

the bulletin

GLOBAL ADT EDITION - VOLUME 1 - 2018



**Strong Reliable Machines
Strong Reliable Support**

BELL



Intelligent off-road trucking keeps Bell in the driver's seat

We've come a long way since our first A-series Articulated Dump Truck. Not only have our looks improved but our new E-series trucks are pretty impressive inside too; and don't get us started on the clever features under the hood.

Over our five generations of trucks we've listened to our customers and pioneered ground-breaking innovations that make our trucks smarter and our customers' lives easier.



Apart from being smart and safe, our trucks deliver on lowest cost per tonne, highest productivity, fuel efficiency, ergonomics, safety and reliability. Fleetm@tic®, our satellite fleet management system, bears testimony to this by recording productivity and machine data, so you can keep your finger on the pulse of your operation.

With models to meet any need and our extensive customer support footprint, you can rest assured that we're working hard to live up to our motto:

Strong Reliable Machines, Strong Reliable Support.

BELL

Strong Reliable Machines • Strong Reliable Support
www.bellequipment.com

contents

Insight by Group Chief Executive Officer Leon Goosen - **5**

Successful Intermat 2018 for Bell Equipment - **6**

A second chance proves successful for SC Rock and its Bell ADT fleet - **8**

Bell B30E 4x4 shows its worth at Guggenberger - **10**

Iron Horse Contractors invests in Bell B30Es - **12**

High praise for Bell Timber Truck in New Zealand - **14**

Pre-owned Bells sparkle for TCL on Lesotho diamond mining project - **18**

Windhoek Renovations meets the plant hire needs of massive Neckartal Dam project - **20**

AFS Earthmoving chooses Bell Equipment's B30E for the sixth time - **23**



Cover

Windhoek Renovations supplies an extensive range of plant hire equipment to both local and regional construction projects...*read more on page 20.*

Published by the Marketing team for Bell Equipment customers and friends worldwide.
E-mail: bulletin@za.bellequipment.com
Website: www.bellequipment.com

We've never been to the moon... but our innovation is out of this world.



We were the first OEM to:

- Develop On-Board weighing.
- Manufacture a 50 and 60 ton ADT.
- Incorporate Tip Safe to prevent bin tipping at an unsafe angle.
- Develop I-Tip for automatic bin tipping at the touch of a button.
- Install Turbo Spin Protection that varies engine idle time according to how hard the engine has been working.
- Introduce satellite based telematics - Fleetm@tic®

**We are confident that if ADTs were ever needed on the moon,
our leading innovation would be up to the task!**

BELL

Strong Reliable Machines • Strong Reliable Support
www.bellequipment.com

insight

It gives me great pleasure that one of my first tasks as Group CEO, having been recently appointed on 1 June 2018, is to write this message to you, our customers.

Firstly, I congratulate Gary Bell on his 'retirement' following an exceptional 48 years of service with the company, 34 years of which as Group CEO. Gary will still be involved in the business as

Chairman of the Board and I know he is looking forward to spending time with our customers and dealers around the world in his new role.

I would also like to take the opportunity to thank him for the trust that has been bestowed on me and for his

mentorship over the past 11 years that I have been with the company. His passion and energy for the business has been contagious and his empathy towards people sets him apart.

While he has left big shoes to fill, there is no doubt that the Bell executive team and I are fully committed to building on the Bell legacy that has been created by the Bell family over the generations. Part of the Bell appeal is our family culture, which we will vigorously defend and protect along with the values that are contained in our 1-Bell philosophy.

We, at Bell, look forward to working with each of you and continuing to build our relationships as we write the next chapter of the Bell history over the years to come.

Thank you for your support!

Leon Goosen
Group Chief Executive Officer

Bell Equipment Offices

Australia (Perth)+61 (0) 8 9355 2442
France (Dun Le Palestel).....+33 (0) 5 55 892 356
Germany (Alsfeld)+49 (0) 663 191 130
Zimbabwe (Harare) +263 (4) 447 374/9
South Africa (Jet Park).....+27 (0) 11 928 9846
South Africa (Richards Bay) +27 (0) 35 907 9111

Zambia (Kitwe)..... +260 977 770 678
DRC (Lubumbashi) +243 82 857 9784
North America (Texas Houston).....(281) 469 2358
United Kingdom (Staffordshire)+44 (0) 1283 712 862
Namibia (Windhoek) +264 61 226 021/2/3



Successful Intermat 2018 for Bell Equipment

“We are hugely satisfied with Intermat 2018,” comments Gary Bell and Leon Goosen, the outgoing and incoming Group Chief Executive Officers of the global ADT specialist, Bell Equipment.

The Parisian show, held in April, was the last global event before the official handover of the company’s CEO position to Leon Goosen and Gary Bell’s appointment as Non-Executive Chairman of the Board of the Bell Group on 1 June 2018. “Our aim was to demonstrate our commitment to the global ADT market and we succeeded with in-depth interactions with customers and partners throughout the show,” adds Leon.

Bell Equipment’s leadership highlight the strong interest of French customers in all ADT-related sectors. “We were able to welcome existing and prospective customers from our

national and southern European market regions. In addition to the numerous and promising leads, we experienced an optimistic sentiment about the market from our distributors and their customers,” says Céline Gutierrez, Managing Director of Bell Equipment France. “We’re ready to meet these demands with our highly motivated team and a growing variety of products which offer the right solution for individual requirements.”

From a niche into the mainstream
The most recent example of how Bell Equipment identifies customer needs and translates them into

competitive solutions, is the ADT specialist’s new range of articulated 4x4 trucks. Following the successful introduction of the sixty-tonner Bell B60E two years ago, this year’s focus was on the B30E 4x4. Sharing the proven base of the company’s conventional three-axle thirty-tonner, the new two-axle truck offers important advantages for operations that do not require extreme 6x6 off-road capability.

