

the bulletin

GLOBAL ADT EDITION - VOLUME 2 - 2019



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Cover
Western Earthmoving (WEM) has four Bell B45E Articulated Dump Trucks working on one of the largest sub-housing divisions in New South Wales, Australia...read more on page 28.

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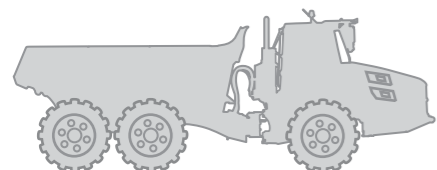
50 is the new 40

It's all about economies of scale; the ability to move more for less. Bell was the first to market with a production 50-ton 6x6 ADT and now the legacy continues with the B50E offering.



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insight

Bell Equipment has a truly global footprint with our Articulated Dump Trucks operating in about eighty countries all over the world. This magazine is one of our most representative yet with coverage from all our major markets: North America, South Africa, Africa, Europe, South East Asia and South America. I trust that you will enjoy reading about the different applications and owner experiences.

It gives me great pleasure to report that our factory expansion in Germany is complete and the manufacture of components for our Northern Hemisphere product is underway. The official opening of the facility was celebrated at the end of September and is covered in these pages. This investment demonstrates our commitment to be a global manufacturer as we continue to enhance our flexibility to respond more efficiently to customer requirements in our Northern Hemisphere markets.

impact on (customer service, professionalism, etc.) rather than focusing on what we have no control over (Brexit, exchange rate fluctuations, commodity pricing, etc.).

Plans are at an advanced stage for our first trade show next year, ConExpo in Las Vegas, America, where we will have a new product on display. Designed to meet the niche needs of customers, we are excited to see the market response and will report back in our next edition.

With 2019 almost behind us, the Bell team is eagerly looking towards next year. Our 'Bell 2020 Vision' for the business is to focus on those factors that we can have an

We thank you for having confidence in our products and for your ongoing support of Bell, which inspires all that we do. May you have a safe and blessed festive season with your loved ones and we look forward to being of service to you in 2020.



Leon Goosen
Group Chief Executive Officer

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“Momentous occasion” as Bell becomes a global manufacturer

Bell Equipment has evolved from a global supplier to a global manufacturer with the 17 million Euro expansion of its Eisenach-Kindel assembly plant in Germany. The project, which attracted a grant from the state development agency Thuringia LEG for its contribution towards the improvement of the regional economic structure, accommodates the fabrication of Articulated Dump Truck components for the Northern Hemisphere.

Bell Equipment Group Chief Executive Officer, Leon Goosen, officially opened the new production complex at the end of September and said the “momentous occasion” was a progression of the group’s sustainable growth strategy to bring the Bell Articulated Dump Truck range closer to customers in the major global markets.

The strategy first gained traction in 2003 when Bell opened its ADT assembly plant in Eisenach-Kindel in response to growing activity in Europe. Leon explained that it was the “rich history in vehicle production, the location relative to

infrastructure, along with investment support by the Ministry for Economic Affairs and the LEG Thüringen” that first attracted Bell to Germany’s Thüringen region in the early 2000s.

Continued strong demand from Europe and North America saw Bell expand its European Logistics Centre in Germany in 2017 and establish an American Logistics Centre the following year.

“This, our third project here, is a significant capital investment for the Bell Equipment Group and completing the project in just over 12 months is a tremendous

achievement that demonstrates our commitment to grow as a global manufacturer,” continued Leon. “The investment is a direct response to the widespread acceptance and growth in demand of our Bell Articulated Dump Truck range. Trucks built in this factory are destined primarily for our Northern Hemisphere markets of Europe, the UK and a significant proportion of production is exported to North America and Canada.”

The new facility directly adjoins the existing factory halls, effectively tripling the available production and storage space, and providing



Key handover by general contractor Goldbeck-Ost (from left): Goldbeck Project Manager Karsten Naumann, Bell CEO Leon Goosen, Goldbeck Branch Manager Christian Weiß, Minister Wolfgang Tiefensee, Bell Chairman Gary Bell and Andreas Kiermeier, Head of Goldbeck-Ost Branch Thuringia.

With around 12 000m² of floor space, the new production complex triples the available space at Bell Equipment’s Eisenach-Kindel site.



in-house manufacturing of truck components in Europe for all seven Bell ADT models (B20E to B50E) that are assembled in Germany.

Leon explained that European production will “improve the group’s lead times providing greater flexibility and better response to dealers and customers. Efficiency in freight and working capital costs will also be achieved by eliminating the

shipping of raw material from Europe to South Africa and then shipping the bulky components back to the Northern Hemisphere for consumption in those markets. More than 3 000 tons of steel will be consumed annually to satisfy the demand from those markets that are served from the plant.

In closing he said: “It takes teamwork to execute a project of this nature in the accelerated

timeframe that it took, so I congratulate the Bell team for their dedication in planning and executing this project according to plan. We are also fortunate to have built lasting relationships with our partners over the years and I would like to extend my appreciation to them for making this a great success. This would not have been possible without the support of the local Ministry for Economy in Thüringen, the region

of Eisenach-Kindel, LEG Thüringen, the Thüringen Aufbau Bank and our building partner, Goldbeck.

Minister of Economic Affairs for Thüringen, Wolfgang Tiefensee, thanked Bell Equipment for its deep and sustained commitment to the region. He emphasized the group’s significant economic importance as an export-oriented global player as well as acknowledged the special co-

operation between Bell in South Africa and the Eisenach-Kindel plant, which is now firmly rooted in the local economy.

The inauguration ceremony, with the symbolic production start, was followed by a factory tour for all guests and project partners. Dignitaries in attendance included: Minister of Economics, Science and Digital Society for Thüringen, Wolfgang Tiefensee; Mayor of

Thüringen, Bernhard Bischof; Chairman of the Board of Management at LEG Thüringen, Andreas Krey; Manager of Goldbeck Thüringen, Andreas Kiermeier and Bell Equipment Group Chairman, Gary Bell.



The new fabrication line for all current 6x6 ADT models.

Bell B45Es are the jewels in Kagem Mining's fleet

Emerald mining is a risky business as the rare green stone, found only in certain parts of the world, is a hundred times rarer than diamonds. That is why, when mining emeralds, you need to be absolutely sure of the resource and waste no time in moving enough soil and rock to expose the emerald crystal bearing rocks.

