatometer testing (SDMT), Menard pressuremeter testing, and MOSTAP soil sampling.





Bell Tracked Carriers feature a unique balanced six-roller undercarriage with compound walking beams that provide an evenly spread footprint with optimal ground pressure contact and less track-point loading.

Solly Phalanndwa, a Professional Engineer and Managing Director of the Mukona Group, says: "We are committed to providing our clients with accurate and reliable data by combining the use of high quality, cutting-edge technologies and equipment with highly skilled and trained field staff. Quick response times and quality reporting ensures we meet our clients' unique project requirements."

Solly explains that Mukona In-Situ Testing has a 6x6 truck fitted with CPT equipment but finds its accessibility is limited. "We bought the Bell Tracked Carrier because of its easy access on mines. It appealed to us that the Tracked Carrier can navigate through swampy areas, go up almost every slope, and traverse deep sands."

This accessability is largely due to the Tracked Carrier's unique balanced six-roller undercarriage with compound walking beams that provide an evenly spread footprint with optimal ground pressure contact and less track-point loading.

The use of rubber tracks further supports the design by distributing the Tracked Carrier's weight over a larger area, reducing ground pressure and providing excellent traction in tough terrain. Rubber tracks also minimise vibration and noise for improved operator comfort and lower fatigue while their durability translates to reduced maintenance costs over time.

To make the Bell TC7A fit for purpose, Mukona customised their machine themselves by removing the bin and fitting their own CPT equipment. In addition, a seven-ton plate was fitted to increase the machine's weight for optimal pushing capacity during testing. Outriggers were installed to the front and back of the machine to lift and level the machine for testing, centralising the weight.

INTERESTING FEATURES OF BELL TRACKED CARRIERS

- **Bell Tracked Carriers are made from high-grade steel and utilise quality components, including the Cummins B6.7 Stage V engine, without exhaust gas recirculation (EGR).**
- Rexroth hydraulics provide optimised fuel consumption and performance while the hydrostatic transmission allows for economical use of engine power, eliminating the need for a clutch and gear controls.
- **An inclinometer accurately measures the pitch and roll of the vehicle. These inclinometer values are then used in software logic to assist with machine control.**
- Tracked Carriers feature a purpose-built ROPS and FOPS certified cab with excellent visibility and easy access that is packed with intelligent technology and operator-friendly features.
- **All service items are conveniently located at ground level in a single service hatch on the left-hand side of the machine, reducing downtime. The Bell Tracked Carrier also has rubbers in the bogie pivots for reduced greasing requirements and improved wear.**
- The Tracked Carriers are fitted with standard reverse cameras and have an automatic turbo spin down feature, which allows the engine to cool down properly after extended periods of high-load operation to protect the turbocharger from damage.
- **Bell Fleetm@tic® telematics software is offered as standard to monitor performance and provides machine hours, hours operated in a shift, average fuel consumption, fault codes, and a time bar report.**

Bell Graders: Impressing operators with precision performance

Production of the highly anticipated Bell Motor Grader range for Stage 3 developing markets, is currently on schedule in Q3 2025. Designed to meet the evolving needs of the industry, the new machines promise to deliver high productivity and precision accurate control with superior operator station ergonomics and visibility.



According to Bell Equipment Product Manager, Jeremiah Mokhomo, the company has drawn upon its 70 years of design and manufacturing experience and spent years of extensive research and development to ensure that Bell Graders are able to demonstrate their capabilities in a variety of demanding applications.

Highlighting the Grader's robust design and reliability, he says: "Grading applications demand a powerful and dependable machine that can consistently deliver precision and efficiency. Our new Bell Motor Graders have been rigorously tested to ensure they meet the highest industry expectations. We are confident that they will compare favourably with established industry leaders."

A versatile product for international markets

The Bell Motor Grader range consists of three base models each available in either a 4WD or 6WD configuration. The G140 is well suited to maintenance and light to medium construction tasks. The G160, with its increased power and performance, is designed to handle heavy construction applications, while the G200 is designed for bulk earthworks and the mining industry.

In addition to the three models, Bell has started production with the G140 Eco – the base spec unit for the G140 – which is well suited to public sector opportunities, lighter construction or agricultural applications.

Jeremiah explains: "From the outset, we factored in the requirements of a six-wheel drive configuration. This early integration, as opposed to trying to add it to the platform later, has resulted in a better-performing, more controllable, and robust machine that is easier to maintain. The significant improvement in performance achieved by adding front-wheel drive is only useful if it is reliable for the life of the grader, so we have invested time to make sure this is the case."



Bell Equipment's test and pre-production Graders have been operating with great success in a wide variety of applications from landscaping through heavy ripping and final levels to overall road construction.



The large operator cab is ROPS/FOPS certified for operator protection and provides unobstructed visibility and climate-controlled comfort.

Bell Motor Graders are powered by Cummins engines paired with ZF transmissions. The Bell G140 is fitted with a 6.7l Cummins engine and ZF ERGOPOWER transmission while the larger G160 and G200 are driven by a 9l Cummins engine with the ZF cPOWER transmission.

Jeremiah says: "The Cummins engines are known for their quiet operation, fuel efficiency, low maintenance, and reliability, and they met our expectations during testing. Additionally, these engines are Stage 3A certified, do not require exhaust gas recirculation (EGR), and are compatible with both hydrotreated vegetable oil (HVO) and B20 biodiesel. Stage 5 Graders will be launched in time and will meet the EU and USA emission regulations.

"The ERGOPOWER transmission is well respected in the grading application for entry-level units and we're particularly excited about the hydro-mechanical transmissions in the larger models, which are new for the industry and are performing exceptionally well for us in heavier duty applications.

> ***"The Bell Grader is a truly global product, engineered to meet different international emission standards and operator control preferences."***

"The staged global rollout will commence in Africa, South America and Southeast Asia followed by North America and Europe."

Built for the toughest challenges

Drawing on over two decades of experience in the supply, maintenance, and repair of motor graders, along with insights from industry experts, Bell Equipment has developed a clear view of what is important to make this product work. While retaining familiar controls and layouts, the Bell Motor Grader incorporates a range of advanced components and features that will help operators to improve productivity, accuracy, maintain costs, and deliver work efficiently.

As Bell has achieved success with its ability to intelligently automate specific functions within the ADT industry, automation also played a key role in the Motor Grader design process. This automation allows the operator to focus on precision grading while benefitting from improved fuel efficiency and extended component life.

Recognising the diverse range of applications and often





Jeremiah Mokhomo,
Product Marketing Manager

remote uses of motor graders, Bell has standardised on high-quality, low-maintenance components, such as a fully-sealed circle bearing. This allows extended service intervals and consistent grading performance without the need to make regular adjustments.

To further simplify operations, advanced diagnostics are incorporated into the machine to reduce the complexity of daily checks and servicing. Utilising industry-leading components for all systems has been instrumental in achieving an efficient and robust machine.

"Getting established components to work well together is what our system engineers do well, and in a highly operator-sensitive product like a motor grader, we knew that we had to get the overall feel 100% right."

Importantly, Bell Equipment's focus on durability across all structures ensures that the Bell Grader's gooseneck main frame – engineered as a single piece construction to eliminate fatigue on fabricated joints will give maximum confidence in hard applications. In addition, the tandem axle, with enhanced bearing life and interaxle cooling, provides reliable performance in long-haul applications.

Proven performance in real-world applications

Bell Equipment's test and pre-production demo graders have been operating with great success in a wide variety of applications, from landscaping, heavy ripping, and final levels to overall road construction. "It has been really pleasing to see the improvements in efficiency and performance identified during the design stage being confirmed on real-world job sites.

"We've been encouraged by the positive feedback we've received from expert advisers and operators who have experienced our pre-production machines. We're excited to introduce the Bell Motor Grader and illustrate some of the advances we've made to a complicated piece of equipment."



Smooth operators

Choose from – the G140 Eco, G140, G160 and G200 – there's a Bell Grader built for your site and application.



Each model delivers the power, precision, and comfort you expect from a premium grader, with local Bell support you can count on:

- G140 Eco: For government and general maintenance applications.
- G140: For maintenance and light to medium construction tasks.
- G160: Increased power and performance for heavy construction.
- G200: For bulk earthworks and mining applications.

The three larger models are available in 4WD or 6WD.

Contact your nearest Bell Dealer to find out more.



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Strong Reliable Machines
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Bell B30E 4x4 ADTs deliver significant advantages for Afrimat

Quarry owners and aggregate suppliers to the construction and road-building industries will tell you that producing these products at the lowest cost per tonne is non-negotiable.



