

# E-series

Articulated Dump Trucks

B18E | B25E 6x4 | B25E | B30E

Stage II Certified



**BELL**

# E is for evolution

Your business is our business. Bell Articulated Dump Trucks haul more, for longer at the lowest cost-per-ton to deliver more on your profit margins.

As a global leader in Articulated Dump Trucks, Bell Equipment brings you the world class E-series range. The evolutionary E-series is packed with class leading features that deliver production boosting payloads, lower daily operating costs, superior ride quality and uncompromised safety standards.

Bell E-series ADTs will give your business the competitive edge you need.

- Extensive use of highstrength, lightweight materials give these trucks the best payload-to-mass ratios and hauling efficiencies in each class.

- With their oscillating frame and high-floatation tyres, Bell trucks won't leave you stuck on muddy, rutted or hilly terrain.

- The redesigned sound-suppressed cab features fatigue-beating controls, advanced diagnostic monitor and a sealedswitch module for convenient, fingertip operation of numerous functions.

- Fuel-efficient emissioncertified engines deliver clean power without compromise in all conditions. Leading-edge emissions technology ensures rapid engine response and dependable cold-start performance.



The E-series range takes ADT functionality to new industry standards, with customer-focused enhancements and the highest level of automated machine protection available.

Through substantial investments in Research and Development and employing industry leading technology, advancements in the key areas of performance and fuel efficiency – help you to move more material at lower operating costs and environmental impact.

| Specifications      | B18E                                      | B25E 6x4                                  | B25E                                      | B30E                                        |
|---------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|---------------------------------------------|
| Maximum net power   | 163 kW (219 hp)                           | 205 kW (275 hp)                           | 205 kW (275 hp)                           | 240 kW (322 hp)                             |
| Operating mass      |                                           |                                           |                                           |                                             |
| Empty               | 16 402 kg (36 160 lb)                     | 17 760 kg (39 154 lb)                     | 19 186 kg (42 298 lb)                     | 21 155 kg (46 639 lb)                       |
| Loaded              | 34 402 kg (75 843 lb)                     | 41 760 kg (92 065 lb)                     | 43 186 kg (95 209 lb)                     | 49 155 kg (108 368 lb)                      |
| Rated payload       | 18 000 kg (39 690 lb)                     | 24 000 kg (52 911 lb)                     | 24 000 kg (52 911 lb)                     | 28 000 kg (61 729 lb)                       |
| 2:1 heaped capacity | 11 m <sup>3</sup> (14,4 yd <sup>3</sup> ) | 15 m <sup>3</sup> (19,6 yd <sup>3</sup> ) | 15 m <sup>3</sup> (19,6 yd <sup>3</sup> ) | 17,5 m <sup>3</sup> (22,9 yd <sup>3</sup> ) |



# Building on pedigree

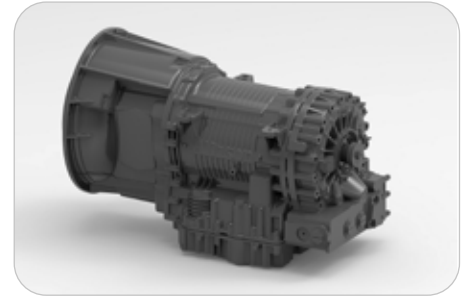
Building on from the proven D-series platform, Bell Equipment's evolutionary approach to design delivers optimised power-to-weight ratio and legendary fuel efficiency.

- Limited slip differentials and electronically controlled automatic Inter-axle Differential Lock (IDL) provide Automatic Traction Control (ATC) in poor underfoot conditions.
- The best-in-class payload-to-weight ratio means that more of your fuel cost is spent moving the material, not running the machine, decreasing your cost per tonne.
- An industry leading, fully automatic six-speed planetary transmission with torque converter lock-up maximises fuel efficiency.
- Automatic retardation slows the truck when the operator backs off the accelerator pedal for more confidence on steep grades and enhanced brake life.
- Improved payloads, faster haul cycles and industry leading fuel economy all help you move more material at a lower cost-per-tonne than your competitors.
- The short front end provides the best approach angle that allows these ADTs to attack steep terrain.

- Electronic unit injection fuel system provides high injection pressures even at low engine speed for improved cold-starting ability, low-speed response and reduced emissions.

High-travel suspension keeps all tyres in constant contact with the ground, for optimum traction.

- Class leading payload-to-weight ratio means that more of your fuel cost is spent moving the material and not running the machine - for maximum productivity and profitability.
- With a high oscillating frame joint, articulated steering, and high floatation tyres, these hard working haulers won't let wet weather or steep grades dampen your plans.



Planetary powershift transmission optimises shift points to match conditions and vehicle weight while protecting the transmission from operator error and abuse. Allison FuelSense® calibration optimises production and fuel burn.



The transfer case inter-axle differential delivers equal torque to each axle when traction is favourable. When conditions deteriorate, the diff-lock automatically engages to deliver torque to the tyres that can best use it.



High-strength steel and widely spaced taper roller bearings in the articulation area enhance long-term durability.



A tailgate is available as an option for better material retention. The tailgate opens as the bin is raised for dumping. Spring steel straps maintain positive seal throughout the haul, ensuring minimal material is lost.

Our innovative front and rear comfort ride suspension options are offered to even further enhance ride quality and ensure minimal whole body vibration exposure.

Productivity increases through reduced cycle times, and reduced haul road maintenance are even further benefits of these extremely successful systems. Experienced ADT operators who have driven trucks installed with these systems have come away amazed by the comfort of the machine, as well as the confidence that the adaptive front suspension engenders.



# Uncompromised durability

Built smarter, to work harder. Bell ADTs offer optimised machine weights so you spend more time and money moving material and not running the machine.