“The Bell B30E 4x4 is an alternative for smaller quarries or other operations within the aggregates sectors. Without the typical tyre scuff that a three-axle ADT experiences when operating on harder surfaces,



At the time: Leon Goosen (CEO Designate), Gary Bell (CEO) and Céline Gutierrez (Managing Director Bell France) were all well pleased with the company’s success at Intermat 2018.

the articulated two-axle concept guarantees substantial savings in tyre wear,” explains Tristan du Pisanie, ADT Product Marketing Manager. “Not only does the tyre scuff compromise tyre life, it also damages the road surface. Therefore, the two-axle truck reduces site maintenance requirements.”

Thanks to the 4x4 drivetrain, the Bell B30E can safely operate in more challenging conditions than conventional rigid quarry trucks, tippers or tractor-trailer combinations. “Our 4x4 customers do not have to stop operations due to rain,” says Tristan, “and many of these B60- or B30-owners have been able to extend their normal operating season or even use their 4x4 ADT for stripping of overburden.”

The positive customer feedback on both the B60E and the B30E 4x4 has led Bell Equipment to present the B45E 4x4 as an addition to its 4x4 ADT range. The two-axle version of the B45E, with twin-tyres on the rear axle, delivers all advantages of the 4x4 concept for payloads over 40 tonnes. “It is envisaged that this will become an alternative to 4x2 rigid trucks in medium to large quarries or mining operations.”

“Today we are offering the most comprehensive 6x6 range with seven models providing payloads from 18,0 to 45,4 tonnes. Our new 4x4 quarry trucks provide a specific solution to a specific customer need and we look forward to both adding value and increasing our presence in the market,” says Tristan.

Important global investments
To meet the growing global demand for Bell Trucks which recorded a +30% increase in unit sales in 2017, the company announced a major investment in its global production and aftersales structures.

A new 12 000m² facility will be built at Bell Equipment’s European ADT plant in Kindel-Eisenach, Germany to accommodate the fabrication of all ADT bins for the Northern Hemisphere. The significant investment will be operational from the second quarter of 2019. “Most of the high-quality steel for our bodies is sourced in Europe, therefore this will optimise our supply logistics and allow us to react quickly to customer demand,” explains Tristan.

The decision will not affect capacity at the South African production headquarters in Richards Bay. “We are experiencing an upswing in all ADT markets around the world. As a supplier, we

want to guarantee short lead times and good availability throughout our whole range,” says Tristan. Part of this is the commencement of two-shift production at Eisenach-Kindel from the middle of this year to meet the growing demand.

Another important investment in 2018 is the commencement of the new American Logistics Centre (ALC). Located in North Carolina, the facility will be ideally positioned to service the expanding dealer network and rapidly growing truck population in North America. The ALC will operate in cooperation with the company’s European Logistics Centre in Germany and the Global Logistics Centre in Johannesburg, South Africa.



A second chance proves successful for SC Rock and its Bell ADT fleet

When Bill Griste decided to run an aggregate and rock mining distribution outlet again, he knew that his former Carolina Aggregates Product's Goretown Mine was a sound business opportunity.

Goretown Mine, near Loris in South Carolina, USA, has many millions of tons of marine limestone buried within the earth and this rock makes for excellent roadbuilding material throughout North and South Carolina.

Bill first opened the Goretown Mine in 1998 after discovering the deposit. After several years he sold the business to an Alabama-based company, Grand Stand Aggregates, before re-acquiring it in 2014 and renaming it SC Rock LLC.

"I wanted to make a successful, prosperous business. We are sitting on about 70 million tons of deposit here," he said. "The math convinced me to go back into this business."

He just needed the right equipment to process and haul the rock for SC Rock to be successful.

The mine already had machinery from May Heavy Equipment, a Bell dealer with locations throughout the two Carolinas, and Bill immediately realised the value of maintaining that business relationship.

On May's recommendation of the 50-ton (45,4t) Bell Articulated Dump Truck (ADT), SC Rock now owns two B50D workhorses that it needs to keep the mine successful for several more decades.

The company's mine, processing plant and product yard can handle from 400 000 to 1 million tons

(362 873 to 907 184t) per year of various sized rock. This rock is used in concrete, pipe bedding, asphalt and road building, among other things.

The mined rock goes through the company's processing plant, which screens and crushes it before it is made into either a clean stone product or road base. Several washed aggregate products are made, such as 89s for concrete companies, 5s for septic tank beds and French drains, 57s for water and sewer projects and washed screenings for asphalt and concrete. The unwashed material is processed into fine base, commercial base or NCDOT or SCDOT spec base.



more economical, but with tremendous strength," Bill explains.

The durability of the mine's product is because it is a recrystallised limestone material that seems to get tighter and more compacted the longer it is used, with a cement-like quality to it. "Another great feature of our material is that it is fairly porous, so if you want stone that will drain water, we have it.

This is a pretty wet area that we are building in, so our customers need a material that will help stabilise the ground, while also letting water pass through."

Bill adds: "We are a state-approved aggregate supply source for North Carolina and South Carolina, so our material can be used for anything that the states approve for aggregate, like concrete and asphalt on highways and major roads. Plus, we do a lot of private work for both developers and individuals."

Ideally located in the northeast corner of South Carolina, near the Myrtle Beach area and just a few miles from the Atlantic Ocean, many of the company's products are used on the region's roads, which are often in need of repair due to high tourist traffic and the coastal climate.

One of the current road projects being served by SC Rock is a widening of S.C. Highway 707 near the south end of S.C. Highway 31, also known as the Carolina Bays Parkway, just to the west of Myrtle Beach. The Goretown Mine also supplied stone for the Parkway itself during its construction.

"A lot of the roads around here are being built using a cement-treated base specified by the state. That base is first put in place under the asphalt. We supply base for that kind of work a good bit. One of the benefits of our material is that it requires less cement than, say, a granite-based material, making it

recommended the Bell trucks and in looking at some of the specs and their production so far, it looks like they will do the job."

The Bell trucks bring material from the pit and move it into SC Rock's feed hoppers. The new haulers are also vital in getting product to more distant areas from the plant and it is SC Rock's hope that they can one day have only 50-ton trucks in their hauling fleet.

Among the other equipment moving around SC Rock's 700-acre spread are machines from other OEMs including two wheeled loaders and a pair of dozers, an excavator, other off-road trucks and several mining machines.