Fleet Manager at Afrimat Lyttleton Dolomite, Jon Gunter.

The production cost is influenced by several factors such as the cost of load and haul equipment, fuel, personnel, maintenance, and the added fact that most quarries only operate in the daytime. When taking this into account, a haulage vehicle that can shorten cycle times, burn less fuel, and reduce wear on haul roads – all of which ultimately lead to increased production and bottom-line profit – sure sounds good.

Afrimat is a JSE-listed mid-tier mining and materials company known for consistently delivering exceptional results. The Afrimat Group comprises Construction Materials consisting of aggregates, concrete-based products, cement and fly-ash; Industrial Minerals consisting of limestone, dolomite and industrial sand, and Bulk Commodities, consisting of iron ore and anthracite. The Services segment consists of external logistical and mining services and the Future Materials and Metals division consists of phosphate, vermiculite and rare earths.

The group's mining and quarrying activities are carefully planned and monitored using a substantial fleet of yellow machinery to achieve sustained and profitable production. Adriaan Lategan is Afrimat's Physical Asset Management Lead for Mobile Equipment and an innovative thinker. He said: "During our 2023 budgetary planning, we knew we had to budget for a number of replacement haulage vehicles in the 30-ton class, which is the size of the articulated dump trucks (ADTs) we use a great deal in our quarrying operations," he says. "We have a well-established relationship with Bell Equipment and the company's proven Bell B30D and various sizes of E-series ADTs."



"We were, however, aware that Bell Equipment was supplying a B30E 4x4 ADT to the European market and this haul truck, with its two axles, intrigued us for a number of reasons," Adriaan adds. "We were fortunate to have use of one of these machines, that was destined for Europe, for a day or two in 2020 and it gave us several pointers that would later prove it would be the correct machine for many of our quarries in the future."

Adriaan mentions that due to the Bell B30E 4x4 having only two axles, its turning circle is much tighter than that of a six-wheeled machine. There is also less scuffing on the road, which augers well for longer tyre life and less wear on the haul roads.

"The operation at our Lyttleton quarry, located next to the Waterkloof Air Force Base, features a very long, but deep and narrow orebody, with many sharp turns on the haul roads. This caused considerable scuffing of the rear axles, particularly on the centre axle of our traditional six-wheeled Bell ADTs.

"Scuffing induces a lot of strain through the drivetrains, which we noticed when analysing their differential and final drive oils," he says.

In July 2023, Adriaan and his team ordered eight Bell B30E 4x4 ADTs with the assistance of Bell Equipment's Sales Representative, Sascha Caixeiro, all of which were delivered by the end of 2023. Four of the new Bell B30E 4x4 ADTs have been swapped with incumbent Bell B30E ADTs and moved to other operations. One was placed at Afrimat's Marble Hall Mine in Limpopo and the remaining three were delivered to an Afrimat quarry in Durbanville in the Western Cape where the loaded hauling also includes tight turns.

"Bell Equipment is currently the only OEM producing trucks that are Level 9-ready, meaning the vehicles can accept the installation of PDS (proximity detection systems) anti-collision systems without modifications, which is something the Department of Mineral Resources (DMR) is increasingly strict on," Adriaan adds. "We gain further reassurance from buying the



equipment with 36-month/6 000-hour warranties on the wet drivetrains."

"Since their arrival at the Afrimat Lyttleton Dolomite Quarry, these Bell B30E 4x4 ADTs have made an immediate impact on our production, especially in terms of shortening cycle times, although they carry the same loads as the 6x6 model ADTs, which is on average 28 tons," says Jon Gunter, Afrimat's Fleet Manager at the quarry. "Having a slightly shorter body length that is offset against the wider body of the bin, and no centre axle, these Bell B30E 4x4 ADTs are definitely negotiating the sharp turns in our quarry much better than their 6x6 three-axled predecessors and have comfortably shaved off one minute on a 10-minute cycle.

"One other important fact we noticed from the get-go was that the B30E 4x4 ADTs were also lighter on fuel which has a direct effect on a lower production cost per ton of any material they move," he adds. "Added benefits would be less scuffing on our haul roads and the trucks' tyres promising longer tyre life, even though the four tyres cost the same as a set of six on the Bell B30E 6x6 ADTs."

At the time of writing, Afrimat's four Bell B30E 4x4 ADTs working at Lyttleton Dolomite had clocked between 600 and 700 hours each which would see them totalling around 1 800 hours a year. "We deploy Bell Equipment's Fleetmatic® telematics, which gives us valuable production and technical feedback but even more valuable is the attention to detail and care we receive from Bell Equipment's Product Support Representative, Willy Winter," Jon says. "Willy calls on us regularly as a matter of routine and is never more than a phone call away. His advice and technical knowledge are only matched by the care he has lavished on our Bell machines, especially the new Bell B30E 4x4 ADTs." Adriaan has the last word when he says: "Bell Equipment's 4x4 technology across all its ADT sizes has been a revolution for us for all the reasons mentioned and then some."

Award-winning Scottish plant hire company invest in Bell ADTs

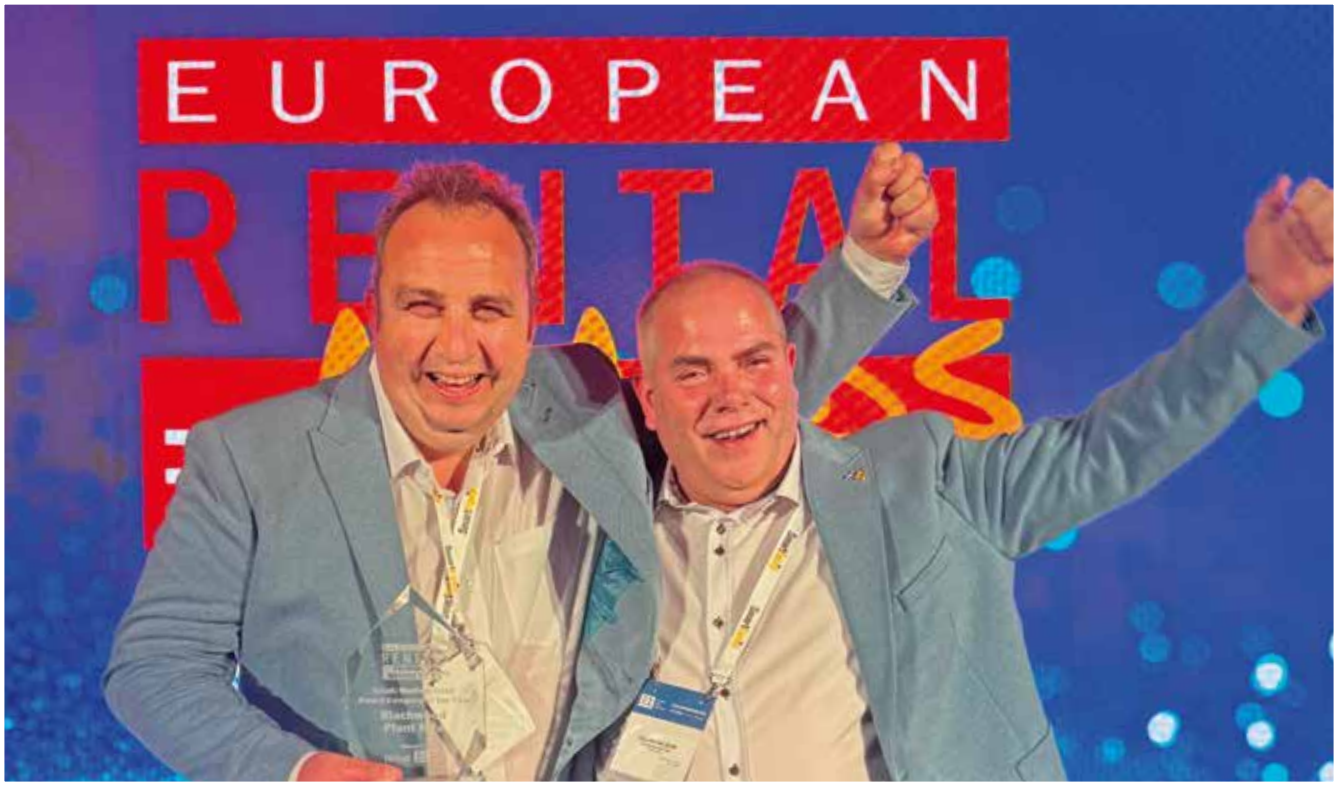
With twenty-five years in the plant hire industry, having started out as a machine operator, it is safe to say that Paul McCormack, managing director of Blackwood Plant Hire (BPH) in the United Kingdom, has a thorough understanding of every aspect of his business.

