

Reflecting on a successful Bauma 2016

“We are hugely satisfied with the result of Bauma 2016,” comments Gary Bell, Group Chief Executive of the global ADT specialist, Bell Equipment. “During the week in Munich we had large and steady visitor attendance, which was impressive due to the sheer numbers but also owing to the wide international spread and high calibre of our visitors, including decision-makers of small and medium sized companies through to multi-national organisations. We’re still working through our leads from the show, but we can confidently sum it up as the best Bauma in years.”

When the going gets rough...
No international trade show would be complete without ‘something really special’ on the Bell stand. This year’s showstopper, and a magnet for international hauling experts, was the display of the completed E-series

generation of trucks, and particularly the brand new 60-ton B60E. Shown for the first time outside Africa, and now incorporating the latest E-series design and technology, the 4x4 crossover concept combines articulated off-road capabilities with the higher transport capacities of rigid trucks. During its Bauma premiere the B60E attracted huge interest and impressed specialists from the earth moving, quarrying and mining segments. “We were certainly benefitting from the move to larger capacities,” says Bell Product Marketing Manager: ADTs, Tristan du Pisanie. “After their first steps round the machine and browsing through the comprehensive documentation, all experts acknowledged that our sixty-tonner is far more than a showroom model, and is a sophisticated solution for the specific hauling problems found within traditional rigid 4x2-truck operations.”



Bell Equipment’s brand new Bell B60E generated great interest at Bauma 2016.



Bell Equipment After Sales Manager, Tobias Appel, discusses the advantages of Bell ADT technology with several groups of interested German students.



Bell Equipment Group Chief Executive, Gary Bell, believes this year's show was the best Bauma in years.



Bell Equipment Product Marketing Manager: ADTs, Tristan du Pisanie, was ready to explain the significant opportunities provided by the products to customers visiting the Bell stand.

Advanced Bell ADT technology, with the original B50E front chassis now powered by a EU4/Tier4final certified 430kW Mercedes-Benz/MTU inline 6-cylinder engine combined with Allison's 7-speed transmission, guarantees high standards in driving comfort, safety and fuel economy for the Bell B60E. Braking and retardation of the 42.5-/97.5-t 4x4 is assured by wet brakes on all wheels in combination with powerful 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 55.0 metric tonnes. Far larger than a conventional ADT bin, the 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.

"We designed the Bell B60E to be able to run alongside rigid trucks within the 60- to 80-ton class, so under normal conditions of dry and well maintained haul roads we do provide an alternative," explains Tristan. "But the B60E concept is ideally targeted for mines, quarries and bulk earthworks that experience conditions that rigid dump trucks cannot safely cope with, such as rainy periods which compromise underfoot conditions. When traditional 4x2 rigids can no longer operate, the superior 4x4-traction, oscillation tube and retardation characteristics of the Bell B60E pay off by keeping production going. As a quick example, if you have a rigid truck fleet that needs to park-up for one day a week, or 50 days a year, then the same size fleet of B60s would immediately provide an additional 20% productivity. This is on top of all the other savings attributable to lower running costs. These scenarios are not uncommon and a lot of customers see this opportunity.

"Having produced higher capacity trucks since 2002, we have clearly identified that at a particular payload, and productivity requirement, the need for a vehicle to have extreme off-road ability is unnecessary. The added vehicle complexity, additional tyre scuffing and difficulty in loading a long narrow bin actually will act against the productivity and overall cost of ownership, and thus cost per tonne of material moved.

"This has led to us opting for a configuration that targets and perfectly fulfils a demonstrated need out in the market. There is no doubt that the B60E will not have the extreme off-road ability of a regular Bell 6x6 truck. However, operations have to carefully analyse whether a 60-ton production application ever really requires this. Generally when this level of productivity is required some road and haul route maintenance is already present. From our experience in larger scale projects it is clear that the 4x4 concept with articulation and oscillation provides the level of off-road ability required to meet all conditions. Additionally it will provide the flexibility customers need to operate through a number of different phases from start up, to overburden stripping, ore production and eventual rehabilitation.

"In Munich, we had great interest in the B60E from a number of potential buyers from many markets," says Tristan. "For this reason this particular truck is booked for site demonstrations, starting in the UK, and then going overseas for its introduction to the North American market. In the meantime we continue to build D-series models for our customers in markets with lower tier ratings."

Successful transition

Bell Equipment's other four new large E-series ADT models, ranging from 33,5 to 45,4 tonne payloads, were also premiered at Bauma and are planned to roll off the company's production lines from this August. "Our intention at Bauma was to show that we have delivered on the next evolution of our D-series ADT line, which successfully set industry standards and has led ADT innovation for almost 14 years," explains Tristan.

"In fact looking at how many of the other manufacturers have only now adopted some of our features, and the length of time it has taken them to do so, is in

itself testament to how we have in the past led, and will continue to lead, this particular industry."

All new models come with Mercedes-Benz/MTU inline 6-cylinder engines, complying to EU4/Tier4final-standards with EGR/SCR-emission technology without diesel particulate filters. From the B40E upwards, all the trucks now feature efficient Allison 7-speed transmissions which, together with improved engine power through the range, ensure efficient and productive driving performance in all ADT applications. Full traction in heavy terrain is guaranteed by electronically activated inter-axle differentials. Controlled traction differentials on all three axles also provide safe cross-locking for extreme conditions. Safe braking is assured through wet brakes with separately cooled and filtered oil circuits. Fully automatic retardation is achieved through a combination of an increased capacity engine brake and the wet brakes. Full electronic control of these functions has allowed Bell to further improve its 'industry first' Hill Descent Control to give operators full confidence in meeting and ensuring safe productivity.

"Throughout the show we experienced very good feedback," says Tristan. "All customers appreciated the upgrades and focus points that have taken place since our first E-series models, the B25E and B30E, were successfully introduced at Bauma 2013. In the intervening period these models have gained great market acceptance."

Positive response was again received on a key differentiator of Bell trucks: "We still have the largest standard offering of value added electronic features including on-board measurements, vehicle behaviour optimisation and interactive communication tools for both operators and owners. This has become increasingly important for onsite productivity, longer term operating cost effectiveness and particularly day-to-day safety," says Tristan.

At Bauma 2016 Bell once again cemented its position as the ADT specialist by providing solutions for all demonstrated needs in the market.

The Bell B60E is focused on improving traditional rigid dump truck applications while the 6x6 range from the B25E to B50E provide solutions for really soft underfoot conditions.

"Operators also need to understand that the move to larger sizes is nothing new for us with the 50-ton ADT having run effectively for the last 12 years and our 60-ton trucks being in real-life service for the last four years. A significant portion of our trucks have historically being sold into high production mining operations, which also helps us understand the requirements better," concludes Tristan.



The 41-tonner Bell B45E represented Bell Equipment's E-series Large Truck range in Munich, and is expected to continue the strong heritage of the company's D-series predecessors.