

Bell B60E – moving more for less

When looking for a cost-effective and efficient haulage solution for the mining industry, South African manufacturer, Bell Equipment, continues to push new boundaries and its sixty-tonner crossover concept, the B60E 4x4, has an impressive balance between off-road performance, productivity and fuel economy.

Designed to provide a crossover to both rigid dump trucks (RDTs) and traditional ADTs, the B60E has a single rear axle instead of the more typical double axle whilst retaining the traditional ADT characteristics of all-wheel drive, and articulation steering with an oscillation joint.

According to Bell Equipment Product Manager: ADTs, Nick Kyriacos, this gives the B60E far better capabilities in challenging conditions compared to RDTs. "The oscillation joint keeps all the wheels in contact with the ground allowing for consistent all-wheel drive performance. If an RDT fleet owner is looking for more flexibility or is forced to stop production due to unfavourable conditions, then the B60E is a great solution for them. The truck has operated side-by-side with rigid dump trucks on several sites where it has proven its capabilities. Additionally, customers running a mixed RDT and B60E fleet are able to standardise on one loading tool whilst retaining a high level of flexibility when deploying their equipment."

In comparison to traditional ADTs, Nick explains that there are customers who do not need the level of off-road ability that their 3-axle ADT counterparts provide. "In these cases, the B60E offers a level of productivity never seen before. There is negligible tyre scuffing on the 4x4 ADTs, which is a major wear point for the middle and rear axles of 3-axle trucks.

"Some of our leading customers have experienced the B60E achieving more than double the tyre life

of their 6x6 counterparts in the same application. The B60E's tyre life also exceeded that of similar sized rigid dump trucks in the same application by 60% due to a combination of its all-wheel drive configuration whilst the oscillation tube ensures that all wheels maintain even contact with the ground along the entire haul cycle," continues Nick. "We have sold a number of B60s to ADT customers in various parts of the world who are running them very successfully and enjoying the increased productivity and tyre life they offer."

Far larger than a conventional ADT bin, the B60E's flat-bottomed 35m³ body resembles a rigid-truck bin in its dimensions and geometry, which makes it fully compatible with existing loading equipment in mines and quarries and assures an ideal 2:1-heap of coarse blasted material. The shape additionally allows the loading tool to easily place bucket loads evenly within the bin for efficient loading that is not possible in comparable ADTs in this size class.

The truck has proven its versatility on customer sites moving rock, ore and sand over extended haul distances, easily managing short, steep gradients, tight turning circles and poor underfoot conditions during inclement weather.

"To date, the average fuel consumption of all B60Es ever sold is less than 24 litres per hour," says Nick. "Carrying a 55 000kg payload per cycle at that fuel economy coupled with the extended tyre life, the B60E achieves the Bell design philosophy by continuing to deliver lowest cost per tonne solutions."

In addition to cost efficiencies related to economies of scale and a highly economical drivetrain, the B60E is loaded with safety features incorporated into the truck as standard including Hill Assist, Safe Tip, downhill braking control and automatic traction control. Other standard features include auto-greasing systems, rear-view camera, onboard diagnostics, and Bell Fleetm@tic[®] telematics with full production data reporting.



"Some of our leading customers have experienced the B60E achieving more than double the tyre life of their 6x6 counterparts in the same application."

Nick Kyriacos