Zambia's emerald mines produce some of the best coloured stones in the world and in an area known as the Ndola Rural Emerald Restricted Area, we find the company Gemfields' Kagem Mine, officially the largest such mine in the world and producing about 25% of the global yield.

"We're proud to say that with three operating pits and our main pit having a strike length of 2,2km and 130m at the deepest point, ours is the largest emerald mine in the world," says Prahalad Kumar Singh, the General Manager. "Our expected mine life is still 25 years and should market dynamics change, it could see us resorting to underground mining as well."

Zambia's emeralds are thought to have been formed some 500 million years ago. Because of the gem's rarity, accurate geophysical information is vital to minimize mining costs that could spiral out of control should blanket digging be attempted. Anomalies in the prospective mining areas are picked up through aeromagnetic surveys and radioactive characteristics are noted before core sample drilling can commence. Bulk sampling is used to determine feasible mining areas.

"We aim to find 250 carats for every tonne of ore mined but even then, only about 25 to 30% is a saleable product," Kumar explains.

"From that small percentage, a mere 1% will be premium quality and provide about 65% of revenue which further explains why we have to move so much soil and rock as quickly and cost-effectively as possible to mine accurately and show a profit."

"Moving many thousands of tonnes of soil and rock to expose the emerald crystals implies using yellow metal machines and for more than 10 years we have built a solid business relationship with Bell Equipment here in Zambia," he adds. "We started off using Bell B40D Articulated Dump Trucks (ADTs) and have over the years owned many of these workhorses throughout the D-series upgrades."



Danie Erasmus (Bell Equipment After Sales Manager), Balakrishnan Srinivasan (Kagem Mining: Senior Manager Engineering), Vishnu Dasari (Kagem Mining: Head of Mining), Prahalad Kumar Singh (Kagem Mining: General Manager), Mike Quin (MD: Bell Equipment Zambia) and Paul Kaluba (Kagem Mining: Mine Manager).



Kagem Mining's new Bell B45E fleet is utilized extensively and runs on average for 18 hours in a 24-hour cycle, seven days a week with fuel consumption at between 28 and 30 litres an hour.

An expansion project in 2018 saw Kagem Mining take delivery of 12 Bell B45E ADTs, such as the one pictured here.



Kagem Mining has no hard and fast rule on replacing earthmoving equipment but rather considers any machine's condition, depreciation and costs when it reaches five years and, depending on cashflow, considers replacement then. The year 2016 saw the company change tack when it took delivery of four Bell B45D ADTs and the success and marked increased production of these larger ADTs showed a clearer path ahead.

A recent expansion project in 2018 necessitated replacing some of the older fleet and again Kagem Mining turned to Bell Equipment to supply 12 Bell B45E ADTs, a 37 000 litre water bowser on a B45E chassis and a Bell 225F Tri-wheeled Tyre Handler. Delivery took place in a phased manner between August and October 2018. All machines were bought with an extended warranty to 10 000 hours on the wet drivetrain.

The new Bell B45E fleet is utilized extensively and runs on average of 18 hours in a 24-hour cycle, seven days a week with fuel consumption at between 28 and 30 litres an hour. The premium Bell Fleetmatic® package supplies Kagem's fleet management with comprehensive feedback on machine performance.

"I have often been asked why we run ADTs manufactured by Bell Equipment and our reasoning is simple," Singh says. "Bell Equipment gives us a distinct advantage in that the company's machines are produced in Africa for African conditions with parts readily available, a hugely

important consideration in seemingly isolated Africa. There is no bureaucracy created by franchising, which causes delays in delivery, and at Bell Equipment you can discuss a problem with someone who you know, especially at its Customer Service Centre in nearby Kitwe."

Singh quotes an example of Bell Equipment's personal touch when he tells how former Group Chief Executive, Gary Bell, had spoken to Gemfields' principals at their London head office assuring them of the OEM's commitment to supporting its products in Zambia. This, Singh believes, is the stuff that builds mutual trust and reciprocal loyalty.

"We're confident that Bell Equipment understands our business and the challenges we face," he says. "Warranty claims are acted on without delay and we commend Bell Equipment for the high levels of after sales service and technical backup it maintains."

Kagem Mining has recently embarked on utilizing Bell Equipment's Reman programme by committing nine older Bell B40D ADTs to the campaign. "These machines have done between 16 000 and 18 000 hours and we've decided on this route because of new taxes on gemstones that have cut into our bottom-line profits," he explains. "When you consider that the refurbishment will add a further 8 000 to 10 000 hours to the B40D ADT's life, the cost involved is workable as we can capitalize it and then depreciate it, which gives us a tax advantage."

ADT consignment boosts Bell Equipment count for L Lynch Plant

Renowned for its determined commitment to 'Meeting Hire Demands' by delivering exactly what the customer wants, plant and equipment hire specialist, L Lynch Plant Hire & Haulage has chosen to expand its extensive fleet with the addition of fifteen new Bell Equipment B30E ADTs.

Purchased to further develop its taskforce, rather than renew older plant machines, this latest consignment of Bell ADTs will help to fulfil multiple earthwork projects, recently won by the plant hire contractor.

Supporting A14 and Hinckley Point schemes

Having already been appointed as a plant hire supplier for the £1.5bn A14 Cambridge to Huntingdon improvement scheme, which includes the development of a major new bypass to the south of Huntingdon and upgrades to 21 miles of the A road, L Lynch Plant will be setting machines from the new Bell fleet to task on this key infrastructure project. In addition, vehicles will also be needed for continuing work at Hinkley Point C in Somerset; the first in a new generation of UK-based nuclear power stations designed to provide low-carbon electricity for approximately six million homes.

ADTs already up and running

With seven Bell B30Es already supplied, and a further eight lined-up for delivery, L Lynch's Head of Key Accounts, Chris Gill, details the positive experience he and the team have had working with Bell Equipment over recent years, and explains why he feels the customer demand for these hard working ADTs remains so strong:

"L Lynch has been working with Bell Equipment for several years now, however I've been dealing with the company increasingly over the past three," he says. "Bell is a key supplier that's true to its word, delivering as and when

agreed and enabling us to keep to our schedules and realize customer promises.