"All of these machines have given us great service," Bill said. "We have lots of different kinds and makes and May has the capability to work on all of them when we need them to. We have our own mechanics, but when we need something done that is beyond what we feel we can do, we call them in to solve the problem.

"We're happy that they have helped us get back in a position where we can continue to grow in the marketplace for many years."

Article and photos courtesy of Construction Equipment Guide.



Bell B30E 4x4 shows its worth at Guggenberger

A Bell B30E 4x4 has been working in production, material handling and overburden removal at the Guggenberger gravel plant in Mintraching, Germany since the end of October 2017 where it replaced a long-serving Bell 25-ton truck. The decision to choose the 4x4 two axle truck concept was taken due to its specific advantages.

With about 500 employees, Guggenberger GmbH is a construction company focusing on building construction, civil engineering and road construction that was founded in 1949 and is based in Bavarian Mintraching, near Regensburg.

Back in the 1950s, the family company opened a gravel pit in the Danube flood plains. With stationary aggregate, asphalt and ready-mixed concrete processing facilities, the production of construction materials was expanded in the 1960s and has subsequently been modernised. Today, around 20 employees are working on site, predominantly to meet the company's own demand for construction materials in the region.

Guggenberger extracts 200 000 tonnes of river gravel per year in Mintraching. The suction dredger excavates to a depth of 6m, the material is then transported on a land conveyor to the processing plant. When working with the dragline excavator, during stripping of the 60 to 70cm overburden layers, or in the restoration of exhausted pit areas, conventional loading and transport equipment is used with excavators,

wheeled loaders and articulated dump trucks (ADTs). This equipment also works in production and material handling at the processing plant.

For twelve years, up until mid-2017, a Bell B25D accumulated 13 500 hours performing a range of

Beuthauser Baumaschinen, the company decided to invest in the two-axle Bell B30E 4x4 truck, which promised best value and better long-term cost efficiency under specific local conditions.

On their 1 500m long cycles on the well-maintained roadways in Mintraching haulers do not require 6x6 traction. Accordingly, the 4x4 two-axle truck scores with very low tyre wear. It also shows off its strengths with a relatively short total length and small turning radius in a traffic network that is often narrow. In direct comparison with the three-axle Bell B30E, the 4x4 offers a turning radius of 14,6m, some 1,3m smaller than the traditional 6x6 ADT. The shorter rear chassis with redesigned dump body makes manoeuvring much easier. Without the scuffing middle axle tyres, the roadways between the stockpiles are spared, which accommodate the conventional tipper trucks that also run there.

The front of the truck is identical to the conventional B30E, including articulated steering and the oscillation joint, while the rear axle comes with reliable B40 and B50 componentry. The 246kW Mercedes-Benz-turbodiesel engine with Allison six-speed automatic

transmission guarantees superior propulsion, while the pre-selectable gearbox retarder and large-diameter wet brakes on all wheels ensure safety. Bell Equipment's most comprehensive standard package of drive and load assistance (on-board weighing, pitch and roll sensors, etc.) ensures safe and comfortable operation.

With a nominal 28 000kg, the two-axle truck offers the same payload as its 6x6 30-tonne equivalent – the high strength, solidly mounted 36t rear axle is fitted with 29.5R25 tyres (front: 23.5R25). The redesigned bin with a flat floor offers a capacity of 18,5m³ (SAE 2:1), one cubic metre more than the dovetail 6x6 body. In Mintraching, the B30E 4x4, fitted with an automatic tailgate,

gives easier and faster loading of easy-flowing sands and gravel from the silo thanks to the shorter bin. During tipping, the shorter hydraulic cylinders translate into faster dump cycles while the low tipping height of B30E 4x4 is important for specific applications such as tunnelling or underground mining. The standard 70° tipping angle can be electronically set to a smaller angle.

The wide opening scissor tailgate enlarges the volume of the B30E 4x4 close to 20 cubic metres (SAE 2:1).



Iron Horse Contractors invests in Bell B30Es

Despite only having a few years under its belt, Iron Horse Contractors, based in Raleigh, North Carolina, in the USA, has rapidly grown into one of the most recognised construction companies in the greater Raleigh Durham area.

John Santoro, owner of Iron Horse Contractors, has been in the business a bit longer. "My father was a farmer in upstate New York. He had tractors, backhoe loaders and bulldozers, so I've been around heavy equipment pretty much ever since I can remember," said John. "I started working for my father when I was in third grade. My summers were spent on the farm. At first, I started out driving a farm tractor, hauling stuff from the buildings down to the fields and from the fields back to the buildings. Then, I began using his bulldozer to clear the land, and I dug ditches with a backhoe loader."

Later, in high school, a visit to Raleigh would determine where he would eventually put down roots and start his business. "As a senior in

high school, I came down and visited, and I really loved the area," he said. "I went back up and went to school for a couple of months and told my parents that I was going to move down to Raleigh. I had to wait tables at Applebee's and a couple other restaurants to get myself finished with school."

After finishing high school, John started building decks, often in 90+ degree weather. "I remember working in the heat and watching this guy in a dozer go back and forth grading," John said. "I thought to myself, 'those hydraulic muscles don't get tired no matter how hot it is. He doesn't look like he is in there sweating very bad. He's got his air conditioner on.' I said, 'I am done with building decks.'"

Shortly after, John applied for a position at Brinley's Grading in Raleigh and went to work for the company in August of 1998. He worked for the company for a few years and eventually moved on to CC Mangum Contractors, now known as Fred Smith Company, installing utilities. Within a few days, he was appointed the utility foreman for his crew. He worked for them for a couple years, then worked for Blue Ridge Site Development for several years.

His time working with other contractors in Raleigh, John said, honed his skills — from estimating to project managing, to the day-to-day business. He worked for seven different contracting firms during this time. However, he spent most of his

career working at Blue Ridge Site Development, under the direct supervision of Ron Biggers, the owner. This provided him with the experience he needed to start his own business, Iron Horse Contractors.