BPH was founded in 1960 by Tom Blackwood Snr, evolving from land drainage and agricultural work. In 2001 Tom Blackwood Jnr bought the company, which comprised two JCB 3CX Backhoes at the time, and set about expanding. Paul joined the company in 2008 as sales director and in 2017 he and Allan Wilson took over the reins as Managing Director and Operations Director respectively, following a management buyout.

Under their management, BPH has grown from strength to strength, winning the 'Best small & mid-sized rental company in Europe' category at the 2024 European Rental Awards. The judges commented that the company "could serve as a model for independent rental business, investing in a modern fleet, using technology to enhance safety, proactive on training, and innovative in its use of social media to deepen its connection to customers and the local community".

Paul believes the secret to their success is customer service – providing customers with modern, fuel-efficient machines, good operators, and offering a solid





Managing Director, Paul McCormack, and Operations Director, Allan Wilson, celebrate Blackwood Plant Hire's win at the 2024 European Rental Awards ceremony.

backup service. To improve response times to customers in Scotland, BPH has opened depots at Inverurie in the northeast and Nairn in the north of Scotland supported by its head office at Kilmarnock. This enables the company to offer its services 24/7, 365 days a year to its client base, which stretches from Southampton in the south of England to the Shetland Islands.

"Machine-wise everyone's got the same standard of equipment, but we make sure our machines are serviced, clean, and have the right operators working on them," says Paul. "A Bell ADT is about £250 000 plus, that's about the price of a nice Ferrari. You're not going to just let anyone drive your Ferrari and we don't just let anyone drive our machines."

BPH has 220 employees, of which 180 are operators. Finding good operators is an industry-wide challenge, and so the company started the Blackwood Training Academy in 2022. Six apprentices are enrolled each year, and the academy also upskills BPH's operators every week, updating them with the intelligence of the industry.

About 100 operators receive training per year, which is helping

to meet BPH's needs and provide skills to the industry in general.

The BPH fleet comprises over 350 machines, all under three years old, including an extensive and comprehensive range of excavators. There are also dozers, dual view dumpers, tracked dumpers, mini dumpers and rollers, telehandlers, road sweepers, low bed trucks, crushers and screeners, and a dozen Bell ADTs – six B20Es and six B30Es.

Bell ADTs were introduced in 2017. Although there were initial teething problems, Bell Equipment's old school way of doing business and the customer service provided by their Bell Regional Accounts Manager, Russell Conn, has made BPH a loyal customer.

Paul recalls their early experience: "We'd bought a couple of trucks and had some issues. I hadn't met Russell yet, but I mentioned the problems to him, and he immediately asked if we could meet at the Hillhead show to sort it out. At the show, he introduced me to someone from the factory. Since then, any issues we've had have been quickly addressed. The trucks are reliable, and Russell is great with customers, very attentive."

The B20Es are used for general construction, including residential developments. Bell B30Es were added to the fleet in 2022 following customer demand for a 30t truck for muck shift jobs. Since then, BPH's Bell ADTs have been used on a wide variety of projects from wind farms to muck shifting on Story Contracting's impressive 5 000t railway bridge at Ravenscraig in North Lanarkshire, Scotland in 2023, one of the largest bridge lift projects in Europe.

BPH's operators appreciate the great visibility and ease of use of the Bell ADTs. "It doesn't matter if it's a B20E or B30E, or a 2017 or a 2024 truck, the controls are the same. The guys love them, they don't have any issues or complaints."

While BPH doesn't use Bell Fleetm@tic® to its full potential, the ability to track machines and monitor machine hours is useful. The ADTs are hired on dry rates, and customers are happy that the trucks are light on fuel and have a mechanical availability of around 90%. In addition, the inherent Bell ADT safety features, such as the inclinometer which ensures safe tipping, are complemented with the addition of human form recognition cameras, which BPH fits to all cabbed machines. The cameras use artificial intelligence technology to detect people, and then alert both the driver and pedestrian, and record images and video.

BPH has owned over 20 Bell ADTS, all purchased with extended warranties of three years or 4 000 hours. The current fleet was expanded in 2025 with the addition of two B20E LGP models and four B30Es, with more trucks on order for 2026. Paul says: "We have looked at other manufacturers, but we feel the Bell's are a good, solid truck. They just go to work and do their job. It's a great brand and we don't see any reason to change."

Appreciative of their operational success, BPH believes in giving back to the industry that has shaped them. The construction sector in the UK faces significant challenges, including work-related accidents, illnesses, high levels of stress and depression, and an alarming rate of two suicides per day, due in part to industry volatility and the cost-of-living crisis. BPH's support of the Lighthouse charity, which offers mental health, physical, and financial assistance to construction workers and their families, demonstrates a commendable commitment to the well-being of the people who keep the industry going.







Less axles. More benefits.

Not every site needs a 6x6. So why run one when a Bell 4x4 ADT gets the job done smarter? By removing the middle axle, you eliminate tyre scuffing, reduce wear on tyres and road surfaces, and gain a tighter turning circle – perfect for confined spaces.

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Matla Sechaba's journey in load and haul with Bell ADTs



One woman is honouring the legacy jointly created by her late husband to make a success of a load and haul business in a challenging mining environment while harnessing the support of a benevolent mining client and a loyal local community near the mine.



Bell Equipment Sales Representative, Chris Botha, with the CEO and Owner of Matla Sechaba Holdings, Lucy Tau, and the company's Production Manager, Johannes Mmadi.

And providing the backbone of this business is a growing fleet of Bell B30E Articulated Dump Trucks (ADTs).

Lucy Tau met her husband, Mothupi, while they were both working for South Africa's state-owned tele-communications company in Pretoria. Both had tertiary qualifications but after some time working in a corporate environment, they felt the need for a new challenge that centred around being self-employed. Lucy holds a Bachelor's degree with a Psychology major, a post-graduate qualification in project management and an MBA specialising in leadership management.

> *We run two shifts of 10 hours each around the clock and ore is hauled over a distance of 3km while the distance to the waste dumps can be as much as 12km.*



"We obtained a franchise for a restaurant from a company operating across South Africa and opened a branch of it in Burgersdorp as Mothupi hails from the nearby village of Mashataung," Lucy tells us. "As the local community knew us, they supported us well, but after five years of counting every slice of bread Mothupi, who was running the restaurant while I remained in the corporate environment, had had enough."

Mines in South Africa are encouraged to support local communities by offering employment and making use of small and emerging contractors who operate in their areas and Two Rivers Platinum Mine, the large platinum mine close to Mashataung village was no different.

"We had heard through the local community that the mine was advertising contracts for load and haul contractors," Lucy explains. "We registered our company, Matla Sechaba Holdings, in 2016 and set out to explore these new possibilities in 2018. We engaged with an existing contractor who offered us a 30% portion of his contract on the mine while also giving us valuable mentorship as we knew very little of how such a contract worked and what was needed in terms of equipment, people, planning and working methods."

According to Lucy, Matla Sechaba means "power of the community" and they chose this name in honour of the support they had received from their local community.

Two Rivers Platinum Mine encouraged Mothupi and Lucy to approach South Africa's renowned Industrial Development Corporation (IDC) for assistance with financing of the yellow metal equipment they need to get started and recommended that they approach Bell Equipment as a proudly South African manufacturer of mining haulage equipment with regards to its legendary tough Articulated Dump Trucks (ADTs).

Here Chris Botha, one of Bell Equipment's top sales representatives based at the company's flagship branch at Jet Park in Boksburg, takes up the story. "I remember meeting Mothupi when he stopped by our branch in 2018 and was struck by his eagerness to learn as much as possible about our products and what their application should be," Chris recalls. "It was a privilege to be able to advise Mothupi after learning about his new company's role on the mine and I suggested that our Bell B30E ADT range of trucks would be the right size for the application."

With financing from the IDC in place at favourable rates, Matla Sechaba Holdings took delivery of two new Bell B30E ADTs in late 2018 and could start work as subcontractors.

By 2020, Matla Sechaba was still working as a subcontractor but now for a 50% share of the load and haul of both waste and ore run-of-mine material from the underground workings. This, however, meant that they needed to increase the size of their yellow machine fleet and they again approached Bell Equipment for two more Bell B30E ADTs.