"Bell Equipment's assurances enable us, in turn, to better commit to our customers, so we can deliver the plant equipment their projects are dependent on within realistic timeframes.

"Not only do the ADTs prove themselves to be impressively fuel efficient, but the level of manufacture and design is excellent. The machines are built to a very high specification, with all the features you'd expect to pay extra for, included as standard, such as inclinometers, on-board weighing with a traffic light safety system, and flotation tyres."

Bringing a Bell boost to the fleet

The 15 additional machines significantly increase the number of Bell ADTs within L Lynch's extensive fleet. Their consignment now totals eight B20Es, 35 B30Es and six B40Es, currently operating on a nationwide basis.

Sights set on HS2

Already supplying plant machinery to the HS2 railway project that will directly connect London, Birmingham, the East Midlands, Leeds and Manchester, L Lynch believes that the new Bell ADTs will come into their own once the large earthwork phases roll out.

Essential to the ADTs continued success as reliable plant mainstays, is the servicing contract included with each machine. "The Bell servicing plan has always proven extremely successful for us. By keeping maintenance and

servicing with the machines' original manufacturer, we can liaise directly with the team in Burton, who are all extremely helpful, accommodating and responsive. They work to reduce customer downtime and understand the important part reliable, working machines play in maintaining effective business operations.

"We find that choosing to work with Bell directly for our repairs and servicing gives us an advantage over using the services of a third party. Bell uses its own parts, has direct links with the team and head office in South Africa, and harnesses real expertise in-house. Whilst we have used third parties for servicing in the past, the process is never as smooth or knowledgeable as it is when working with Bell, and we feel going directly to the supplier is definitely the better route to maintaining a reliable and hardworking machine."

With demand constant for its expansive fleet of plant and equipment - both operated and self-drive - L Lynch anticipates supplying to additional civil and rail engineering, public utilities, ground works, highways, demolition and winter maintenance schemes over the coming months, confirming that as its business progresses, so too will its relationship with Bell Equipment.



Half a century of development in Australia's largest city

ABAX Contracting and their growing fleet of Hitachi, Bell and John Deere machines are put to work assisting the continual growth in Sydney's suburban regions.

For 50 years ABAX Contracting has provided civil and services to Sydney's ever-growing suburban landscape. The company's impressive fleet supports a broad range of projects from quarrying, landfill and earthmoving. A notable venture for the company was the redevelopment of the Harbourside shopping complex in Sydney's renowned Darling Harbour district.

The breadth of their services is illustrated through the extensive fleet of machines within the Hitachi Construction Machinery Australia (HCA) family which includes, six ZX330 LC-3 Hitachi Excavators, three John Deere 670G Graders

and a Bell 30-ton Articulated Dump Truck. Operator comfort, less routine maintenance and more efficient cycles are some of the key reasons that ABAX has

established an ongoing relationship with HCA. The machines are mostly utilized for subdivision work in the growth corridors of Sydney where their technology, fuel performance and reliability are an asset.

ABAX Contracting is at the forefront of new and upcoming projects across the Sydney region, supporting projects from basic operations such as trenching to a polished presentation of a

marketable block of land. Their ability to thrive in business since 1968 is in part due to their adoption of new technologies to stay ahead of the curve.

"Working on integrating drone and associated technology to stay ahead of future challenges, we are currently involved with approximately 25 subdivision projects across Sydney and running a development arm involved with site acquisition and

delivery of residential, retail and industrial projects in NSW," says Director Tom Baxter.

Tom speaks highly of HCA Construction Equipment Sales Representative, Barry Cahill: "We have always found Barry to be friendly, reliable, and cooperative and acts with a lot of integrity. If we need a machine Barry is one of the first people that I call."

Copy courtesy of Hitachi Construction Machinery (Australia) Pty Ltd

* HCA is the exclusive dealer for Bell ADT Trucks within Australia.



(From left): Barry Cahill (HCA Major Accounts Manager, NSW), Tom Baxter (Director of ABAX Contracting), Andrew McDowall (Plant & Maintenance Manager, ABAX Contracting) and Daniel Xuereb (HCA Parts & Service Representative).

InfraBrasil displays Bell ADT at Expositram for the first time

Bell Equipment's exclusive dealer in Brazil, InfraBrasil Obras Pesadas e Mineração, exhibited at Expositram this year for the first time where it displayed a Bell B45E Articulated Dump Truck.

Expositram 2019 is one of the largest exhibitions in the Latin American mining sector and was held in Belo Horizonte, Minas Gerais, Brazil from 9 to 12 September. Organized by the Brazilian Mining Association (IBRAM), the trade show marked the beginning of transformations in the Brazilian mining industry, highlighting the main focal points of IBRAM's new policy for the mineral sector.

With the aim of generating business and driving the state

economy over the coming years, Expositram 2019 had impressive numbers with 490 booths, lecturers from 30 countries, 45 000 visitors, about 1 700 workers during the six days of the trade show assembly, 4 500 people working in the booths and more than 900 people attending to the various areas from the production chain of the event.

InfraBrasil provides earthwork and mining services with a team of qualified and experienced employees and a wide range of state-of-the-art equipment. One is

its success stories is a Bell B45E that their customer, Ferro+ Mineração, took delivery of in November 2018. The truck is used to load and transport iron ore and aggregates in an open pit mine in the city of Ouro Preto, Minas Gerais.

According to InfraBrasil's CEO, Ulisses Rodrigues, the underfoot conditions are good with well maintained haul roads. The geological features comprise of low severity land and pit slopes with low gradients of on average 12% and up to 20%. With an

average round haul distance of 3km, the Bell B45E works an average of 16 hours per day, seven days a week and returns an average fuel economy of 18l/h when unloaded and 25l/h when laden. Production of 3 400 to 3 500 tonnes per day is achieved with machine availability in excess 95%.

Bell Equipment Marketing Manager: Sales and Distribution, Llewellyn Roux, says: "We have been pleased with the customer perception of our B45E. The

customer has been so happy with the performance that they took delivery of a second rental unit after Expositram.

"We see good potential in this market because of the quality of our ADT product and its suitability to the South American environment but more especially because of our partnership with InfraBrasil, which is a well respected and established dealer with an existing sales and support network to provide our customers

with the level of support they expect.