"I wanted to dabble in the land development side," he said. I tried it but didn't care for that side of the industry. I wanted to be the contractor moving the dirt. There is nothing I enjoy more than getting a set of plans and going and building a project. I like being the one doing the work instead of being the one telling them to get the work done."

"I always said I wanted to start a company and do my own thing by the time I was forty. I was always in a foreman position or a superintendent. I have worked for everybody else and it has always ended in me going somewhere else or me going back. It was just the same result every time. So, I figured the only way to change that result was to just jump in with both feet. I sold my house and started Iron Horse with the \$100 000 profit from the sale."

John brought in a business partner not long after - Jim Lindsley, a friend from upstate New York where John is from. Lindsley owns one of the largest roofing companies in that area.

Iron Horse Gets Started

Iron Horse Contractors' first project was a pond conversion for the Halle Building Companies. These ponds are used for temporary sediment basins during construction as a collector for all the storm runoff from the jobsite.

Later, the company won larger bids, including one for the Riverstone sub-division project. "It was seated on 100 acres, and it was a right-of-way job," John said. "We only did the streets and the storm drain because it was a well and septic job."



It was a job just under one million contracted, but after all the change orders and field adjustments, it ended up coming just over a million dollars for our very first project. It was pretty sweet to start out the gate with a job that had 70 000 cubic yards of dirt on it."

John rented Bell trucks and Hyundai excavators for the job from May Heavy Equipment. "Getting started in this industry is hard. It is capital intensive," he said. "The \$100 000 I started with was used to market the business, as well as acquire the office space and get things going. \$100 000 in this industry is not very much by any means. It wasn't like I had \$100 000 to put on equipment. I had to have some of that for payroll to be able to get our guys going. We were building up. Jim had some

equipment that was bought and paid for which he sent down to help along with the cash from the house sale.

"May Heavy Equipment stepped up even when I told them that I wouldn't be able to pay them right away. I told them, 'look, it is not going to be 30 days by the time I can pay you; I need that money for payroll. It is going to be 60 to 90 days or maybe even longer before we can pay you to get this thing going.' They stood right there with us, hand-in-hand. Those guys were amazing."

So far, the company has purchased five 30-ton Bell ADTs, two 330 Hyundai excavators and a 740 Hyundai loader along with two trench rollers from May Heavy Equipment. John said that an in-house mechanic does some of the service, but they also call on May Heavy Equipment for some of their service needs.

"If it's anything that is electronic and digital, May comes out and handles that," he said. "They also service equipment that is rented or leased. May offers great service; they have done a great job for us."

In total, the company has a fleet of more than 40 pieces of machinery. These are used for what John calls 'turn-key' site development services. The company performs grading, erosion control and utilities but sub-contracts out other work. Iron Horse Contractors has an unlimited license for Highway and Public Utilities.

Article and photos courtesy of Construction Equipment Guide.

High praise for Bell Timber Truck in New Zealand

Bell Equipment is extending its global product offering with a Tier 4 version of its 20-ton truck, the B20E 6x6.

Whangarei-based Rosewarne Cable Loggers in Northland, New Zealand got its first purpose-built 6-wheel-drive Bell Timber Truck seven years ago through local agent, CablePrice. Another three have followed with the latest and most capable version, a TH403E model, now working on the Pouto Peninsular, south of Dargaville where the company is harvesting a Maori trust-owned forest for Rayonier/Matariki.

When the Rosewarne team first came up with the idea of using an ADT it was partly for efficiency and productivity reasons. Over time, safety and environmental considerations have also become increasingly important, as the operation moved from large landings to compact landings that reduce land disturbance.

Lars Rosewarne explains: “We’ve been de-phasing that whole part of the harvesting operation for a while. It was done largely for health and safety reasons, because there was just too much happening on the landings and potential for things to go wrong. But we also realised that it wasn’t the right thing to do environmentally, creating such big landings – so reducing their size was another reason we went this way.”

The advantage of going with a purpose-built factory log transporter, as supplied by Bell, also meant it could be tailored specifically to meet the requirements of the Rosewarne operations, including lengthening the chassis to fit multiple lengths of logs. Previous ADT-based log trucks working for Rosewarne could only carry one packet, which reduced their effectiveness – for instance, a

single load of 3,9 metre logs amounts to just 12 tonnes.

“This is the first full-length machine we’ve had, which has made a real difference,” adds Lars. “It can take two bays of different-sized logs, which gives us flexibility and allows us to carry 30 tonnes of logs every load.

“Cost per tonne with a timber truck can be significantly less than other systems. This is all down to its productivity, given it can carry more timber than a forwarder and has faster ground speed. The timber truck certainly refines the concept of log forwarding in certain applications.”

When Lars and his team sat down to specify what they wanted in a timber truck or long-range forwarder, they focused on the largest of the models built at the Bell factory in Richards Bay, South Africa.

A 6x6 was deemed necessary for the Northland forestry environment – all the previous ADT-based log transporters have successfully used this layout. Rosewarne has plenty of tracked loaders, so a crane wasn’t needed, and neither was a trailer because it would make manoeuvring in tight spots more difficult. But the ability to carry more logs became a serious point of discussion with CablePrice and Bell.

The longest of the standard bunks offered by the factory is around 7 metres in length, and at just under 3 metres in width, plus 1,34 metre bolsters, the load capacity equates to 39,6 cubic metres. That translates to a maximum load in the low 20

tonnes, depending on the logs.

A lengthened and beefed-up chassis allowed the bunk to be stretched by almost 3 metres in length, with the pair of rear axles re-positioned to accommodate the additional weight. Additionally, Rosewarne specified big balloon tyres so that weight is evenly spread over the ground, without cutting up the surface, which can be an issue with skidders, especially in wet winters.

Result: a tailor-made log transporter than can carry two packets of 3,9m log lengths, which boosts the carrying capacity to around 50 cubic metres and as much as 30 tonnes in weight. And, best of all, the work was engineered at the factory and covered by warranties.

The Pouto Peninsula is an interesting area; a long slither of land jutting south of Dargaville separating the northern part of the Kaipara Harbour from the Tasman Sea. While some dairy and sheep farms remain from the pioneering days, its mix of sand and poor soil is not very productive, so much of the land was planted in Radiata in the 1990s and those forests are ready for harvest.

