

All the bells and whistles for new E-series Water Tankers

Local original equipment manufacturer, Bell Equipment, has expanded its range of water tankers and now offers eight tank sizes having introduced 16 000-litre and 50 000-litre offerings.

Bell Equipment Product Manager, Warren Swart, represents the company's custom-made machines that are designed and manufactured by its dedicated Bell Application Equipment (BAE) division. This includes the Versatruck programme that comprises derivatives based on the chassis of the acclaimed Bell E-series Articulated Dump Truck range, such as Water Tankers.

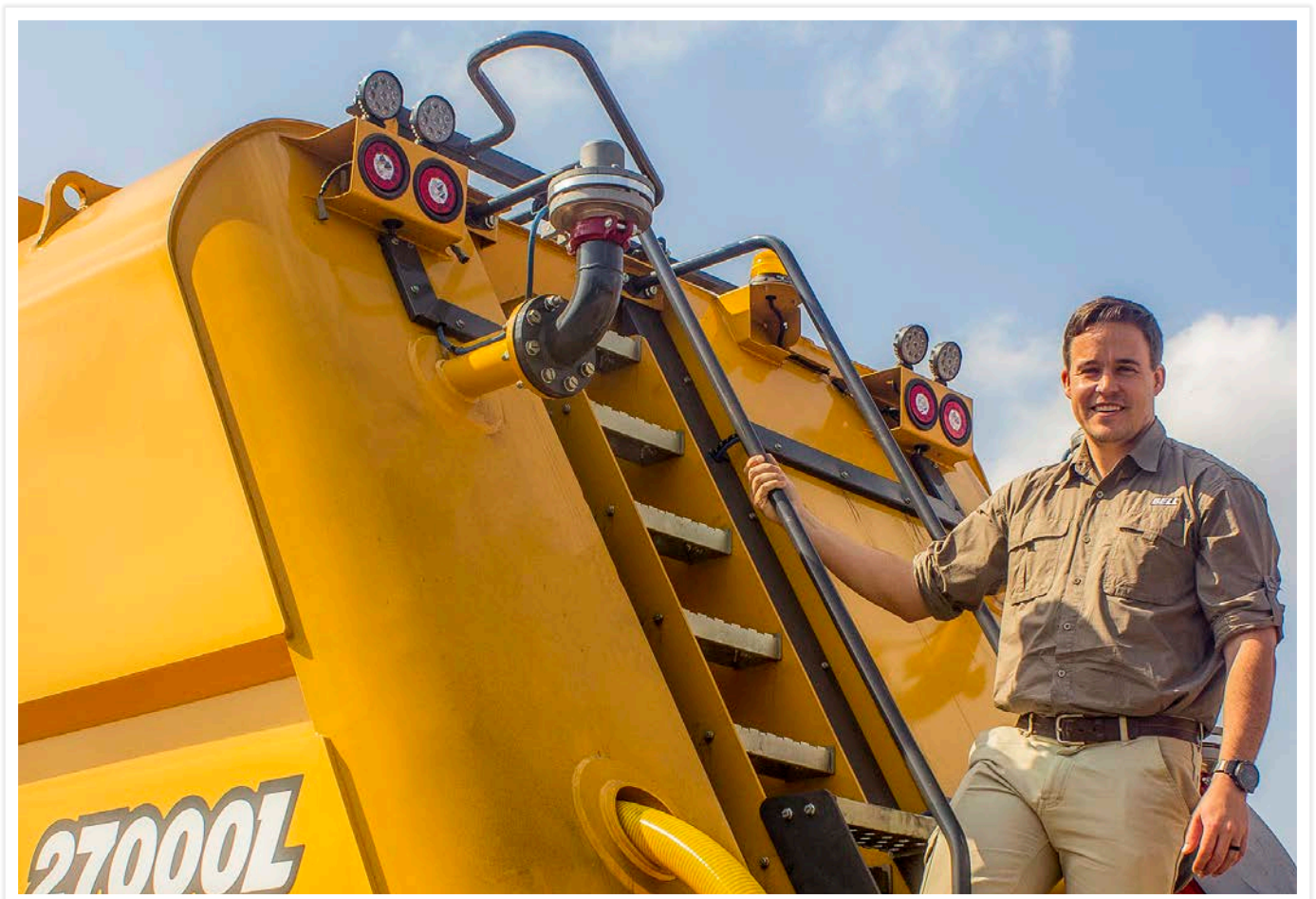
According to Warren, one of the primary purposes of a water tanker is dust suppression and the 50 000 litre tank was designed following interest from larger mining companies requiring more capacity for dust suppression on longer runways.