"We were very pleased that with Bell Equipment backing us, we obtained financing through Wesbank and could take delivery of two new Bell B30E ADTs which made an immediate difference to our production," Lucy says. "We run two shifts of 10 hours each around the clock and ore is hauled over a distance of 3km while the distance to the waste dumps can be as much as 12km."

Matla Sechaba Holdings' Bell ADTs are used for an average of 225 to 250 hours a month and the first two ADTs have now done 16 535 and 16 041 hours respectively while the latter two from 2020, show 13 815 and 12 648 hours respectively. All the Bell ADTs have been bought with Bell Equipment Care Packages for up to 6 000 hours on the wet drivetrain and hydraulics and the most recent ADTs have an added Full Machine Cover (FMC) to 36 months or 6 000 hours. Fuel is supplied by the mine and although its consumption is monitored, the Bell B30Es' frugal use is well within the business plan.

Sadly in 2021, Mothupi passed away due to COVID-19 and Lucy resigned from her corporate role to manage the contract at the mine. "Mothupi had shared a great deal of information with me about what makes a mining contract work when we first started, but I've had to learn so much more in a short space of time and I'm fortunate to have a lot of support from my team, the mine, as well as the likes of Chris Botha from Bell Equipment," Lucy says. "Our Bell ADTs get serviced from Bell Equipment's branch in nearby Steelpoort but despite this, my point of entry into Bell is through Chris, who is always available to assist me with technical, accounting, and general enquiries. Chris has proved to be more than just a sales representative and I see him as a friend of mine and of my company as he and Bell Equipment really understand our business and the challenges we face."

> ***"Bell Equipment really understands our business and the challenges we face."***

By 2024, Matla Sechaba's role on the mine had changed as the company was offered a stand-alone contract that amounted to 50% of the load and haul of run-of-mine ore and waste material.

The mining industry in South Africa must be applauded for its initiatives in promoting small and emerging businesses to succeed and Two Rivers Platinum mine where Matla Sechaba Holdings works is no different. "I have the backing of our clients under a development plan for five years and with this assurance, we confidently ordered another Bell B30E ADT in 2024 as we really believe in this great product's design and build that helps us deliver a sustained service to our supportive clients," Lucy adds.

B60Es provide the most cost-effective mining solution for Afrimat

When Afrimat, a leading mid-tier mining and materials company, bought out the assets of the Nkomati Anthracite mine in 2019, the company did a critical evaluation of the mine's landscape and haulage vehicle requirements. Given prevailing underfoot conditions in both dry and wet weather, they decided to buy the largest Articulated Dump Truck (ADT on the market to fulfil their needs.





Adriaan Lategan, Afrimat's Physical Asset Management Lead.

The Group, known for its entrepreneurial drive, supplies industrial minerals and construction materials to a range of industries across southern Africa. In addition, Afrimat supplies bulk commodities such as iron ore and anthracite to local and international markets. During the last year, Afrimat also started supplying phosphates to the agriculture sector. As of 2023, it is listed in the 'General mining' sector of the JSE Main Board, having been previously listed in the 'Construction & Materials' sector since 2006.

It is about the Group's anthracite commodity and the haulage vehicles that move it, that we chat with Adriaan Lategan, Afrimat's Physical Asset Management Lead. "Since buying the Nkomati Anthracite mine, which lies between Komatipoort and the Eswatini border in Mpumalanga, we've had several challenges to overcome," he says. "One was the flooding of our main pit in 2021 due to heavy rain, which took eight months to dry and become productive again. This prompted us to start looking at developing further pits as production areas."

Adriaan mentions that instead of asking their current mining contractor to increase his fleet size, which would have meant increased production costs, Afrimat, after careful and critical analysis of the haul distances and underfoot conditions amongst other factors, decided to rather deploy its own fleet of haulage trucks for this purpose.

"As we usually do, we researched the wider earthmoving equipment market and did some testing of various haulage vehicles at our Jenkins iron ore mine in the Northern Cape," Adriaan explains.

"Here we saw first-hand how Bell B60E ADTs came out tops in terms of production and fuel consumption, which convinced us that the Bell B60E ADT would be the ideal haulage vehicle for the planned expansion at the Nkomati Anthracite mine."

Afrimat placed its order for four Bell B60E ADTs in the second quarter of 2022 and the machines were delivered in January 2023. They are matched with a 120-ton excavator loading with a seven-cubic metre bucket. Creating the new pit means stripping off the topsoil, which is stockpiled for use in later rehabilitation. Then the overburden is removed and this, according to Adriaan, when dry, has a relatively low specific gravity, which means that the operator in the cab of the Bell B60E ADT can sit and watch his onboard load indicator steadily climb as more material is added to the large bin with its heaped 35 cubic-metre design capacity. This optimises the loads on the average 1km haul to the waste dump.

"I should just mention that another important reason for us buying Bell ADTs stems from the long and solid business relationship we have with Bell Equipment," Adriaan explains. "We believe on the sales side to trust a single point of entry which we have with the company's Sales Representative, Sascha Caixeiro.

On the maintenance and repair side, we will approach whichever Bell branch is closest to an operational site and introduce ourselves to the branch and workshop manager, so creating a relationship where everyone knows what we expect and we get to know the Bell managerial, technical and support staff, which is always a pleasant experience."

Adriaan mentions that they did the same when their Bell B60E ADTs were delivered to the Nkomati Anthracite mine. He approached Brett Peddie, the Bell Equipment Customer Service Centre Manager at the Nelspruit branch from where the machines would be supported.



"We were impressed that Adriaan and his Afrimat colleagues took the trouble to visit us personally to clarify how they would prefer having their Bell B60E ADTs serviced," says Brett. "This gave us an opportunity to introduce our support staff to them as new customers and so establish open lines of communication."

Afrimat's new Bell B60E ADTs have been bought with extended warranties that are backed with a 12 000-hour Bell Care Package. "As we don't yet have our own mechanics on the mine, we thought it imperative to rely on Bell Equipment's technical staff to be totally in control when it came to maintenance and repair of this fleet, as small as it may seem," Adriaan says. "These four Bell B60E ADTs form such an important part of our operation that we'd like to minimise downtime due to servicing and repair when needed by using the best skilled mechanics, and where better to find them than from the original supplier of the equipment."

Afrimat has found good use for the full Fleetmatic® package which provides comprehensive feedback on machine performance.

"This care by skilled mechanics is already paying off because once small initial technical hitches were ironed out, the Bell B60E ADTs are achieving the budgeted 400 hours per month and doing that with very frugal fuel burn," Adriaan adds. "Currently the units are running with their full loads and returning average fuel figures of below 20 litres an hour. This has surprised and impressed us all, although it is expected to increase a bit as the haul conditions will change due to inclines getting steeper. With new equipment being hard to find due to most OEMs having long lead times, using a contractor may be the more convenient option currently," Adriaan states. "However, we have found that in the long term, using one's own equipment is the more cost-effective way of mining and buying these Bell B60E ADTs is proving that point on all fronts."



Stefanutti Stocks employs Bell B30E fleet on massive tailings dam project

The inside grassed area of an athletics track is roughly one hectare in size. Nine hundred such areas stitched together would give you the approximate surface area of what will be the largest plastic-lined tailings depository in the world, which a South African construction company is building with mostly homegrown haulage vehicles.





(From left): Nigel Ramiah (Stefanutti Stocks Group Plant Director), Hannes Scheepers (Stefanutti Stocks Production Manager), Craig Bowles (Stefanutti Stocks Contracts Director), Chris Botha (Bell Equipment Sales Representative), and Rulof Nortjè (Stefanutti Stocks Construction Manager).

A tailings depository, known in the vernacular as a mine dump, is an active dam where the materials left over from the processing of mined ore are stored. These materials can contain ground rock, unrecoverable and uneconomic metals, chemicals, organic matter and effluent from the process used to extract the desired products from the ore.

With strict new environmental regulations in place, a new facility such as this has to be lined with a plastic material to stop seepage of the effluent into the groundwater and to date, this will make it the largest lined depository of its kind in the world. This facility for the tailings of a gold mining company, is being built by Stefanutti Stocks and is situated near Fochville on Gauteng's western border with the North West Province.

Nigel Ramiah, Stefanutti Stocks' Group Plant Director, tells us more about this mammoth project. "To fully grasp the enormity of this project, one needs to look at the numbers, which in themselves are daunting," he says when we meet on the site of the project, which bears the remains of the last maize crop. "We need to dig down into the earth to create a box-cut and from this we'll move 10 million cubic metres of soil that will be broken up into 6,5 million cubic metres of fill material, 1,5 million cubic metres of cut material with 2 million cubic metres of topsoil that will first be stripped off and stockpiled for later use.