"We've been working closely with InfraBrasil over the past year and are encouraged by the success that we are seeing in this market and look forward to a busy 2020 with the planned introduction of the B60E 4x4, the B30E and the B33L SMC (Side Mount Cab) Low Profile ADT, which will add exciting new dimensions to our product offering in Brazil."



Seen at Expositram are the Bell Equipment and InfraBrasil team of (from left): Ulisses de Souza Rodrigues (CEO, InfraBrasil), Etienne Volschenk (Engineering Manager: Bell Equipment), Llewellyn Roux (Marketing Manager: Sales and Distribution, Bell Equipment), Christiano Kunzler (President, InfraBrasil), Nei Hamilton Martins (New Business Developer, InfraBrasil) and Meltus Badenhorst (General Manager: Group Technical Services, Bell Equipment).



Chilean mining companies and contractors show interest in B50E

The first four Bell B50Es introduced into Chile just over a year ago operate in the largest salt flat in the north of the country where they work in the harvesting of lithium. The South American countries of Argentina, Bolivia and Chile hold eighty percent of the world's lithium reserves and global demand for the material, which is a key material in the manufacturing of batteries, is increasing.

Operating conditions are harsh as the ADTs cope with high temperatures, altitude and the complexities of transporting salt. The trucks average 2 000 hours a year and, depending on the moisture content of the salt that they work with, they can haul payloads from 38 to 46 metric tons. Haul distances average about 2km on fairly well-maintained haul roads to deliver an average fuel economy of 27ℓ/h.

After using the trucks and experiencing positive results, the mining contractor purchased an additional two trucks for bulk earthworks construction projects at high altitude and is interested in further growing his fleet.

The key to success has been the combination of Bell Equipment's technology and the service given by the group's local dealer, RAICO S.A.. The end user is particularly

impressed with the Fleetm@tic® system, according to operations chief at the work site. "It's the best telemetric system available on the market. We have spent huge amounts of money on other systems and have never achieved the accuracy and speed of this system, which has allowed us to be more efficient in our process."

Another important factor has been the low ground pressure and the

ability to carry more tonnes per trip than 40-ton ADTs that were previously used.

According to RAICO S.A. Commercial Manager, Cristóbal Alexandroff, Chilean operators love Bell ADTs. "They don't want to use the other trucks available because they find Bell B50Es very comfortable and user-friendly. They highlight some features such as l-tip, the operator's seat and the spacious cabin amongst others. Overall we've enjoyed positive feedback from our clients and potential customers and expect to grow our market share in Chile."

Introducing new brands and models to a market is never easy but the collaboration between RAICO S.A. and Bell Equipment's management and factory in South Africa have made it seem so. Bell Equipment Marketing Manager: Sales and Distribution, Llewellyn Roux, says: "We are extremely happy that we have a reliable local partner in RAICO S.A. and appreciate their proactive response to customer support, which ties in with our Bell ethos of 'strong reliable machines, strong reliable support'. They can guarantee assistance at a customer's site in 24 hours and

have service engineers who have been trained at our Bell factory, which makes service response and troubleshooting much faster."

"The B50E is a proven concept, with Bell first introducing the 50-ton concept globally in 2004. The truck offers a significant cost per tonne benefit over the 45t class and it is pleasing to see such a respected and influential customer recognizing this and enjoying the automation, production and safety features that are provided as standard."



Bell Equipment's Marketing Manager: Sales and Distribution, Llewellyn Roux, with Chilean customer, Andrés Infante (centre), and his wife, María Carolina Cuevas Vergara, and one of RAICO S.A.'s partners, Michael Alexandroff, and his wife, Dania Andrea Ulloa Davet, during a visit to the Bell Factory in Richards Bay in March 2018.



ADT features and dealer support sell Terrahawk on Bell

Daniel Horne, President of Terrahawk Inc. in Raleigh, North Carolina in the United States, likes to move dirt, but not just any dirt, he prefers projects that are complex, technical and difficult, ones that most contractors won't touch.

With a graduate degree in civil engineering, Daniel knows what he's doing, and he approaches equipment purchasing with the same analytical mindset. For him, owning and operating Bell trucks just makes sense. "It's just a smart truck," he says. "For us, we found that when you put Bell trucks side-by-side with competitor trucks, they will out cycle them all day long."

After renting B25E Bell Articulated Dump Trucks (ADTs) from May Heavy Equipment, Daniel was impressed with their dealer support, reliability and the numerous standard features. Features such as engine protection, speed control, tip safe, retardation and more, make Bell ADTs, in his words, "dummy proof".

With the current construction labour crisis in North America, having a truck that doesn't allow the operator to make huge mistakes is crucial. He likes that he can put someone without extensive training and experience behind the wheel of a Bell truck and know that in a couple of days they will be proficient enough to make production.

"We were really impressed with the reliability of the truck and the technology that doesn't allow the operator to screw the truck up," he said. "With the current labour

crisis, pretty much anyone can be put behind the steering wheel, so the smarter the truck is, the less chance you have that they tear the truck up or flip it over."

Daniel's truck operators also prefer Bell ADTs because of the operator-focused comfort features. Part of combating the labour shortage is

terrain and "they are just good trucks, a good product".

Before Bell, Daniel used ADTs from two major competitors, but says he wasn't impressed with the dealer support he received from the first. The repair time was too long for the second and these trucks were also heavy on fuel, not as productive, and gave frequent transmissions problems.

"That's what really interested me about the Bell ADTs," he said. "They are more productive, faster and handle better in rough conditions. We have found them to have better cycle times and are more fuel efficient than the competition."

Terrahawk's focus is on site development for both public and private infrastructure sectors, including clearing and grubbing, mass earthworks, grading, utilities installation, street construction and erosion control.

"We do anything with a lot of dirt," Daniel says. "We try to chase technical projects; projects other people are afraid to do, something with a lot of technical challenges to pull it off."

Daniel, as a third-generation civil contractor, excels at challenges and his fleet of smart Bell ADTs helps him do just that.

keeping your workers happy, so when a cab is designed for doing just that, it's an important part of the equipment buying decision process.

