

B60Es provide the most cost-effective mining solution for Afrimat

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

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

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

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

"As we usually do, we researched the wider earthmoving equipment market and did some testing of various haulage vehicles at our Jenkins iron ore mine in the Northern Cape," Adriaan explains. "Here we saw first-hand how Bell B60E ADTs came out tops in terms of production and fuel consumption which convinced us that the Bell B60E ADT would be the ideal haulage vehicle for the planned expansion at the Nkomati Anthracite mine."

Afrimat placed its order for four Bell B60E ADTs in the second quarter of 2022 and the machines were delivered in January 2023. They are matched with a 120-ton excavator loading with a seven-cubic metre bucket. Creating the new pit means stripping off the topsoil which is stockpiled for use in later rehabilitation.



Then the overburden is removed and this, according to Adriaan, when dry, has a relatively low specific gravity which means that the operator in the cab of the Bell B60E ADT can sit and watch his onboard load indicator steadily climb as more material is added to the large bin with its heaped 35 cubic-metre design capacity. This optimises the loads on the average 1km haul to the waste dump.

"I should just mention that another important reason for us buying Bell ADTs stems from the long and solid business relationship we have with Bell Equipment," Adriaan explains. "We believe on the sales side to trust a single point of entry which we have with the company's Sales Representative, Sascha Caixeiro. On the maintenance and repair side, we will approach whichever Bell branch is closest to an operational site and introduce ourselves to the branch and workshop manager, so creating a relationship where everyone knows what we expect and we get to know the Bell managerial, technical and support staff, which is always a pleasant experience."

Adriaan mentions that they did the same when their Bell B60E ADTs were delivered to the Nkomati

Anthracite mine. He approached Brett Peddie, the Bell Equipment Customer Service Centre Manager at the Nelspruit branch from where the machines would be supported.

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

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



Adriaan Lategan, Afrimat's Physical Asset Management Lead.



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

"This care by skilled mechanics is already paying off because once small initial technical hitches were ironed out, the Bell B60E ADTs are achieving the budgeted 400 hours per month and doing that with very frugal fuel burn," Adriaan adds. "Currently the units are running with their full loads and returning average fuel figures of below 20 litres an hour. This has

surprised and impressed us all, although it is expected to increase a bit as the haul conditions will change due to inclines getting steeper."

"With new equipment being hard to find due to most OEMs having long lead times, using a contractor may be the more convenient option currently," Adriaan states. "However, we have found that in the long term, using one's own equipment is the more cost-effective way of mining and buying these Bell B60E ADTs is proving that point on all fronts."