It’s rolling country, with some steep sections that necessitate the use of a swing yarder to access certain blocks. But on the day that we visited Rosewarne, 78, the crew’s Madill was parked up while they attacked an easier ground base area just 200 metres from the main skid site, serviced by a twisting track that gets boggy when wet.

“It’s not ideal,” concedes Lars Rosewarne’s eldest son, Luke, who

is foreman of this crew, but the fact that the truck still managed to deliver 30-tonne loads consistently and in quick time, even when rain turned parts of the track to mush, does showcase the TH403E’s versatility.

The flotation tyres help but these soils are fragile, and it doesn’t take much to disturb them. That’s another reason why the Bell was introduced to the Pouto, as the skidder the crew previously relied on was causing too much damage to the ground. However, the skidder

has been retained to use on steeper and rough terrain or where they don’t wish to build a track.

Those stems still need to be processed out in the cut-over, at a place near a well-formed track for the Bell to collect

because the skid site is set up just to receive cut-to-length wood for stacking and loading out, not full-length stems for processing.

“We don’t want to be skidding into this site, because you’d have a bigger volume of wood here, plus a processor, then you’d be walking the diggers more up and down the skid and making much more mess,” says Luke.

“Doing it this way, the mess is left out at the landing or in the cut-over and the Bell comes to unload and it’s all sorted. It eliminates a lot of congestion on the skid.”

Since adopting this system, both the size of the yarder landings and the skid sites have shrunk in size,

reducing infrastructure costs and time in setting them up.

Luke has been impressed with how the Bell has performed: “It’s pretty quick, provided you run it over a nice piece of road. You won’t get it into the same places you’ll get a forwarder into – it’s a completely different sort of vehicle – but it is doing a good job for us.

“Fuel consumption is great, it hardly works, if you know what I mean and then only on the drive in when it’s fully laden. On a flat track it’s not really working that hard at all. We probably only fill it up once a week or twice if it’s really working hard, compared to a skidder that you fill up every day with 300 litres.”

The tank in the Bell takes 379 litres of diesel, so that makes it around four times as fuel efficient as the skidder in straight dollar terms, but when you consider that the TH403E is bringing 50% more wood to the skid site per trip and it’s making three trips for every two made by the skidder, the sums just keep adding up in the high-speed log transporter’s favour.

A large, traditional forwarder capable of carrying more than 20 tonnes of logs will use around 40% more fuel than the Bell and would probably make half the number of delivery trips in a typical day. So, it’s safe to say that the Bell is a key to making this operation meet its 500 tonnes per day target.

Time to sample the Bell TH403E in real life

When you first catch sight of the machine it looks more like a six-wheel forwarder than a log truck, highlighted by the articulated joint between the bunk and the cab/engine. But hop into the ROPS/FOPS protected cab and it’s the reverse, this definitely feels more like a truck.

The TH403E does look like it’s been engineered for the challenges of life in the bush, with large belly plates protecting vital parts like the transmission and plenty of steel encasing the prop shaft running back to the pair of rear axles under the sturdy box chassis.

The heavy-duty articulating joint that enables the Bell to pivot and turn in the same way a forwarder or a skidder does is very handy for manoeuvring around sharp corners and through pinch-points at each of the loading zones.

As any log truck driver or forwarder operator will attest, the most challenging manoeuvre is reversing when there’s a full load of logs sitting behind the big safety grille. The three mirrors hanging off each door do help, but Bell has thoughtfully fitted a rear-view camera at the end of the chassis and a huge screen on the dashboard to give the driver an unimpeded view behind the bunk.

The final step in our static inspection is to see what makes the TH403H so frugal with fuel and tipping that front hinged bonnet forward reveals the 6,37 litre, 6-cylinder Mercedes-Benz OM906LA engine that delivers gross power output of 205kW (275hp) at 2 200rpm and peak torque of 1 100Nm available between 1 200 and 1 600 revs. There’s plenty of room in the engine bay to work on the engine if required, and in the year since the TH403E began working in Pouto it has been completely reliable, so it may not see a repair technician very often, if at all. Good to see all the



regular maintenance items are easily reached from the ground.

Drive from the engine is transmitted through an Allison automatic transmission that features an integral retarder. The transmission provides six forward gears and one reverse, with lock-up applied to all gears to reduce slippage that is usually associated with a torque converter. Top speed in sixth gear is rated at a heady 50km/h, but even in the readily accessible third gear the Bell can still reach 23km/h, equivalent to the top speed of the fastest forwarders. In practice, it's the track that will dictate the speed it can travel.

Bell makes its own transfer case to provide a lower range when conditions demand more traction for the six big tyres to maintain momentum.

On easy runs, only the two axles at the rear can be used, but on challenging surfaces the driver can bring in the front axle by operating the centre diff, along with diff locks for the rear axles.

Bell has ensured the TH403E is provided with good suspension to cushion the ride for both the driver and the load, installing a semi-independent set-up at the front, utilising a leading A-frame supported by hydro-pneumatic suspension struts, with the heavy-duty rear layout consisting of pivoting walking beams distributing equal load through laminated rubber suspension blocks.

In place of the standard 23.5 R25 tyres, the Rosewarne team specified larger Michelin 750 / 65 R25 flotation tyres that make it easier to work on the softer, sandier surfaces without causing damage, particularly in wetter winter weather.

The large footprint created by those tyres requires plenty of steering effort and the hydraulic system has two-double acting cylinders and needs very little input from the driver to manoeuvre the truck.

Luke's uncle, Tony Rosewarne, who is filling in with the driving duties while regular operator, 76-year-old Dale Right is on medical leave, says it's an easy piece of equipment to pilot and very sedate when compared to the felling machine he normally controls.

Tony likes the Bell and puts it among the best machines he's operated in more than 40 years in the bush, saying: "This is a dream compared to some of the equipment I've experienced in the past. It's lovely inside, pretty comfortable. You've got a fridge in there for keeping drinks cool. Very easy to drive, even when you've got 30 tonnes on the back, it handles that pretty well."