When they have to operate their Bell trucks in less desirable job site conditions, Daniel reports that the trucks do fine with rocky, wet



Carocept joins the Bell family with five B30Es and a Bomag Roller

A company that first saw life as a modest venture to render services such as cleaning, security, transport and discard handling to a coal mining group, has shown exponential growth in a short space of time with haulage equipment from Bell Equipment headlining its growing fleet.

Carocept is contracted to work at the Umsimbithi Coal Mine near Belfast in Mpumalanga, South Africa which is jointly owned by Lithemba Wonderfontein Coal and Umcebo.

Carocept has four directors and the company's dynamic CEO, Nolwazi Qata, fills us in on its origins and structure: "Our company is a nominee of Lithemba Wonderfontein Coal, which owns

50% of Umsimbithi Coal, and we have been tasked with services on the mine that are seen as non-core mining activities," she says. "To this end, Carocept was founded in Johannesburg in 2016 with me, Tandi Mohale, Lunga Ngcobo and the 'thorn amongst us roses', Bongani Raziya, as directors.

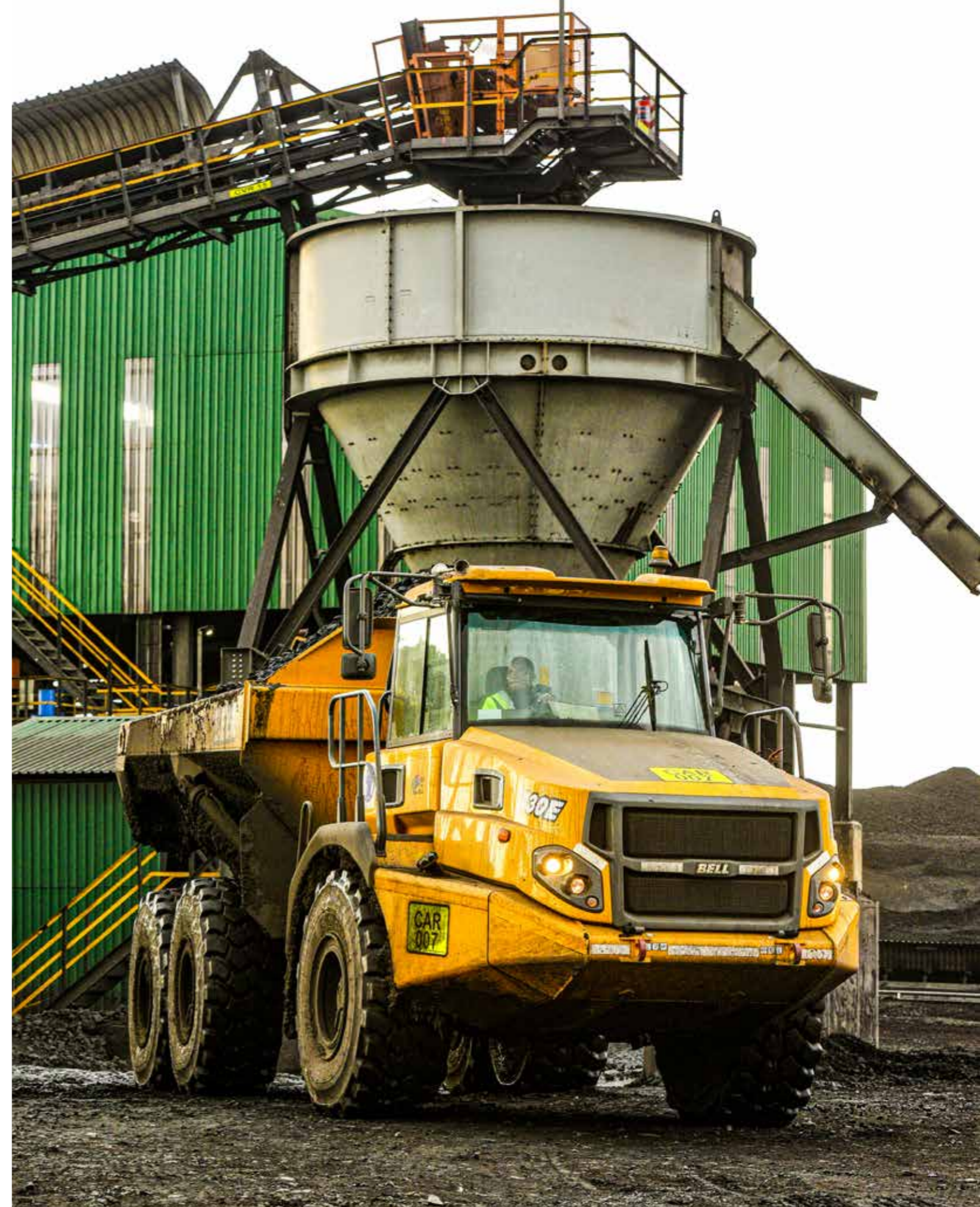
"Of all our tasks on the mine, coal discard handling promised to be the most daunting as we realized

early on that we'd need material haulage and handling equipment for this," she says. "This obviously meant a major capital outlay and you'll appreciate that, as a start-up company, finding that type of serious financial backing wasn't easy."

According to Nolwazi, a major South African bank came to their aid with competitive financing at reasonable rates and the next



Bell Equipment's Bruce Ndlela presents Carocept CEO, Nolwazi Qata, with a model Bell ADT to commemorate their recent purchase. With them are (from left): Wiseman Sitole (Operations Manager, Carocept), Aaron Sibiya (Bell Sales Representative) and Bright Zwane (Production Superintendent, Carocept).



Bell Articulated Dump Trucks haul more, for longer at the lowest cost-per-ton to deliver more on your profit margins.

hurdle was to obtain the correct equipment with reliable technical backup.

"We did some thorough research of our own within the South African yellow machine market and spoke to leading industry players about what we should look at buying as this was our first and somewhat tentative venture into a challenging and competitive market," she adds. "The one name that kept recurring was that of Bell Equipment, which was compounded after we met Bell Sales Representative, Aaron Sibiya."

"It was immediately clear to us that in Bell Equipment we'd found

an original equipment manufacturer (OEM) that not only understood our business but had personnel who were patient and knowledgeable and who would be committed to us as customers in the long term. And, as Aaron Sibiya showed, salesmen who were tenacious and simply wouldn't let go," she says with a smile.