"To do this, we'll need at least 65 articulated dump trucks (ADTs) and, as we don't own that many ourselves, we'll be hiring in a substantial number. What we do have though is a new fleet of Bell B30E ADTs that we started compiling in late 2023 while tasked with a project on a platinum mine in Limpopo. The initial six Bell B30E ADTs have now grown to number 24 with eight machines delivered during July 2024 and another 10 in August 2024," he says. "We chose the Bell B30E ADT as it's a proven and reliable ADT designed and built for South African conditions. Bell Equipment's large footprint ensures we can rely on the company's technical back-up wherever we work across Southern Africa."

We wanted to know why his company did not consider larger ADTs such as the Bell B40E or B50E models to which Nigel replied that Stefanutti Stocks is essentially a construction company. To buy such larger ADTs would see the company move into the mining space, which would not be ideal as the new fleet of Bell B30E ADTs will still be utilised for future construction projects beyond the three-year contract period of the present tailings dam project.

"When deciding on an ADT model, we contacted Chris Botha, Bell Equipment's experienced sales representative who has been our solid link to the company for many years now. We believe in standardising on one model, in this case the Bell B30E



ADT, which makes the maintenance of such a fleet that much simpler in terms of ordering parts and having our own maintenance staff being familiar with the brand and model," he adds. "We've been very pleased with the performance of our Bell B30E ADTs as the even torque distribution across the three axles delivers enough power under big loads and this further extends tyre life as there is little or no scuffing on the centre axle's tyres.

"We're also confident that when the spring and summer rains arrive, our Bell ADTs will perform well in the wet thanks to their all-wheel drive traction."

Current operations see the project teams working six days a week and haul distances for the Bell B30E ADTs vary between 700m and 3km, depending on what material is being moved. The Bell ADTs are loaded by 36-ton excavators and each ADT will carry between five and six loads per hour, which translates into 1 000m³ or 1 600 tonnes per shift. The soil conditions are generally soft with some ferrocrete, but no blasting is required for the excavations.

The tailings depository has been designed with earthen walls which will be 100m wide at the base with an initial height of 10m. As deposits continue over time, the walls are raised by mining contractors responsible for the tailings management. The Bell B30E ADTs have been bought with extended warranties covering the wet drivetrain and hydraulics to 6 000 hours or 36 months, which also includes a Bell Care Package for the same period. During the warranty period, all servicing and repairs are done by personnel from Bell Equipment's largest branch at Jet Park in Boksburg.

"We're running on wet rates meaning we supply the diesel ourselves, so the Bell B30E ADTs' fuel consumption is important to us," Nigel continues. "The average fuel consumption that we're able to get from Bell Equipment's Fleetm@tic® telematics shows 12,9 litres per hour and, coupled to general mechanical availabilities of 91% across the fleet, we're confident that our choice of ADT for this and other projects has been correct."

Stefanutti Stocks is very aware of its social responsibilities as it adheres to localised job creation by sourcing the bulk of its ADT drivers and machine operators from communities close to the project site. Training is also given which upskills the community for when the project ends.

Products from Bell Equipment enjoy a major presence on the site with a wide range of ADT models spanning 18-ton, 25-ton and 30-ton dotting the landscape in addition to Bell B2306D and B2806D Articulated Haulers and an assortment of Bell Water Tankers.



Bell ADTs at BAUMA 2025 Always in a class of their own!

Twenty-one years after the world's first 50-ton articulated dump truck (ADT) debuted at the same venue, Bell Equipment once again proudly showcased its flagship 6x6 model, the Bell B50E, at BAUMA. Demonstrating its capabilities, it was joined by the 20-ton Bell B20E LGP, which, at the opposite end of the size scale, reaffirmed the Bell E-series as the largest and most comprehensive ADT range on the global market.

The legend lives on

Bell Equipment Product Manager, Brad Castle, says: "Our 50-tonner concept is a great example of our company's passion for innovation and ability to respond to customer needs. The development of the B50D, in the early 2000s, was driven largely by increased operating costs in the market and, having the largest payload of any ADT on the market at that time gave customers a unique solution: being able to transport a higher payload for marginally more fuel and with less operators required per ton of material moved. The reasoning behind the concept remains as valid today, and the B50E has really come of age as a high performing product, showing pleasing product maturity and longevity."

When the B50D was released for worldwide sale at BAUMA 2004, it set a new benchmark with its industry-leading power and power-to-weight ratio. It also introduced the best standard features on the market, including onboard weighing and Bell's proprietary telematics system, Fleetm@tic®.

"The new E-series generation model, introduced to the market in 2016, has continued to build on these strengths through Bell Equipment's continuous evolution philosophy," says Brad. This starts with the engine power and the power-to-weight ratio of the vehicle, which weighs around 35,9t empty with a payload of 45,4t. The



A payload of 45.4 tons makes the Bell B50E a highly productive earthmoving solution.



In the quarry, the Bell B50E's 27.5 m³ bin is compatible with common loading equipment.

B50E's in-line six-cylinder engine from Mercedes-Benz develops 430 kW at 1600 rpm. With 5,29 kW/t unladen and 11,98 kW/t laden, these are class-leading figures, which translate into superior driving performance.

"The Alison 4800 ORS seven-speed automatic transmission with self-calibrating FuelSense® 2.0 technology uses algorithms to adapt variable shift points to the route and load profile. This supports optimum power delivery and low fuel consumption even under full load," he adds.

In terms of standard features, the list has grown to include the adaptive Comfort Ride front suspension. Based on real-time data collected by the standard on-board scales and other sensors, the electronically controlled struts automatically adjust the spring characteristics and body level to the current payload and driving situation to enhance ride comfort and significantly reduce typical workplace stresses.

"The B50E, like the rest of the range, is loaded with safety and driving assistance features such as Hill Assist, Tip Safe, downhill braking control, and automatic traction control. We also have auto grease systems, rearview camera, onboard diagnostics, and Bell Fleetmatic®, which itself has evolved to provide pole-to-pole coverage and real-time tracking, giving customers the ultimate tool for asset, production, and machine health management."

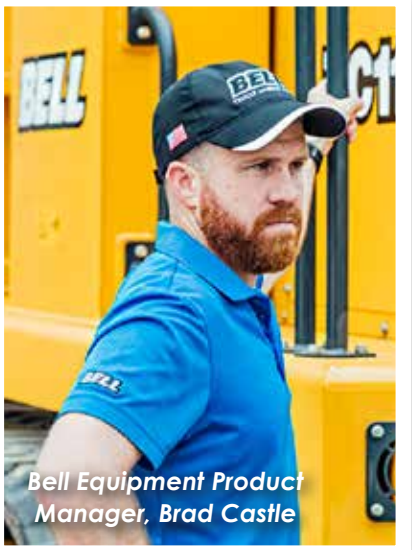
Integration with ease

Most progressive is the E-series technology platform whereby all Bell E-series ADTs are now built PDS/CAS-ready, i.e. they have a corresponding gateway interface (ISO 21815-2) for level 9 pedestrian detection system (PDS) / collision avoidance systems (CAS).

Bell Equipment also advocates direct communication between specialist suppliers and end customers when it comes to the topical issue of autonomous driving. "There is already a wide range of systems available that are best suited to individual regions, company sizes or operational requirements. As a machine supplier, we see it as our responsibility to give our customers the greatest possible freedom. We have been working intensively with a wide range of suppliers for many years, which now enables us to integrate our vehicles very quickly into fully or semi-autonomous or even remote systems via the appropriate interfaces," says Brad, explaining Bell's strateg and inviting interested customers to an intensive exchange of information at the forthcoming BAUMA.



The clear, ergonomically designed cab contributes to the high productivity of the fifty-ton truck.



Bell Equipment Product Manager, Brad Castle

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Master Drilling customises ADT as a drill rig carrier



In much the same vein as Bell Equipment establishing itself globally as an innovative company that custom designs mechanical products to meet customer needs, a fellow South African company, Master Drilling, has established itself as one of the largest rock boring and drilling services providers in the world.

With its head office in Fochville, in the North West Province, Master Drilling operates all over Africa and South America and has a presence in the US, Canada, Australia, India, Turkey, China, Russia and France. The company, founded in South Africa in 1986, is focused on delivering a fully mechanised range of services to the mining, infrastructure, and energy sectors.