One of the items he's most impressed with is the rear-view display that he uses when reversing up to the loading site, saying: "It's a huge screen and really helpful for reversing, I use it more than the mirrors."

Over the past year, the Bell has transported a variety of log lengths, from two packets of 3,9s to one packet of 3,9s plus a few longer lengths hanging out behind to single loads of 5,9s.

While it was purchased with long, straight hauls in mind, the TH403E can adapt to most situations and still deliver the goods.

The trick to making it work to its full potential is to tailor the operation to suit the strengths of the Bell, which is what Rosewarne Cable Loggers has done. They've rung the changes and it's paying dividends.

Story and photos courtesy of John Ellegard of NZ Loggers.



"Pretty cruisy, by comparison – all I've got to do is drive from point A to point B and back," he chuckles and then adds in a more serious vein: "It's still an important job, as I've got to get 30 tonnes to the skid regularly or they'll run out of wood pretty quickly."

That means anywhere up to 18 trips to the skid each day, which is not so hard when there's only 200 metres to cover either way but can be a challenge on a 2km round trip. Or when rain intervenes making the track much more difficult to traverse.

Q.

What does the lowest cost per tonne in the market look like?

A.



The evolutionary E-series from Bell Equipment. The B25E and B30E build on the class leading D-series range and offer the very lowest cost per tonne.

Talk to us about our advanced E-series – setting new benchmarks in truck management.

- Class leading fuel economy
- An ADT heritage spanning over 60 years
- Tier 4 with no DPF required
- On board weighing as standard

BELL

Strong Reliable Machines • Strong Reliable Support
www.bellequipment.com

Pre-owned Bells sparkle for TCL on Lesotho diamond mining project

For many companies, developing strong, successful working relationships with employees, customers and suppliers alike, is considered the best foundation for growth and achievement.

High mechanical availabilities from its fleet of Bell Articulated Dump Trucks recently saw a company specialising in civil construction and residue mining services getting involved in open-cast diamond mining, almost by default.

This happened despite challenging environmental conditions such as working in snow at high altitudes and in the arctic-like air of a diamond mine situated in the upper reaches of the Maluti Mountains of Lesotho.

Turnkey Civils Lesotho (TCL) is a Lesotho-registered subsidiary company of C & F Construction CC, a civil construction company started in Bethal, Mpumalanga by Chris van Niekerk and Francois Jordaan in 1989. Both founders had previously worked for a large South African civil construction company. Recent additions to the owners' team include civil engineer, Jan-Louw Botha and mining engineer, Albert van Wyk. We spoke to Albert about the company's Lesotho operations.

"This diamond mine is relatively new and we were first tasked with the construction of essential residue and civil infrastructure, which would enable our clients to start processing the mined kimberlite ore," he explains. "Our first project was the construction of the residue storage facility or tailings dam, and as this

facility is situated immediately below the mine but at the top of a valley, more material than normal went into constructing its wall which would be continuously raised as demand increased."

While this facility was being built TCL was asked to build two return water dams. This is where clean water is received from the residue storage facility after solids have settled out and these dams are in the

"You will appreciate that sustained and almost relentless hauling of soil and rock was the cornerstone of our operation on this mining project and for that we relied heavily on our fleet of Bell Articulated Dump Trucks (ADTs)," Albert continues. "Our company's relationship with Bell Equipment goes back to 1990 when we first bought three Bell 1766 Rigid Haul Tractors hauling 9-cubic metre dump trailers for work on a coal mine near Ermelo. We then moved on to buying Bell B30D and B20D ADTs, mostly new but with some selectively on the pre-owned market. We would also seek out low-hour machines at auctions."

Albert explains that when low-hour Bell ADTs are bought, their respective serial numbers are presented to Bell Equipment's Middelburg Customer Service Centre for verification on maintenance. With this information at hand, decisions are then taken on how to proceed further. C & F Construction has grown to become so familiar with the Bell D-series ADTs that they now undertake the rebuilding of the trucks themselves.

"Our fleet of Bell ADTs has really been the mainstay of our operation on this mining project, which is now a fully operational diamond mine," he adds. "In the early days of the project we hauled big loads down a very long and steep downhill ramp of approximately 20 degrees, which

made us very reliant on all-wheel drive traction, transmission retarders and exhaust brakes. Despite this, our Bell ADTs came through for us and, in the process we learned a lot about the equipment's performance and what we need to do to maintain the high mechanical availabilities that the project demanded."

The company is running a substantial Bell ADT fleet consisting of 18 Bell B30D ADTs, two Bell B30E ADTs and two Bell B20D ADTs.

"With our preventative maintenance policies and the confidence of doing our own rebuilds, we put very high hours onto our Bell ADTs during continuous operations. Our oldest Bell B30D ADT now boasts 46 000 hours and is still in daily use."

Albert has high praise for his chief mechanic on the mining site, Flip Kok, who has also trained local Lesotho mechanics. George Geringer and Mike Motlhaoleng from

Bell Equipment in Bloemfontein assist the TCL maintenance teams. Due to its remote location, urgent supply of parts to the mining site can take a day and for this reason TCL carries a large stockholding of essential consumable spares and service kits.

"We believe that the same trust we have in the Bell D-series ADT due to its simple and uncomplicated design, will be projected onto the Bell E-series ADT of which we currently have six units running here on the mine. We had bought two Bell B30E ADTs, each with a mere 1 000 hours on the clock, and in the space of 30 months we had put 12 000 hours onto each machine at an average of 416 hours a month."

Although TCL is contracted on dry rates - meaning the mine supplies the diesel - the company has not once overrun its projected monthly fuel consumption, a fact that Albert believes can be put down to the frugal and efficient fuel burn of the

Bell ADTs and their Mercedes Benz engines.

"We believe that the proven mechanical availability of our fleet coupled with the economical fuel burn and performance of our Bell ADTs prompted our clients to request that we start mining the open pit," Albert continues. "Although this is a temporary arrangement as we know another specialised mining contractor will take over in due course, we've managed to commence the mining with confidence and on average haul 12 000 tonnes of ore and 10 000 tonnes of waste rock between 1,4km and 1,9km in a 24-hour cycle."