Nolwazi also indicates that other important points that warmed them to Bell Equipment were the company's huge local content advantage, expansive footprint with customer service centres, trained mechanics and a comprehensive parts holding as well as the knowledge that

purchasing locally would have the downstream benefit of sustaining employment for others.

"Our immediate needs to successfully handle the discard coal service on the mine saw us buying five new Bell B30E Articulated Dump Trucks (ADTs) and a Bomag BW211 Tandem Smooth Drum Roller and these machines were delivered in early May 2019," she says. "They are used to load both wet and dry discard coal from feed-bins and haul it anywhere between 1km and 3,5km to the mining pits, which get rehabilitated as mining progresses in a traditional strip-mining method."

Wiseman Sitole is Carocept's Operations Manager and he is enthusiastic when discussing the new Bell ADTs and Bomag Roller. "We were pleased when Bell Equipment offered training to our 16 drivers and operators who, despite being relatively experienced, were happy to be shown the correct way of handling these Bell B30E ADTs and the Bomag BW211 Roller.

"We work two shifts a day and this should see our Bell B30E ADTs clock between 5 000 and 5 800 hours a year, which is in keeping with the comprehensive extended

warranties to 10 000 hours that we specified when ordering the equipment. A further confidence booster for sustained uptime is that Bell Equipment undertakes all maintenance and repair during that time and we have our own Bell-trained mechanic on site, assisting our operators with their daily checklists."

The fleet is further monitored with the Bell Fleetm@tic® monitoring system.

Once the discard coal has been dumped in the pit, a dozer is used to flatten the heaped coal before

the Bomag BW211 Tandem Roller compacts it into the mined-out areas of the pit. According to Wiseman, average loads of around 27 tonnes are hauled at a fuel burn rate of 26 litres an hour.

"We feel that this is the start of greater challenges for our small company and we're gearing up mentally for bigger things," Nolwazi says. "Future plans could see us venturing into topsoil mining and getting involved in other mining activities. We are confident that with a trusted OEM such as Bell Equipment in support, the sky is the limit."



Bell B45E makes inroads for WEM in Sydney, Australia

One of Sydney's most professional and well-renowned earthmoving companies, Western Earthmoving (WEM), recently acquired four Bell B45E Articulated Dump Trucks to tackle one of the largest sub-housing divisions in New South Wales (NSW).

Western Sydney based civil contractor, WEM, was awarded a civil contract worth over AUS\$40 million to deliver two gateway intersections into The Gables and earthworks, roads and infrastructure for the first 540 lots. To achieve this, WEM recently took delivery of four B45E Bell ADTs.

Director and General Manager of WEM, Michael Ragg, says they've used Bell ADTs for many years, and

it was an easy decision to welcome on board four more.

"The B45Es come with standard features that are imperative to our operation. Such as the keyless start, automatic traction control, hill assist, hill decent control, auto park application, on board weighing system and bin tip prevention which incorporate pitch and roll sensors preventing the bin operation if the truck is in

an unsafe position. There's a standard 10-inch colour monitor enabling the operator's easy viewing of daily checks, machine operation and machine adjustments from inside the cabin," he said.

The Gables project is situated north-west of Sydney's CBD in the Hills district, spread over 330 hectares and will house more than 13 000 people when completed.

Michael says it will provide "The Gables residents with benefits of living in a master planned community that provides over AUS\$315 million worth of community infrastructure, services and utilities."

Like many large projects, Michael has considered the key engineering challenges, "throughout the duration of this project we will dewater 52 large site dams using irrigation and infiltration techniques to prevent discharge into nearby creek systems. Extensive swale construction and trunk drainage systems will be used throughout the subdivision. The pressure sewer system required collaborative design amendments to accommodate specific site features."

WEM is known as one of the largest and most professional earthmoving companies that specialize in sub division work within NSW and have been using Bell ADTs for many years. They know the Bell product has proven itself as being a very fuel efficient and reliable dump truck with class leading power-to-weight ratios.

The E-series range was launched three years ago with the smaller B25E and B30E. The large trucks add five new models: the B35E, B40E, B45E, B50E and the innovative 4x4 crossover concept, the B60E.

Incorporating the latest in ADT design and technology, the Bell E-series Large Trucks are the culmination of three and a half years of development and testing, representing an evolution on the D-series range, which has set industry standards and led ADT innovations for over a decade.

Bell and Hitachi Construction Machinery Australia Pty Ltd (HCA) are particularly buoyed about the 45-tonner in light of increased global demand for this truck size. With its rated payload of 41 000kg, a bin volume of 25m³ and a powerful new engine, the B45E has the potential to become the most popular model in the range due to its overall value proposition to customers.

Michael credits HCA for not only supplying reliable Bell machinery to WEM but providing impeccable

service when it's needed. "Since day one, we've had support from HCA and in particular our Major Accounts Manager, Scott McClement, who ensures minimal downtime on service and delivery."

Striving to meet customer satisfaction and go the extra mile, Michael comments "the machines have outstanding reliability with minimum down time. In particular, the operator comfort and overall machine performance are second to none."

Overall Michael credits the relationship he's built with HCA's Major Accounts Manager, Scott McClement: "He makes it easy to gain information when required and provides honest timelines on machine delivery dates, so I can meet the demands of our business overall."

Copy courtesy of Hitachi Construction Machinery (Australia) Pty Ltd

* HCA is the exclusive dealer for Bell ADT Trucks within Australia.



Additional 14 ADTs further Chepstow Plant and Bell relationship

Continuing its long-established relationship with Bell Equipment, Chepstow Plant has announced the purchase of fourteen new E-series trucks, increasing the contractor's substantial Bell fleet to thirty machines.

Ten B30Es and four B40Es join Chepstow's hardworking task force and will be put through their paces, working for a variety of customers on critical payload management operations, where the Bell machines' standard

on-board weighing feature will be invaluable. Due to the payload being measured from three different points on the truck, this feature is proven to be accurate to five percent irrespective of the amount and distribution of the material being loaded.

This recent consignment is the latest order to come from a successful 17-year association between the two firms. During that time, the companies have formed a mutually beneficial relationship, built not only on sale and supply requirements, but on a programme of safety-based research and development.