"Master Drilling is known for its innovative approach in tailor-made designs coupled with cutting-edge technology to provide solutions to the challenging environment it often finds itself working in," says Gerhard Pretorius, Manager: Master Drilling Project Office. "It was with one such challenge that we, in 2019, started work on a concept of a mobile drill rig capable of carrying interchangeable tools to work underground."

The basic concept was that Master Drilling would mount a drill rig capable of drilling holes of between 660mm to 760mm in diameter, vertically upwards and at various variations up to 15 degrees forwards, backwards, and laterally with a technique called slot boring.

With a different interchangeable tool, holes of the same size could be drilled downwards using down-reaming. "As this was to be a custom-built rig for our own use, we were governed by strict cost structures and had to find a carrier vehicle of good quality, which was reasonably priced, to provide a robust and sustained service in an underground working environment," he adds. "The risk of its design and build was entirely on our shoulders and that's why the choice of the correct carrier vehicle was so important."

Gerhard says that they approached Bell Equipment because it was a local company known for the robust design and build of its Articulated Dump Trucks (ADTs).



They approached Bell Equipment's Sales Representative, Chris Botha, who directed them to David Ras, Bell Equipment's Manager: Mining & Construction Specials. "Our initial thought was to mount the drill rig on a Bell ADT chassis called a 'dock-spotter', a specially adapted 'binless' version of an ADT that was designed to work on harbour quays in Europe," Gerhard explains. "While this ADT's availability worked in our favour, we had to watch our costs and sadly had to make alternative arrangements to source a used machine. We are, however, grateful for the insight and advice we received from Dawid Ras and his team at the Bell factory in Richards Bay."

Master Drilling used a pre-owned Bell B30E ADT from Europe that had done 8 300 hours and was imported and brought to the Master Drilling project yard in Fochville. The machine's higher-tiered engine made it suitable for use in the Northern Hemisphere, but the lower emissions of a higher tiered engine also makes it ideal for underground conditions.

Andre da Silva, a junior mechanical engineer with Master Drilling, takes up the story: "We removed the Bell B30E ADT's bin and lengthened the chassis to enable us to fit on all our equipment. We then adapted the cab to have the seat rotate through 180 degrees to enable the operator to face backwards. This we did without affecting the ROPS-FOPS integrity of the cab."

Touch screens were installed at the back of the cab for the operator to use when facing backwards for total control over the drilling process. "Some of the other visible modifications we made involved changing the prop-shaft but retaining the Bell B30E ADT's 6x6 capability. We then replaced the hydraulic fluid tank with a cyclone reservoir as it was originally intended to serve the bin tipping but, with the bin removed, it was no longer necessary. We also modified the exhaust system to exit in the right front wheel arch and repositioned the catalytic converter."

Other add-ons see the Bell B30E now carrying universal hydraulic and electrical packs for different applications, which will make it even more versatile. "We're also looking to lower the Bell B30E carrier to enable it to fit into general mining haulages and we're considering a lower profile tyre to do this," Gerhard adds. "An important factor to consider, though, is that as we deliver a service and not equipment as such, the development of this rig was successful in that we could do it within tight budget constraints. We're confident that our choice of a Bell B30E ADT chassis as a carrier was the correct one."

Both Gerhard and Andre report that simulation tests, where holes were drilled in granite blocks suspended in a steel rig using slot boring, proved successful but as with any prototype machine, especially those destined for the harsh world of underground mining, testing to the utmost continues.



Bell fleet helps new mining contractor find its feet



When the COVID-19 pandemic all but shut down the world as we knew it, there was a lot of talk of small businesses, especially restaurants and 'mom and pop' stores having to close. The same applied to performing artists who suddenly had no audiences.

But one should also spare a thought for the likes of self-employed engineers who, as professional people, suddenly couldn't rely on new contracts being issued and saw a dramatic drying up of income beyond their control.

Two such engineers are Amos and Karabo Manaka. Karabo, an electronics engineer, and her husband Amos, an industrial engineer with a postgraduate qualification in civil engineering, had worked for major petroleum energy, and mining companies in planning, coal handling, and water purification. Their varied portfolio under their trading name of Equinox Engineering Solutions even includes paving and sidewalks in the City of Tshwane.

"We sat isolated at home and tossed around ideas of how to make a living in the future when the idea of contract mining arose," Karabo says. "With no new contracts being issued by our existing clients we were looking for alternatives which we needed rather urgently.

"There had been talk of a large platinum mine in the North West Province issuing



Equinox Engineering Solutions COO, Amos Manaka, with the company's CEO, Karabo Manaka, and Bell Equipment Sales Representative, Enock Mabaso.

contracts to emerging contractors for drilling, loading, and hauling of platinum ore and, although this was a totally foreign field to us, we thought that with our backgrounds we could learn to understand this industry and make a go of it," Amos says. "We therefore tendered on the load and haul segment of the contract thinking that we'd be able to raise finance and buy loading and haulage equipment on the used market to make a start."

Raising finance turned out to be far more challenging than the Manaka couple had hoped it would be and they were sent from pillar to post without so much as a cent or favourable interest rate being offered. And without finance, they could not begin to look at loading and haulage equipment, even on the used market.

But help was at hand as Karabo explains: "We had, through a mutual friend from our church, met Bruce Ndlela of Bell Equipment, and with Bruce's easy and affable manner, we felt comfortable to think that we could establish and develop a business relationship with Bell Equipment where Bruce had the title of Director: Business and Public Sector Development."

"We subsequently also met Bell Sales Representative, Enock Mabaso, and immediately got the feeling that Bruce, Enock and their colleagues at Bell Equipment were not only listening to us but also fully appreciated our position, which other suppliers had not done," Amos adds.

Here Bruce Ndlela takes up the story. "I met Amos and Karabo Manaka of Equinox Engineering Solutions and, after listening to their business plan and the difficulties they had encountered with both equipment and financial services suppliers in the industry, immediately requested that given the long lead-time on machines, we sign an official purchase order for four new B45E Articulated Dump Trucks and a new Kobelco SK850LC-8 Excavator. To secure the order we installed an equal number of used units as we do with many customers to assist them in getting their contracts off the ground and generating cash flow which would in time create a win-win situation. This is done on a rental basis with an option to purchase that equipment (ROP)."

Bruce adds that having won the one load and haul tender at the particular platinum mine, Equinox Engineering Solutions along with another company, became a preferred supplier to the mine and could rely on one of two five-year contracts.

"We, as Bell Equipment, interacted with the mine as well and laid the foundation for Equinox Engineering Solutions to get started in a challenging but exciting new field. We recognised that as engineers Amos and Karabo are clear thinkers and solutions-driven professionals."

"We were happy to take delivery of the first used equipment in November 2022 when three Bell B40D Articulated Dump Trucks arrived along with the Kobelco SK850LC-8 Excavator," Amos says. "Then in the following month, we took delivery of two further used Bell ADTs, a B40E and B45E model, both of which have boosted our production.

"The Kobelco SK850LC-8 Excavator had clocked some 8 200 hours and the Bell B40D ADTs had done between 11 000 and 30 000 hours and this is a testament to Bell Equipment's legendary solid design and build to see that despite these high hours these Bell B40D ADTs still get the job done daily."

The rental package also includes a Bell Care Package that sees Bell mechanics from the Rustenburg branch attending to services every 500 hours and repairs when needed. According to the contract with the platinum mine, Equinox Engineering Solutions has been tasked with a monthly target of moving 250 000 bank cubic metres (bcm) of overburden to a stockpile. To do this efficiently they had to appoint three teams of operators who all came from a village near to the mine.
"The applicants were all keen to learn and we were fortunate to be able to give them top-class training with the assistance of Bell Equipment Trainer, Temba Lucky," Karabo says. "Temba took his time while training the operators thoroughly and with his help, and that of the mine, the six months it took to train these operators properly is now paying off handsomely."

Karabo stresses that while operating a piece of mining equipment is merely the start, doing it safely during every hour of every shift is what counts, especially in a mine where there are many potential hazards.
"We're slowly ramping up to meet our monthly target and we believe that once we've concluded negotiations with lenders to fund the four new Bell B45E ADTs along with the equally new Kobelco SK850LC-8 Excavator, we'll be a competitive and productive unit,"



Amos says: "We're eternally grateful to Bell Equipment for reaching out to us and assisting us in a steep learning curve of this contract mining industry along with its pitfalls, challenges, and rewards." Amos adds that they appreciate the support they've had from their clients at the mine who realise contractors can only commit to capital expenditure having a five-year contract in hand. The mine also assists them with access to a grader and a water bowser to maintain the haul roads that fall in their operational area.