"During dry seasons, dust suppression is a critical part of safety in mining and construction operations, from visibility improvements to pulmonary disease

prevention. We are also able to offer fire fighting options to provide an additional benefit with one of our customers recommending our 38 000 litre water tank for mitigating fire risks in tall structures due to the remote water cannon stream reaching heights above 30 metres."

The 50 000 litre tank is paired with the B60E powerhead making it one of the largest articulated water tankers available on the global market. While it enables Bell to offer a full range of tank sizes, the B60E Water Tanker importantly offers commonality of parts to the growing number of customers running fleets of B60Es.

At the opposite end of the scale, the 16 000 litre Water Tanker was developed specifically with Bell Equipment's Australian customers in mind.



Bell Equipment Product Manager, Warren Swart, with a 27 000 litre water tank ready for fitment.

“Meeting the unique requirement to have a smaller articulated water tanker in tight industrialised areas stands as a testimony to our longstanding skill of listening to our customers’ requirements and innovating solutions to meet these needs.

The 16 000 litre water tank compliments the 38 000 litre water tank commonly sold into Australia with a top fill chute only, which excludes the standard dam or reservoir filling solution we have available. External plumbing is also kept to a minimum and guard rails are used to increase safety when an operator is required to climb on top of the water tank,” he says.

BAE enables Bell Equipment to give focus to the design and manufacturing of specialised products for individual markets and ensures that quality standards are on par with the rest of the Bell range. With regards to the Water Tanker design, Warren explains that the centre of gravity is kept low to reduce the risk of rollovers. A fully engineered baffle system prevents water surge and slosh, and provides increased stability for greater safety. In addition, tanks are coated internally with a dual epoxy paint lining as standard to prolong the life of the tank.

“Most of the truck is built through Bell Equipment’s standard high quality production facility while the Water Tankers, as specialised vehicles, are manufactured on our BAE line. This ensures that we remain cost competitive, while providing the time that our specialised vehicles require to meet our world-class quality standards.

“We adhere to international welding quality standards for earthmoving and construction equipment (AWD D14.3) with the inclusion of additional Bell specific quality inspection processes, such as a pressurised leak test on all tanks produced,” he adds.

“Our water tanks are engineered to perfectly integrate with our E-series ADTs as a complete unit, however they can be purchased separately and retrofitted to our E-series ADTs,” he continues. “Our water tanks can be customised to meet the customer’s requirements with a wide range of options. To mention a few, we offer a manual water cannon with a long-range spray nozzle and a remote water cannon that is remotely controlled using a joystick inside the cab.

“This cannon has an adjustable fog/stream pattern and a variety of flow settings between 1 100 and 3 200 litres per minute. Both water cannons feature high quality components making them highly suitable for heavy duty applications,” says Warren.

“Other options include additional batter spray valves that expand the spray pattern horizontally. A range of rear spray bars are available beginning with a gravity fed dribble bar that delivers an even

spread pattern covering the width of the vehicle. Penetration spray bars are also available, with either nozzles or holes, and are pressurised by the pump to create a jet of water which is not affected by wind.

“These options are complemented with the design of an in-cab control panel for all water tank functions. This provides an ergonomically sound controlled environment for the operator inside the cab. The in-cab control panel increases productivity and ensures operations are never interrupted by the need to exit the cab and manually open external valves.”

However, perhaps the most important feature is that since Bell, as an OEM, builds both the main chassis and the additional component required by the customer – in this case the water tank – the finished product enjoys full factory support. This means that wherever in the world a customer takes a Bell Versatruck solution, they can be guaranteed of Bell Equipment’s technical support offered through the company’s global network of customer service centres and dealers.

Bell powerhouse pairings for the company’s range of water tanks:

16 000 litre	Bell 2304E / Bell 2806E
18 000 litre	B18E
23 000 litre	B25E
27 000 litre	B30E
35 000 litre	B40E
37 000 litre	B45E
43 000 litre	B50E
50 000 litre	B60E

The B25E and B30E are also available with a diesel bowser option with plans to expand this range to match the current water tank range.