Performing as a complete mineral, aggregates and earthmoving contractor, Chepstow Plant has become renowned for placing safety as its utmost priority. Consistently striving to create a safer environment as standard, the contractor has set the bar as an industry front-runner, providing clients with the safest machines on the market.

Chiming with Chepstow's safety principles, Bell Equipment considers its machines' integral safe tipping solutions as 'non-negotiable' essentials, regarding its included vehicle software as being as fundamentally important as the engine itself.

With Bell UK as a supplier and Chepstow Plant as safety research partner, the two firms have, in conjunction with the development teams at Bell South Africa, helped progress Bell Equipment's Safe-Tip

software over recent years, by assessing the movement of their machines along with payloads and environmental working conditions.

By cross-referencing a vehicle's angle using an integral inclinometer, Bell Equipment's Safe-Tip software performs in collaboration with a computerized on-board weighing feature, situated within the vehicle's cab. A pitch-and-roll sensor then sets appropriate limits for safe bin-tip activation.

The capabilities of Safe-Tip, in addition to the inclusion of Fleetm@tic® technology – Bell Equipment's satellite-based fleet management system – and its multiple advantages, combine to create an ADT with the design, safety mechanisms and power to meet Chepstow Plant's exacting requirements.

"It's been beneficial for us to contribute towards critical research and development that heightens the tipping safety of plant machinery. Being part of the process has given us insight, as well as the confidence to return to Bell for this latest phase of machines," says John Corcoran, Managing Director of Chepstow Plant.

"We consider Bell Equipment a great safety partner within the industry. The company has invested heavily in research to develop systems that prevent its ADTs from performing unsafe or overloaded tips, and the technology to make its machines real contenders in the increasingly digital, working quarry environment.

"The partnership has served us well, and we hope it continues for years to come."



Bell ALC is a 'game changer' for US customer support

After its first year of operation it's safe to say that the American Logistics Centre (ALC) has been a pivotal addition to Bell Equipment's business for both the North American and Canadian distribution companies and customers. This stands as testimony to the group's 'strong reliable support' ethos.

Looking back at the establishment of the ALC, President of Bell Equipment North America, Neville Paynter, recalls that in December 2017 the BENA team delivered a record year in truck and parts sales and achieved a 10% market share in just three and a half years of being back on US soil. "With a fast-growing population of Bell ADTs, we needed to focus on delivering the 'strong reliable support' that keeps new customers coming back to the Bell brand for more.

"BENA was delivering technical training and technical support to dealers and customers through distributors in Canada and the USA. We had warehouses for parts support but our parts support and delivery to the market seemed to be mediocre. Using distributors, we felt at a disadvantage in terms of

support knowledge on current and previous models. At the same time, competitors were advertising aftersales promises to customers, which we realized we would struggle to emulate unless we had a fundamental and intentional change in our approach to the business."

A sound business case

The business case for the establishment of a Bell-owned parts warehouse, the ALC, was approved after a thorough investigation and analysis. Three important factors contributed to the final decision;

- Bell Equipment's control of on-time parts support and delivery from inventory on USA soil would provide the opportunity to exceed competitor promises and exceed customers' service expectations.
- The establishment of the ALC

would send a message to our customers that Bell is committed to the support of our ADTs and the investment our customers have made.

- The ALC would provide the Bell Group with an opportunity to source more components from North American-based manufacturers and vendors to assist with reducing costs and improving logistics.

Since BENA's location offered insufficient storage space to house the parts inventory that was envisaged for the ALC, the team set about finding a new home. Within four months the team had located a suitable warehouse within minutes of the existing BENA offices. Negotiating out of their current lease and into a lease for the new building at very good terms, ensured funds were

available to cover the office refurbishment at the new location. The team got stuck into cleaning the new warehouse and doing some much-needed maintenance themselves to save costs. Racking and shelving were sourced from a used vendor and installed at 60% of new and by end of May 2018 refitment work was completed to a stage where the BENA staff could settle into their new ALC location and open for parts business.

In the meantime, hours of work went into understanding, evaluating and deciding the right parts and quantity of inventory at the ALC, since much of the supply history to this territory was unknown or documented in several different locations. Fortunately, the Global Logistics Centre (GLC), in Johannesburg and the European Logistics Centre (ELC) in Germany, which had been supplying the distributors in the territory, had reasonably forecasted inventory already on hand. Forty-foot shipping containers were packed and shipped as quickly as possible from the GLC and ELC destined for the ALC.

The first year

"The past year at the ALC has been an incredibly exciting time,"

says Neville. "The team at BENA more than doubled in size to enable smooth processing of weekly incoming inventory and daily customer order expediting. Warehouse systems had to be learnt as well as processes tried and tested, then embedded and communicated internally and externally. Parts price lists were negotiated, changed and setup. We had daily visits for a month by logistics vendors trying to entice business. Shelves and racks were planned and marked for inventory locations and were packed as soon as the containers arrived. At last, by January 2019 the ALC looked like a parts warehouse."

Today the ALC is fully functioning in sales and support to the North American dealer and customer base, supplying 92% of all parts which are destined for the customers in this territory, with the GLC and ELC supplying the balance in emergencies.

"Having additional parts available to ship immediately, in the same time zone with little or no cross-border documentation has made a huge impact in getting parts to customers on-time," says Neville. "It has also enabled us to eradicate duplication and streamline processes, producing greater efficiency for vendors, logistics suppliers, distributors, dealers and customers."

By the end of 2019 BENA would have installed a significant number of Bell ADTs into the North American market over the past six and a half years, so parts support growth is a given. BENA staff understand the absolute importance of customer satisfaction and their goal is to reach 95% first pick availability by the end of 2020.

The ALC also boasts a Reman component workshop, which offers engine, differential, transfer case, and transmission rebuilds to the North American customer bases - another support growth area and benefit for the customers.

Neville concludes: "The sourcing project at the ALC has just scratched the surface of opportunity in 2019 and supplies mainly the GLC with parts and components sourced in the USA. This is a great business opportunity which was realized and executed well with customer support as the first driving focus. It could not have seen success without managements' foresight and approval, and many hours of work to support and assist the venture by many of the Bell folk in Germany, Richards Bay, Johannesburg, and the USA. The team has worked tirelessly on pricing, logistics, forecasting, resourcing, picking and packing as well as expediting parts over the past 14 months."