Sales Representative, Enock Mabaso, has the last word when he says: "We started with Equinox Engineering Solutions from the ground up and we're positive that as our customers, their experience of Bell Equipment is that we strive to create a family-like atmosphere with our customers much the same as Bell Equipment started as a family-run business."



Production Foreman Dingaan Rampete, Site Manager Grant Luck, Production Foreman Patrick Diswai, Safety Officer Arnold Mogwe, and COO Amos Manaka.

Bell B30E impresses Mission Point in sand mining operation

Imagine an articulated dump truck (ADT) hauling clean river sand for twelve hours a day and twenty-six days a month, giving its owners a twenty-seven percent increase in production while saving a massive fifty percent on fuel costs.



Esté Muller (left) with Bell Sales Representative, Chris Botha.

If that sounds far-fetched, you'd better believe it as it's a scenario that plays out daily on a sand producer's site close to the Vaal River on the border of Sasolburg in the Free State and Gauteng's Vanderbijlpark.

Mission Point Mining is the name of the sand mine established by a quirk of fate. The late Hennie Pretorius, a dynamic entrepreneur, had founded a company that manufactured tile adhesives, grouting, and primers, aptly called Stick-a-Tile. He also ran a subsidiary company called Cleveland Silica, which provided dried sand for the manufacture of tile adhesives, construction chemicals, and foundry industries.

"In 2012, our late dad felt the need for better quality sand, not only for our own use in the drying of sand, but to also supply the local construction industry with building sand as well as sifted and unsifted plaster sand," says Esté Muller. Esté and her brother, Johann Pretorius, now manage the three businesses under the umbrella name of the SAT Group. Mission Point Mining also has a workers' trust with Simon Mohapi representing the company's employees, who all benefit directly.

"Our sand mine, named Mission Point Mining, is situated near the banks of the Taaibosch Spruit, a tributary of the nearby Vaal River, and we mine the sand under strict environmental controls. We stockpile the topsoil, which is returned when we rehabilitate the blocks where mining is complete," Esté explains. "As we don't have our own distribution fleet, outside companies fetch the sand, which is distributed in a radius of up to 150km."

Mission Point Mining does, however, have a fleet of yellow machines and screens used to produce the various types of sand. Excavators in the 30- and 40-ton classes mine the sand once the topsoil has been removed and stockpiled, and load it into ADTs for the 2km haul to the stockpiles from where it is screened.


B30E
BELL

"You'd appreciate that our profit would lie in producing sand at the lowest cost per ton and with the current price of diesel coupled with some aging haulage equipment costing us money to maintain, we were staring down the literal barrel of rising costs affecting our bottom line," Esté says. "During the second half of 2023, we realised we would need to replace an ADT, and we spoke to Bell Equipment's Chris Botha who had been diligently calling on us for the past seven years.

"Chris knew that our present haulage fleet consisted of 30- and 40-ton ADTs. With his product knowledge, he suggested we look at a Bell B30E ADT fitted with 200mm greedy boards to ensure a decent heaped load in the bin," Esté adds. "I should admit that we were hesitant at first as this was a big capital equipment commitment but the factor that won us over was what Chris told us about the Bell B30E ADT's proven fuel consumption and this has not disappointed."

Mission Point Mining took delivery of a new Bell B30E ADT in November 2023 and, at the time of writing, this new haul vehicle had completed almost 700 hours of service.

"This Bell B30E ADT's all-round performance has been nothing short of amazing as its frugal fuel consumption is such that we're saving at least 10 litres an hour, which with present usage translates into a saving worth around R63 000 per month," Esté says smiling. "Then too, with the 200mm greedy boards in place, we're getting 27% more in production with the big, heaped loads in the bin and these factors combined, lower our production costs per ton.

"Our business is driven largely by the volumes of material that we sell and fortunately Chris and Bell Equipment understand and appreciate these factors. We're already talking to Chris about fitting future similar-sized ADTs with bin heating to negate the carry-back of wet material stuck in the bin.

"On this performance and amazing fuel burn, the Bell B30E ADT certainly sells itself and we'd be pleased to swap out our entire fleet of ADTs to the Bell brand in time."

Mission Point Mining further benefits from Bell Equipment's Classic Fleetmatic® telematics package, which gives vital information on tons moved, machine performance, and operator behaviour.

The SAT Group had previously bought a three-wheeled Bell 220A Forklift to handle bulk-bags at its Cleveland Silica operation.



CSV Construction celebrates 30th anniversary with new Bell B30E machines

Civil engineering companies are dependent on yellow machine fleets but wait for triggers in the form of sustainable contracts that justify the acquisition of new equipment. These are the thoughts of a managing director of one of the big five civil construction companies operating predominantly in the Western Cape Province of South Africa.



Bell Sales Representative, Fiona Johnson, with MD of CSV Construction, Alex von Klopmann.

Established in 1994 by John Cullum, Johan Scriven, and Alex von Klopmann, CSV Construction started operating from small premises in Ceres. The three partners had derived their company's name from the first letters of their surnames.

Celebrating 30 years in business, CSV Construction has grown to be one of the largest diversified civil engineering companies in the Western Cape, which is a tribute to the tenacity of its founders and the continued quality of the company's work.

Alex von Klopmann, his fellow directors and management team attribute the company's success to their focus on training. In addition to upskilling their own people, they go a step further by assisting promising Grade 11 and 12 learners at selected schools. They founded the CSV Academy in 2015 and Human Resources Officer, Charmaine Duke, leads the initiative.

In 2024, the Academy partnered with Kayamandi Secondary in Stellenbosch, Zandvliet High in Macassar, and Hottentots Holland High in Somerset West. Twenty-four students received specialised math and science tutoring during afternoon and evening classes and after matriculating they will pass through a training facility where they will be considered for bursaries or

trade training. “This, we believe, will allow us to leave a lasting legacy as a company and make a real difference,” says Alex.

This commitment to nurturing future talent reflects CSV Construction’s own journey. From humble beginnings where each partner worked with a bakkie and five labourers, CSV Construction now employs over 700 people.

“Since the world economic downturn in 2008/2009 and the recovery since then, we’ve shown rapid growth and our portfolio of successfully completed projects grows every year. We’re proud to say that as a company we’ve evolved from a construction company to one that is known for executing specialised civil engineering projects, and we are always challenging ourselves.”

CSV Construction’s impressive portfolio includes retail outlets, office parks, warehousing, wine cellars, township developments and student accommodation.

“It’s exciting and challenging to now work in renewable energy and provide structures for solar and wind turbine complexes,” Alex adds. “We’re also seen as the ‘go-to-company’ when it comes to large-scale water management and all its related challenges along with micro-tunnelling, for which we’ve imported specialised tunnel-boring machines from Europe.”

Despite an influx of work in the company’s order book, Alex and his fellow directors are conservative when it comes to investing in new earthmoving equipment. “Yes, we have enjoyed the ramp-up in construction activity in recent years, but it’s still vitally important to manage the peaks and troughs of the business cycle by applying cash flow gearing and not overcapitilising on equipment purchases,” he cautions. “We firmly believe in analysing the triggers that indicate when the time is right to invest in equipment as those have proved accurate indicators over the years.”

One such trigger was a contract to upgrade the passage and direction of the Sir Lowry’s Pass River. This seemingly gentle flowing stream that runs across a potential flood plain in Gordon’s Bay can turn into a raging torrent when enough water enters it from the heights of the Hottentot Hollands mountain range that the famous Sir Lowry’s Pass transcends.



"With our company and its engineers recognised as specialists in working with water, our task is to reshape the river, reinforce its banks, and incorporate many changes to make the flow of the river more user-friendly for the proposed housing, which is said to be developed on both the eastern and western sides," Alex explains.

The extensive upgrades include berm construction, grade levelling, and rectification of the Sir Lowry's Pass River's alignment between the N2 in the north and False Bay (Indian Ocean). This will create land for development and drastically reduce the flooding risk.

The upgrade further includes the construction of bridges, erosion control measures like riprap, gabions, berms, and small concrete structures, the creation of non-motorised transport facility pathways, service provision, landscaping and the demolition of various walls and structures.

"When we analysed what we'd need in terms of loading and haulage equipment for this challenging project, we realised that two additional 30-ton articulated dump trucks (ADTs) and one large excavator would fit the bill," Alex says. "With the project due to run for at least 40 months, it justified the purchases as we generally finance our yellow metal equipment over 36 months."

CSV has a long and solid relationship with Bell Equipment and their Bell Sales Representative, Fiona Johnson, had sent CSV a list of equipment that was considered essential to this project with Bell B30E ADTs heading the list.

