Dzombo Plant Hire sees huge benefit in its B30Es with coal bins



Load and haul in a mining material handling application involves so much more than simply loading a haulage vehicle with the commodity at hand. There must be proper planning, daily adjustments to environmental conditions and above all, the correct tools for the job.



This is according to Wynand Botha who heads up the Dzombo Group of Companies in Limpopo's Lephalale where Dzombo Plant Hire has made its mark as a contract mining and material handling company. Dzombo was the name of one of the legendary magnificent seven big elephants that ruled South Africa's Kruger National Park for many years. The name comes from the Xitsonga word for a stream that is slow to move but impresses on arrival.

"Since starting our company in 2005, we first concentrated on doing developments in the domestic housing and commercial retail markets and believed in doing the levelling of building sites, preparation of platforms for construction, installation of water and power services and the construction of roads, ourselves," Wynand says. "To do this we needed a fleet of yellow machines, and we have over the past 17 years steadily grown our own fleet to now number some 150 pieces of equipment."

According to Wynand, their acquisition of yellow machines was always for their own use and, at the right time, the creation of a plant hire division named Dzombo Plant Hire was a natural outflow of their ownership of a variety of earthmoving equipment that "Proof of excellence in a machine is found in good production coupled with economical fuel consumption which in turn needs to be backed up by good parts availability and service and here Bell Equipment ticks all the boxes," Wynand adds.

could be put to wider and profitable use.

"If you look hard enough, you'll find plenty of opportunities for work as we did when an opportunity to do material handling on one of the



Bell Sales Representative, Jan Barnard, (left) with Wynand Botha in front of a mural depicting the elephant Dzombo.

major coal mines in our area came across our path and we created a mining division," Wynand continues. "We had been using a fleet of 16 Articulated Dump Trucks (ADTs) fitted with standard bins to haul coal slimes for reprocessing when in 2021, Gerald Lottering, Bell Equipment's Branch Manager in Rustenburg, first approached us with the concept of a Bell B30E ADT that was fitted with a coal bin, which would carry far more volume due to the low specific gravity of the coal products."

Bell Equipment duly provided Dzombo Plant Hire with a demonstration Bell B30E ADT fitted with a coal bin to test its performance and fuel consumption under actual working conditions. Wynand says when testing the Bell B30E, the results of its performance and especially its frugal fuel consumption were so positive while carrying a larger load that he had no hesitation in ordering two Bell B30E ADTs fitted with coal bins. The new Bell B30E ADTs were delivered in July and August 2022.

"When working in challenging environmental conditions such as heat, dust and wind, we pay a lot of attention to controlling those factors that we're able to such as reducing dust blowing into our machines and having our haulage vehicles pull away on a downhill rather than uphill, if possible," Wynand explains. "Our two new Bell B30E ADTs with the coal bins have been managed in the same way and have really exceeded our production expectations while using remarkably less fuel over the 6km haul route."

"We've been impressed with Bell Equipment's design of its coal bin which, with the use of a tailgate, gives us six to seven more cubic metres of a heaped load than ADTs with standard bins," he says. "And even working with those larger loads in wet underfoot conditions, a fuel burn of around 22 to 24 litres an hour does not exceed our fuel cap."

Wynand adds that with Bell Equipment's design engineers distributing equal torque across the Bell B30E ADT's three axles, thus creating equal torque bias, tyre life is extended as there is less scuffing of the centre axle's tyres.

"What we especially enjoy about the design and build of the Bell B30E ADTs is that it's a simple design and everything is made of steel, which means that should you want to replace something beyond the ADT's warranty period, you can simply fabricate such a section to be slotted in," he says. "Having invested in many pieces of earthmoving equipment, our aim is to get the maximum life out of such a machine, and this can only be done when there is diligent maintenance backed by parts availability from the original supplier, which in the case of Bell Equipment has been solid.

"Proof of excellence in a machine is found in good production coupled with economical fuel consumption which in turn needs to be backed up by good parts availability and service and here Bell Equipment ticks all the boxes," Wynand adds. "We're especially keen to learn what other new products Bell Equipment plans to bring to the market and we appreciate the company's Sales Representative, Jan Barnard, calling on us regularly."

The Dzombo Group employs its own team of mechanics which has become familiar and confident with rebuilding machines where necessary, so further extending machine life and productivity.



Wynand Botha with his beagle aptly called Bell. Bell follows Wynand everywhere.