"Whether we operate in Lesotho or South Africa we're confident that Bell Equipment will be part of our future endeavours and we look forward to seeing what new and innovative products the company brings to the market."



Windhoek Renovations meets the plant hire needs of massive Neckartal Dam project

The past few years were marked by international economic downturn, large scale unemployment, tighter regulatory controls, increased consumer education and awareness as well as financial challenges that had not been experienced before.

Traditional business models no longer seem to be working as effectively as before and doing business has become one of the most challenging tasks. Several companies have had to face foreclosure, staff retrenchments or mergers and acquisitions in an attempt to survive this storm.

Despite these challenges, Windhoek Renovations, a reputable Namibian company, has successfully managed to navigate its way through the storm and has continued to focus on its passion and core services offering. This sense of purpose has provided them with the courage to persevere and their inspiring journey will hopefully inspire other companies to keep trying despite the many challenges that abound.

Windhoek Renovations, a construction plant hire company, is located in Windhoek, the capital city of Namibia, and was founded by Robby Wirtz in 1987.

Robby, who had worked in the motor industry for several years, decided to leave this industry to establish and gradually expand a renovation and construction company. After having worked in the construction industry for several years he felt he needed a new challenge and started hiring out construction plant. In 2013 he saw that the demand for his services was beginning to exceed his capacity as a sole business owner and he approached Johan van Wyk, a friend and reliable businessman, to offer him a business partnership. For three consecutive years Johan had been one of the Top 10 Bell Equipment Salesmen in Africa and had also spent several years working

as a Namibian Sales Representative for Bell. It was during this time that he acquired extensive knowledge of earthmoving equipment, people and business practices. He has been a member of Windhoek Renovations since October 2013.

Since then, the Windhoek Renovations' fleet of yellow plant hire machines has grown from 35 to more than 90 machines and various attachments. Johan says: "We believe that Windhoek Renovations is unique because we are able to provide our clients with a comprehensive package in terms of their equipment needs." He adds: "If a client needs plant hire in the construction industry, we are able to offer them amongst others graders, compaction equipment, water tankers, wheel loaders and excavators, and we believe we are the only local company that can provide such an extensive range of earthmoving equipment for hire. We started to experience rapid growth ever since we took a conscious decision to supply a full service offering to clients, which judging by our growth is what our market appreciates."

Their latest project is the Neckartal Dam, which is currently being built on the Fish River and is located in the Karas region of Namibia. The country is located in the south-western region of Africa and boasts the most breathtaking and diverse landscapes in the world. It has been voted the number one travel destination and, with a population of 2,3 million spread across a total area of 824 292km², is among the most sparsely populated countries in the world.

The Karas region takes its name from the Nama word 'Karas' which means 'Quiver Tree'. This region covers 161 235km², which almost represents 20% of the surface area of the entire country.

The Karas region's arid, pest and insect free climate is nourished by the waters from the Orange and Fish rivers. These rivers make the area an ideal location for abundant, plush crops. This region has been acknowledged and praised for the size and scope of its four pristine and delicately balanced desert ecosystems, which are home to many of the planet's most exceptional natural wonders. These wonders include the Kalahari and Namib deserts and the Fish River Canyon.

The Neckartal Dam is set to become the largest water storage dam in Namibia and will provide an almost 5 000 hectare irrigation scheme with irrigation water for fruit cultivation. The construction of this dam is currently ranked as the most substantial project in terms of water storage construction in southern Africa.

According to published information, the idea of a dam on the Fish River was first conceived by German colonisers more than 100 years ago but did not come to fruition until Namibia won independence from South Africa in 1990. It then took more than two decades before a building tender was held. With a future height of about 80m and a crest length of 518m, Neckartal will be a curved gravity dam. It will have an intake tower housing pipe, valves and gates to bring the water,

captured by the future reservoir, to a chamber with two 1,5-megawatt Francis turbines.

The main contractor for the construction of the dam is Salini Impregilo, an industrial and dynamic group specialising in the construction of major, complex projects. Operating in over 50 countries with 35 000 employees, a turnover of around € 6,1 billion and a backlog of € 37 billion, Salini Impregilo is a global player in the construction sector and the leading global infrastructure company in the water segment.

One of Salini Impregilo's primary challenges was to find reputable and well-equipped local Namibian plant hire companies that could minimise the need to import earthmoving plant equipment from South Africa or from abroad.

It was during this stage of the project that Salini Impregilo contacted Windhoek Renovations to provide the backbone of the plant hire needs.

Windhoek Renovations supplies an extensive range of plant hire equipment to both local and regional

construction projects. Its unique service offering of an extensive fleet of Liebherr excavators that are fitted with specialised tools, such as hydraulic hammers, rock splitters, grinder and vibrating rippers and rammers was what gained Windhoek Renovations entry into the Neckartal Dam project and from there, demand for their other machines grew.

Robby commented: "Our approach was quite straightforward as we started off on a small scale by sub-contracting to another sub-contractor. We realised soon enough



that we had the capacity to fulfill more of the requirements in terms of equipment that was needed on this massive project. In time, we expanded our share of the project to include plant hire as well as direct contracting services. “As the local agents for Liebherr, we naturally support the brand but whatever they can’t supply, we source from Bell Equipment. In 2008 we purchased our first Bell 770D Grader and we’ve subsequently expanded our Bell Grader fleet to include 772G and 670G models as they are sought after in the hire market.”

Due to its 80m-high curved concrete wall the Neckartal Dam construction requires aggregate rock, which is being sourced from a quarry located fairly close to the construction site. The rock had to be extracted and Windhoek Renovations provided its range of Bell B40D and B30D Articulated Dump Trucks (ADTs) for this specific task.

Johan stated: “When working in the excruciating 42 degree Celsius heat and dust of such a quarry, hauling heavy dolomite rock to the crusher, nothing can match our Bell ADTs in terms of performance and durability. Our Site Foreman, Mike Lipman, does a sterling job of monitoring the equipment and has put in place

preventative maintenance processes to ensure sustained uptime of the equipment throughout the extraction from the quarry.”