CSV took delivery of two Bell B30E ADTs in April 2024. One is deployed on the river site and the other at a quarry from where the rock fill and aggregate material is supplied some 15km away. Although these are not seen as production machines, as one would have in mining, CSV is pleased with their average fuel consumption, which is monitored.

While under warranty all servicing will be done by Bell Equipment Cape Town technicians. CSV Construction employs a plant manager, a workshop manager, and seven mechanics, who all assist the machine operators and ADT drivers to keep their pre-shift checks up to date and do preventative maintenance.

These regimes have evolved over time as CSV Construction's own fleet of vehicles and machines numbers more than 100. "Much as we believe in building long and lasting relationships with our clients, so we believe in building long and lasting relationships with our suppliers and Bell Equipment has for a long time been part of our business," Alex says smiling.



Age is just a number for AJVW Diamante's legendary Bell fleet



When Dries van Wyk first started alluvial diamond mining with a younger partner, a passing bird flying overhead made a 'deposit' on his head while he was repairing a truck's transmission outside and his assistant told him it was a sure sign of good fortune coming his way. This proved to be true that very same day.

Dries was born and raised in Kuruman in the Northern Cape Province of South Africa. His father, Lambert, ran a water-drilling business and Dries recalls how he spent many school holidays living in a caravan while accompanying his father who drilled for water for a widespread farming community.

After finishing his schooling at a technical high school, Dries qualified as a panel beater before joining a manganese mining company, first near Hotazel and then at Postmasburg, working as a diesel mechanic underground with water pumps and air compressors his speciality.

"Those were exciting times on the rugby scene as I played rugby with Springbok legends like Piet Visagie and Mannetjies Roux for the Amasol Club at Postmasburg," Dries says. "It was also around that time that Griqualand-West, with these giants of the game in the side, won the Currie Cup in 1970."

But Dries had an inner drive to be self-employed and he left the mines and started a repair workshop in Barkley-West, maintaining and repairing earthmoving equipment. One of his first clients was his father-in-law, who ran an earthmoving business, and Dries soon got to know many of the local alluvial diamond miners in





(From left): Eric van der Merwe (Bell Sales Representative, Bell Kimberley), Daantjie van Wyk (Dries' younger son), Andru van Wyk (Dries' grandson), Dries van Wyk, and Leonard van Wyk (Dries' older son) all standing in front of the 1992 Bell B30C ADT that has clocked over 52 000 hours.

the area whose equipment he repaired. As a sideline, he restored older earthmoving equipment for resale, and little could he know how well this growing skill would serve him in the future.

"Being exposed to so many of the alluvial diamond miners in the area started rubbing off on me. So, when a young acquaintance suggested we form a partnership to do some small-scale alluvial diamond mining, I agreed but still carried on running the workshop as well," Dries says.

"It was during a period at Longlands, an area close to Sydney-on-Vaal, which as the name suggests is close to the Vaal River, that I had the experience with the bird and later that same day, having mined an unlikely section of hard calcrete, we found a 40-carat diamond that was very profitable for us."

Soon after this Dries closed his mechanical workshop and concentrated his efforts on alluvial diamond mining. In time, and mining further west towards areas better known for iron-ore deposits, Dries left the partnership and moved back east to areas that he was familiar with. By now, Dries had been joined in the business by his two sons, Leonard and Daantjie, and currently the family mine a concession bordering the Vaal River that is owned by another company where they pay royalties for mining.

"We've been through some lean times but have also had some extraordinary luck as the incident with the bird shows," Dries continues. "One night I had a dream, although it may have been a vision as well, but I dreamt that we were to find a tree that had a hole next to it with the tree's roots hanging into the hole, which we duly did the following day." Dries says when digging in the hole next to the tree, they found a perfect 44-carat blue-white diamond that netted them R2,2 million and they used that money to buy good used earthmoving equipment in the form of a wheeled loader and a Bell HD1880 Excavator.

"We had previously bought two Bell B30A Articulated Dump Trucks (ADTs) on the used market, and they had served us so well – and still do, to this day – that when another Bell-branded machine like the Bell HD1880 Excavator was on offer from a client indebted to us, we were pleased to be able to buy it," Dries explains.

"This Bell HD1880 Excavator is still in use today and, as a result of its efficient hydraulic cylinders that help produce sustained productivity, we in time bought another similarly weighted Bell HD2045 Excavator, which is also still in daily use."

The Van Wyk family diamond mining business, AJVW Diamante, bought its first new Bell B30C model ADT in 1992 and this machine, too, is still running despite having worked over 52 000 hours. Dries says proudly that this ADT still boasts its original transmission, pumps and differentials although its engine was replaced some 20 000 hours ago.

In 2004, they again bought new Bell ADTs in the form of two Bell B35D ADTs with a third similar model used ADT added later. An older B25A ADT has been converted into a water truck.

"We believe that Bell Equipment designs and builds their ADTs especially well, but the machines' longevity is also down to our preventative maintenance regimes that are non-negotiable," Dries says. "As an example, we service all our equipment once a month and replace all the filters while monitoring the condition of the oil with those changes being done when necessary.

"Should we be too busy to maintain our equipment properly, we make use of a contractor mechanic, Martin Naude, who used to work for Bell Equipment before venturing out on his own, and he is one of the best mechanics I have ever come across."



When visiting the family's mining area, reports showed that the two newer Bell B35D ADTs had notched up 23 199 and 19 566 hours respectively and were moving big loads of the red earth overburden that covers the diamond-bearing gravels.

"Our main challenge here is the stripping ratio which varies between 4:1 and as much as 7:1 before we get to expose the gravel, which can be red and also yellow as we get closer to the old river runs," Dries explains. "We mine through a lot of the older diggings that were done by our ancestors decades ago when their accuracies on extracting and recoveries weren't as good as now."

Dries says that another reason for taking such special care of their entire yellow fleet, which pays dividends in terms of longevity and sustained production, is that they don't have a fixed policy on machine replacement. This is largely brought about by the uncertainty of where they may find workable ground in the future due to strict regulations with the granting of mining concessions.

"What I can tell you though is that our range of machines from Bell Equipment, as old as the fleet may seem, forms the backbone of our mining operations and should we ever need to buy another dump truck, we'll buy a Bell machine."



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Bell expands BETA Parts range and footprint



Less than a year after launching its Bell Equipment Trusted Alternative (BETA) Parts offering, Bell Equipment has expanded its footprint of South Africa, and Zambia to include the major articulated dump truck markets of the European and United Sates dealer network.



Bell Equipment Director of Aftermarket and Product Support, Meltus Badenhorst.



BETA Parts provides Bell ADT, Tractor, and Tri-Wheeler customers with a wider range of options to suit their specific needs.

Bell Equipment Director of Aftermarket and Product Support, Meltus Badenhorst, said: "We introduced BETA Parts after identifying the need to give customers a convenient and competitive parts alternative, endorsed by Bell, for their more mature machines, or for those looking for cost effective solutions. We have been pleased with the interest shown by our African-based customers and their acceptance of the range and are now ready to offer BETA Parts in other regions.

"Our team is also constantly looking at opportunities to grow the range and has supplemented the pilot range of alternators and starters with turbos, V-belts and ground-engaging teeth for buckets."

According to Meltus, BETA Parts bridges the gap between Original Bell Parts, the company's premium quality parts that are designed to OEM specifications and used in production, and Bell ReMan, which are major components that have been remanufactured to meet OEM specification. Original Bell Parts and Bell ReMan have a one-year/unlimited hours warranty while BETA Parts carry a six-month/1 000-hour warranty.

At the other end of the scale, Bell Used Parts, which are available in the South African dealer network are also available but do not carry a warranty.

He says: "It's about giving our customers choices and so that we can fully support their needs throughout their Bell ownership experience. Our premium Original Bell Parts is our 'alpha' or leading parts brand, and BETA Parts is the next best alternative giving customers more cost-effective parts that have less risk than other cheaper parts because they are endorsed by Bell and covered by a Bell warranty.

"Choosing BETA Parts also simplifies the purchasing process, offering a one-stop-shop experience that eliminates the need for customers to search and compare prices from multiple suppliers in their quest for savings."

By offering BETA Parts, Bell Equipment ensures that Bell ADT, Tractor, and Tri-Wheeler customers have a wider range of options to suit their specific needs, as well as the convenience and assurance of dealing directly with Bell Equipment's extensive dealer network in regions where BETA Parts are available.



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