E-series safety features impress Excavo Mining

Proven reliability with sustained high hours of service over an extended period of time has led a Mpumalanga contract mining company to add to its existing fleet of Bell Articulated Dump Trucks (ADTs).

Excavo Mining is the contract-mining arm of two holding companies, Isambane Mining and Msobo Coal. The contract mining company came into being as a result of a contract on a potentially large new colliery south of Belfast in Mpumalanga. With one parent company, Isambane Mining, already owning and operating Bell ADTs, the idea came about to standardise on haulage equipment and Bell Equipment was again chosen as the original equipment manufacturer (OEM) of choice for the haul fleet.

"As a new company it's very difficult to obtain financing on an outright

purchase of new equipment without any sort of credit record," says Koos Reinecke, one of Excavo's four directors. "To its credit, Bell Equipment through its local Sales Representative, Carel Venter, saw potential in us as long-term clients and offered us a rental agreement with an offer to purchase, which we gladly accepted."

"We get audited on our local content and with Bell Equipment being a South African OEM with a product this good and a deal to match that, it was an easy choice," Koos adds. "We then acquired 14 Bell B40D ADTs in 2013 on a 'rental option to purchase' (ROP) deal, which means that by the 18th month of the initial rental contract with Bell Equipment we obtained financing and took ownership."

With the current pressure on coalmining companies' commitment to supplying both local and export markets, downtime could not be tolerated and according to Johan Venter, their Bell B40D ADTs proved their mettle from the start.

"Coal mining is very intense and individual annual machine hours of 5 000 hours is not uncommon," he says. "Our Bell B40D ADTs gave us



Three of Excavo Mining's Directors (from left): Koos Reinecke, Johan Venter and Koos Jordaan with (back) Bell Equipment Sales Representative, Carel Venter. Absent is Director, Yacoob Mansoon.

that from the outset proving that their mechanical availabilities had to be at the higher end of the scale. To add to their value, we're still running these machines and in spite of their 15 000 hours of service, we've not had to rebuild any one ADT apart from swapping out a transmission."

As this particular mine developed, so did Excavo Mining's scope of work. Additional earthmoving equipment was hired to supplement that of sub-contractors. Then in 2016 Excavo Mining, in a planned effort to be more cost-effective, decided to start replacing their sub-contractors by acquiring additional earthmoving equipment for this purpose.

"It was an easy decision to approach Bell Equipment as we and especially our maintenance teams, already knew their products and had established a firm relationship with the company," says fellow director Koos Jordaan. "Staying with Bell Equipment meant enlarging our current fleet of Bell machines albeit with a later and more efficient model ADT in the E-series."

"As part of the phasing out of sub-contractors, we tested a Liebherr 764 Dozer for four months and after seeing pleasing results, decided to include three of these machines in our ROP along with 14 Bell B40E ADTs," he adds. "These machines have proved invaluable especially on the all-important rehabilitation of mined out areas."

Excavo Mining had been tasked with a total mining package of drill, blast, load and haul of topsoil, overburden and coal. Rehabilitation is an important task to them as multiseam rollover mining is completed. They also maintain haul roads and general infrastructure for the mine's owners.

"We operate on dry rates but even so maintain accurate record-keeping on fuel. Checks and balances in our total mining package dictate that we should move specified cubic metres and tonnages within a given fuel allocation," Johan says. "Mining down to 30 metre depths means some challenging traction conditions for our new Bell B40E ADTs as they carry full loads of both overburden and coal on a maximum 4,5km haul but at average fuel consumptions of 24 litres an hour, this is not causing any unhappiness."

Excavo Mining's Engineering
Manager Gert de Bruyn has been
closely associated with the new fleet
of Bell B40E ADTs. "We did
experience a few growing pains as

the new B40E ADTs settled in but we had the immediate attention of two Factory Technical Analysts from Bell Equipment's Richards Bay plant in attendance on site, showing us that they took this seriously and potential problems were quickly attended to."

"We've been impressed with some of the new safety features in the Bell B40E such as the tipping action that won't operate unless the machine stands on level ground and the hill-assisting park-brake that engages automatically. And to add to this, a much smoother ride goes a long way to easing driver fatigue," he says.

"As long as a machine is not costing us money in maintenance, we have no issue with running that piece of equipment to high hours," Koos Reinecke concludes. "This has made the decision to stay with Bell Equipment as our OEM of choice, an easy one as we feel they understand our business and the challenges we face on a daily basis. And when you add the reliability of both their equipment and back-up service, you have a structure for sustained success."