Windhoek Renovations also carries a wide variety of Bell Equipment spares onsite and Norman van Wyk from Bell Equipment Namibia does his best to ensure that their orders for parts are executed accurately and promptly.

Having completed the excavation of almost 800 000m³ of earth and rock on the riverbed and the construction of abutments on either side of it, workers started building the foundation of the dam with the use of Windhoek Renovations’ earthmoving equipment, one layer of concrete at a time. This method is called roller-compacted concrete, which is faster and economically advantageous in respect to other methods.

In 2014 Windhoek Renovations identified the need for a 30-ton ADT and they decided to purchase a new Bell B30E ADT, which is being used specifically for this process of spreading roller-compacted concrete on the dam wall. This layering and compacting process is used to build a higher dam wall. Initially rigid tippers were used to convey the

concrete but their narrow tyres left marks in the wet concrete. The wider and high-floatation tyres of the Bell B30E ADT and its low ground impact made this the ideal haulage machine to convey the concrete to the dam wall.

“There has been such a huge demand for this particular Bell B30E ADT that it has clocked up more than 9 000 hours in the three years that we’ve owned it,” Johan explains. “We believe that our ability to sustain this demand definitely means high mechanical availability and that the Bell B30E ADT is delivering on its promise.”

Johan is also full of praise for the Bell B25D Water Tanker fitted with a 23 000 litre tank, which was purchased on the open market at 9 000 hours. With its clock now showing an excess of 19 000 hours, this water tanker continues to dampen the Namibian dust that prevails throughout this project.

“The same praise goes to our two Bomag BW212 Rollers and the Bomag BW213 Roller, again supplied by Bell Equipment, that continue to perform at optimum levels for this large project,” he adds. “Quality of design and build coupled with diligent maintenance is definitely a recipe for success even in the arid and challenging locations where we work.”

A substantial plant hire range, attachments and an unrelenting passion for what they do have provided Windhoek Renovations with a substantial growth of 124% over the last four years. Both Robby and Johan believe that once the Neckartal Dam has been completed, the Windhoek Renovations brand will continue to expand and grow because of their shared commitment and the goodwill they have created with their reliable brightly-coloured yellow equipment and attention to sustainable performance and quality.

AFS Earthmoving chooses Bell Equipment’s B30E for the sixth time

AFS, a leading UK specialist in earthmoving works and aggregates supply, has once again demonstrated its confidence in Bell Equipment by further investing in a new B30E Articulated Dump Truck (ADT).

This evolved E-series ADT is the sixth Bell machine to be purchased by AFS since 2014, when it acquired its first B30E. This latest addition to the AFS fleet of earthmoving equipment will be tasked with predominantly muck shifting duties, making the most of the B30E’s powerful, yet economical, engine.

“We operate a varied fleet of plant, trucks and equipment, all of which have been selected for their quality, efficiency and ability to deliver – and our ADTs are no different,” explains Jason Allen, owner of AFS Earthmoving.

“We initially considered the E-series, and specifically the B30E, from Bell Equipment as the machines featured all of the qualities we were looking for. One of the key deciding factors for us was the B30E’s fuel efficiency, which was extremely favourable in comparison to equivalent machines from other manufacturers. However, this did not detract from the power and reliability of the engine, which performed consistently – and continues to do so – helping to reduce downtime and increase productivity.

“The B30E also came with a number of features ‘as standard’, including Fleetm@tic® and the inclinometer, which, at the time, were not included on competitor machines,” adds Jason.

Fleetm@tic®, a satellite-based fleet management system that was first introduced on Bell ADTs in 2003, allows AFS to monitor machine productivity, utilisation and condition. The on-board weighing function, which has been standard on Bell machines for over a decade, also provides accurate, detailed information to ensure efficiency is guaranteed with every load.

years has placed us in an extremely competitive position, being able to provide our customers with a unique offering. Features, such as the inclinometer, also demonstrate our continued commitment to ensuring the safety of our drivers and our customers.

“The B30E has been an integral part of our fleet for four years, and I’m confident it will be there for the next four,” concludes Jason.

Nick Learoyd, Managing Director at Bell Equipment UK, says: “The B30E benefits from a long heritage of technological developments and is proving a popular option in our E-series range. Its mid-size is practical, yet its low ground pressure allows it to work in areas where other trucks cannot reach. Customers, including AFS, are also benefitting from the many ‘standard’ features that are included on the B30E, helping them to better manage their fleets and maximise productivity.

“We’re extremely pleased that AFS has chosen to add another B30E to its fleet. It is a strong demonstration of their confidence in the Bell brand and the build quality of our ADTs.”

The B30E also benefits from an inclinometer as standard, which prevents tipping at various angles keeping both the driver, and any other operatives in the area, safe.

“Having these features as standard on all of our ADTs over the past four



Wolfgang Schweiger (General Manager of Bell Equipment Namibia) with Johan van Wyk (Member, Windhoek Renovations), John Collins (General Manager: Bell Equipment Cape and Namibia Region) and Mike Lipman (Site Foreman on the Neckartal Dam Project, Windhoek Renovations).



Strong Reliable Machines Strong Reliable **Financing**



Good reasons to choose Bell Equipment Capital:

- Flexible financial solutions • Hold on to your cash • Keep existing credit lines open
- Get a competitive edge • Enjoy tax benefits • Quick and easy

Contact your dedicated Bell Equipment Capital representative for more information:

GLOBAL PROGRAM MANAGER

Michel Steijaert

T: +31 620 404 104

E: michel.steijaert@dllgroup.com

UK

Nick Levey

T: +44 (0)7554 458 116

E: nick.levey@dllgroup.com

USA

Brian Hutchison

T: +1 704 619 9977

E: brian.hutchison@dllgroup.com

FRANCE

Antoine Ayrignac

T: +33 (0) 676 728 533

E: antoine.ayrignac@dllgroup.com

GERMANY

Christian Wich

T: +49 172 295 7632

E: christian.wich@dllgroup.com

BELL
Equipment Capital