

# Bell increases reach of innovative B60E hauling concept

Following its debut at Bauma Germany 2016, Bell Equipment's 60 ton crossover truck, the B60E, was presented along with the company's new E-series Large Trucks for the first time in North America at CONEXPO 2017.

Featuring the new E-series truck styling and features, the range includes the latest generation Mercedes Benz engine, certified for off-highway use by MTU, with an Allison transmission. Both have a distinguished record in on-highway trucking, an industry which demands both high performance and exceptional fuel economy, and they have been optimised for off-road performance by Bell.

President of Bell Equipment North America, Neville Paynter, says: "The new engine enabled Bell to extend its geographical reach in 2016 and made the B60E available in emissions regulated countries for the

first time. We were excited about the potential of the B60E in the Americas because of the feedback we had received from other markets with regards to off-road performance, productivity and fuel consumption. Machines that have come into the US over the past year have proven themselves during site evaluations."

The B60E is an Articulated Dump Truck (ADT) with a single rear axle instead of the more typical double axle. The traditional ADT characteristics of all-wheel drive, oscillation joint and articulation steering are maintained to deliver a proven competitive alternative to

both rigid dump trucks (RDTs) and traditional ADTs.

When compared to RDTs the B60E has far more capability in challenging conditions, according to Bell Equipment Product Marketing Manager, Tristan du Pisanie. "The oscillation joint keeps all the wheels on the ground, which allows the all-wheel drive to perform at its best. If a rigid dump truck operator is looking for more flexibility from their RDTs or has to stop production when conditions are unfavorable, then the B60E is a great solution for them. The truck has operated side-by-side with rigid dump trucks on a number of sites where it has

proven its capabilities. We also have customers looking into the feasibility of a mixed RDT/B60E fleet which would allow them to standardise on one loading tool and give a high level of flexibility when deploying their equipment.

Tristan adds that when compared to ADTs, the B60E offers a level of productivity never seen before. "While the 2-axle configuration does not have the same level of off-road ability that a 3-axle ADT has, due to the higher ground pressure at the rear, there are many ADT customers who do not need all of the capability of a traditional ADT and the simpler B60E is a great solution. In addition the B60E has almost no tyre scuff, a major sore point for the middle and rear axles of a 3-axle ADT. We have sold a number of B60s to ADT customers in various parts of the world who are running the B60E very successfully and enjoying the increased productivity it offers."

The B60E shares the B50E front chassis powered by a EU4/Tier4final certified 430kW Mercedes-Benz/MTU inline 6-cylinder engine combined with Allison's 7-speed transmission, to guarantee high standards in driving comfort, safety and fuel economy. Braking and retardation of the 42.5-/97.5-t 4x4 is assured by wet brakes on all wheels in combination with powerful Jacobs Vehicle Systems® engine braking.

The rear chassis is a completely new design and incorporates all practical experiences and analytical data gathered in the extensive four-year test programme with B60D prototypes and production machines working in actual quarry and mining operations in South Africa. Now featuring a suspended 70-ton rear axle with 24.00 R35 twin tyres, the nominal payload is rated at 121,254lbs (55 metric tonnes). Far larger than a conventional ADT bin,

the flat-bottomed 45.8yd<sup>3</sup> (35m<sup>3</sup>) 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.

In addition to delivering cost efficiencies related to economies of scale, the economical drive-train of the B60E delivers significantly lower fuel consumption than a traditional rigid truck.



Safe Tip, downhill speed control and auto 4x4 traction control. Other standard features include auto grease systems, rearview camera, onboard diagnostics, and Bell's Fleetm@tic® telematics with full production data reporting.

In Southern Texas the B60E was used by Wright Materials Inc. to haul from a sand and gravel pit to the plant, about three miles away. The haul road was level and well maintained, which creates tough conditions for any ADT that will see high fuel burn due to the truck continuously running at high speed.

"With an average haul cycle of 6.6 miles (10.6km) and an average payload of 61.8 tons (56 tonne), the B60E was in a league of its own delivering an average of 140 tons/hour (127 tonnes/hr) with fuel consumption between 9.4gal/hr (35.6l/hr) to 10.5gal/hr (39.7l/hr)," says Paynter.

"In Oregon the truck was evaluated by a customer of Orion Equipment, our dealer in that region, and they have since ordered two trucks," he adds. "The B60E took the place of two 40-ton ADTs to haul heavy rock out of a steep pit and along a wet, sticky clay haul road. With an average payload of 56,0 tons (50.8 tonne) along an average haul distance of 0.2 miles (0.3km), the B60E used an average of 5.2gal/hr (19.7l/hr)."

Commenting on the B60E, Bell Equipment Group Chief Executive, Gary Bell says: "With our 60-tonner we've broken the mould with how things should be done with an artic truck and I'm pleased to see that the vision we had is proving itself. I know many of our customers who have been testing and running the B60 are very impressed with its ability to run in all weather conditions as well as the fuel consumption and cost per tonne of these vehicles."

This has been demonstrated during product testing and on customers' sites around the world.

Bell B60Es have been placed in Africa, Europe, North America and Australasia. The truck has proven its versatility on customer sites moving rock, ore and sand over extended haul distances, easily managing steep gradients, tight turning circles and poor underfoot conditions in inclement weather.

Customers applaud the easy transportation of a truck this size, as well as the truck's productivity, operator comfort and safety features. Incorporated into the truck as standard, for safety, are Hill Hold,