New 45-tonner rounds out the Bell 4x4 range

The newest edition to Bell Equipment's two-axle Articulated Dump Truck (ADT) range, the B45E 4x4, is quickly finding its niche in the market following its global launch at Bauma Munich in April, reports Bell Equipment ADT Product Owner, Tristan du Pisanie.

"The flagship B60E 4x4 has been uncompromisingly engineered for high productivity in mining under all weather conditions and the B30E 4x4, at the other end of the scale, has been internationally successful as an economical solution in bulk handling. However, the B45E has emerged as the true mean, attracting considerable interest from small and medium-sized mining companies," says Tristan.

"As successful as our 60-tonner is in the various markets due to its great flexibility and economies of scale, many quarry operators with traditional fleets of 40- to 50-ton rigid trucks believe the B60E is too large to include as an all-weather backup or supplementary machines. In these circumstances the B45E 4x4 often fits better into a company's fleet where they provide greater efficiency at higher capacity compared to

small rigid dumpers. They are also able to take over overburden or restoration tasks that were previously reserved for traditional 6x6 ADTs," he explains.

Proven technology

With the front half of the truck being essentially the same as its 6x6 counterpart, the Bell B45E 4x4 is derived from proven high-volume technology and decades of experience. Powering the truck is a 390kW/2 460Nm inline six-cylinder engine from Mercedes Benz, optimized for off-highway use by MTU. This, combined with the Allison seven-speed automatic transmission, contributes to outstanding driving performance while delivering the low fuel consumption typical of Bell ADTs. Wet brakes on both axles ensure safe deceleration and work in conjunction with the Jacobs Engine Brake®, to provide the multi-stage programmable

automatic retardation. The standard Bell cab is spacious, offering great visibility and comfort while ensuring safety and productivity. This is achieved through a comprehensive package of productivity, safety and ease-of-operation features, based on real-time data collection by the truck's sensors (on-board weighing, pitch/roll sensor, etc.).

In designing the rear chassis and the 25m³ bin, the company followed the design of the Bell 4x4 flagship, the B60E which has been optimized for tough mining applications. A rigidly mounted 55-t-axle supplied by German manufacturer Kessler with 21.00R35 twin tyres ensures a robust solution with a nominal payload of 41 tonnes. At the front the truck rolls on 775/65R29 tyres that boast high load carrying capacities and high lateral stability, an essential characteristic for a machine

intended for challenging underfoot conditions. To improve ride comfort, the B45E 4x4 is equipped as standard with the Bell 'Comfort Ride' adaptive front suspension system.

Like the Bell B60E, the B45E 4x4 bin concept is along the lines of a rigid dump truck rock bin with bottom-mounted telescopic tip cylinders. Thanks to its wide geometry and flat-bottomed floor, the 41-tonner fits in well with typical quarry loading equipment and offers better filling characteristics than the longer 6x6 ADT bins of the same volume. When carrying sticky material such as clay, optional body heating helps to minimize carry-back when tipping. Additionally, Bell Equipment has found that their 4x4 bin configuration, which doesn't have the traditional ADT dovetail, is considerably better at minimizing carry-back than their 6x6 counterparts. With a fully programmable maximum tipping angle of up to 55° relative to horizontal, the short bin body reaches a tipping height of only 6 394mm, which can be an advantage when operating with overhead structures (for example hoppers and crushers).

Flexible Allrounder

"Target applications for the B45E 4x4 include small to medium-sized mining or quarrying operations with lower production tonnage as well

as larger sites with difficult underfoot conditions. Finally, there could be operations requiring selective mining in very specific areas as a top-up on their main production volumes."

Despite a number of competitors having dropped 40t rigid dump trucks from their range, many customers in Europe are continuing to work with rigid trucks in the 40-ton class. "With comparable performance to rigid dump trucks on well-tended, dry underfoot conditions, the two-axle articulated trucks score in all-weather conditions when the haul roads deteriorate or become slippery. Additionally, the loading site is often a challenging environment to negotiate and undulations are common. The all-wheel drive and oscillation joint configuration are the reasons for this and they also provide for safer machine operation. This means that the machine is also suited to stripping or overburden work, which provides higher utilization and improved return of investment."

For today's quarry operations, with lower maximum speeds and shorter hauls, Bell 4x4s offer a more economical drive concept compared to 4x2 rigid trucks that are designed for high top speeds over long distances. "The lower fuel consumption has a direct effect on the operational costs.

Another very important factor in this regard is tyre wear," said Tristan. "After several thousand operating hours, in direct comparison with 4x2 rigid trucks of the same size, operators reported a 65% lower wear on the rear twin tyres of the Bell B60E. Here again, the all-wheel drive and the consistent traction on each wheel ensured by the oscillation joint seem to be the difference."

With regard to tyre wear on hard and abrasive haul roads, the two-axle ADT concept offers further advantages over conventional 6x6 trucks. The shorter rear chassis means 4x4s are more manoeuvrable than comparable three-axle trucks, whose middle and rear tyres tend to scuff around tight bends. This increased wear results in higher tyre and route maintenance costs as the scuffing tyres tend to churn up the road. The use of 4x4s in opencast mining requires less shunting at narrow loading points or at the primary crusher. In tunnelling or in underground mining the smaller turning circle is particularly significant: "Here, we have already successfully placed several 4x4 30-tonners. Specific customer requests for the more powerful B45E 4x4 prove that this derivative of our standard 6x6 machine can offer a real alternative for this very special market segment," concludes Tristan.



The 25m³ rock bin of the Bell B45E 4x4 offers a low tipping height at crusher housings or in underground applications.



The B45E 4x4 has successfully brought the conceptual advantages of Bell Equipment's two-axle ADT to the 40-tonne payload class.

Season's greetings to all our Bell Bulletin Global ADT Edition readers

As this is the last edition of the magazine for 2019 we would like to take the opportunity to wish all our readers a safe and peaceful festive season and best wishes for the New Year.

Thank you for your support during the past year. We trust that you have enjoyed reading our publication as much as we've enjoyed putting it together for you and we look forward to bringing you more inspirational stories in 2020.

The Bell Bulletin Team

The Bell logo is displayed in a bold, italicized, black font with a white outline, set against a dark background.