With decades of ADT experience, the Bell E-series articulated hauler is designed and manufactured using purpose built, reliable Bell components best suited for the toughest of conditions. The central oscillation joint, high suspension travel on all axles, and balanced weight distribution provide the agility and ability to navigate hostile terrain.



The high-strength steel chassis delivers strength and rigidity without excess weight.

- Dual circuit hydraulically actuated brakes deliver consistent "on-the-mark" braking, even in cold weather. The B30E is fitted with wet disc brakes as standard and the B18E to B25E with dry disc brakes.
- Viscous electronically controlled direct-drive engine fans provide cooling for the best efficiency.
- Class leading engine braking coupled with automated retardation, provides superior braking power.



For comfortable productivity the A-frame suspension system coupled with hydropneumatic suspension struts reduce the lateral vibration often experienced with off-road conditions. A superior suspension seat provides additional isolation for the operator.



Rough terrain demands tough suspensions. Heavy-duty components absorb shocks and come back for more. You get best-in-class suspension travel and ground clearance, too.



Other uptime-boosting features include world class on-board diagnostics with live stream functionality, solid-state sealed switches and satellite fleet management system.

High-strength welded-alloy steel chassis and reinforced articulation joints, offer superior strength and durability with optimised weight for class leading power-to-weight ratio. Lower machine mass reduces powertrain and structural stress.

# Smarter fleet management



Cutting edge technology, helping you run your fleet smarter. Providing accurate, up-to-date operational data, production data and diagnostic data.

The key to a productive and profitable fleet, lies in the ability to monitor and manage your machines and operators efficiently. Machine operational data is processed and compiled into useful production and performance statistics, accessible via the Bell Fleetm@tic® website. These reports are also automated and emailed directly to you. The two monitoring packages that we have available, are:

- **The Classic Package** supplies you with good enough information for you to have a very good understanding of how your machines is operating for each shift that it runs. This package comes standard with the machine for 2 years.
- **The Premium Package** is focused on customers who need to have extremely detailed information of the machine's operation. For this package we offer similar information to that of the Classic Package but for each individual laden - unladen cycle. In addition, live tracking is available on the Fleetm@tic® website on a per minute basis.

## Fleetm@tic®:

- Maximise productivity
- Generate machine utilisation reports
- Identify operator training requirements
- Pro-active maintenance planning
- Implement safety features
- Receive machine fault codes as well as suggested trouble shooting procedures
- Protect investments
- Receive real time geospatial data



# **BELL**

Fleetm@tic®



# Operate with ease

Using the latest in automotive technology and state-of-the-art tooling, the E-series takes operator experience to new heights.

Climb into the cab of a Bell ADT and you will feel right at home. Its quiet, spacious interior, ergonomically positioned operator station and climate-controlled cabin is loaded with productivity-boosting comfort and convenience features that minimise operator fatigue and enhance the operator's experience.

Modern flowing lines, in keeping with current styling trends on road vehicles, offer unsurpassed levels of visibility.

From the state-of-the-art 10" full colour screen automotive mouse interface and sealed switch module to air suspension seat, tilt/telescoping steering wheel and optional CD player with high-output speakers, the E-series provides everything your operators need to perform at their best.

- The standard sound-suppression package significantly reduces noise levels and operator fatigue.
- The adaptive transmission control adjusts clutch engagement to ensure smooth, consistent shifts throughout the life of the truck.
- A fully adjustable air-suspension seat with variable damping, auto height adjust according to operator weight, pneumatic lumbar support and multipoint harness for class-leading comfort and safety.

- A purpose designed HVAC climate control system with automotive-style louvres keeps the glass clear and the cab comfortable.
- New machine styling and cabin design improvements, which include full glass access door and high visibility mirror package, provide exceptional all-round visibility.
- You won't find retarder pedals or levers in a Bell truck. Retarder aggressiveness is simply set on the switch pad. Everything else is automatic.



Easy-to-understand instruments and intuitive controls wrap around the operator so they're easier to view and operate.



A user friendly 10" colour monitor offers vital operating information, safety warnings, detailed diagnostic readings and dump body function settings.



An automotive controller provides menu navigation on the colour monitor to extract information on machine operation and adjustment of machine settings.



Convenient sealed switch module provides fingertip control of numerous productivity enhancing functions including: **Keyless Start, I-Tip, Dump Body Upper Limit, Soft Stop/Hard Stop Selection, Retarder Aggressiveness and Speed Control.**



# Safety, our business too

By listening to users and delivering on expectations in an ever changing workplace, we provide a truck that leads in application safety with numerous groundbreaking innovations.

Independent features such as Keyless Start, Hill Assist, Bin Tip Prevention, Auto Park Application (APA), Standard Turbo Spin Protection and On-Board Weighing (OBW) are still standard on the E-series.

For improved safety and productivity, the E-series has an electronically controlled automatic Inter-axle Differential Lock (IDL) giving the vehicle full Automatic Traction Control (ATC).

- Full handrails (to ISO 2876) can be installed to offer improved safety when performing engine checks.
- The park brake automatically applies when neutral is selected and it is not possible to engage neutral at speed. Torque dependent park brake release (Hill Assist) ensures no roll back on slopes.
- All trucks can be set up to automatically sound the horn when starting or switching between forward and reverse.

- Best-in-class retarder and engine braking automatically applies when the operator lifts his foot off the accelerator. Retarder aggressiveness can be simply adjusted on the sealed switch module ensuring maximum descent control for all conditions.
- Multiple geofencing in challenging site conditions ensures safe machine operation, such as downhill speed control, geofence speed limits and bin restrictions.



Our quiet operator cabins are ROPS/FOPS certified with an air suspension operator seat. The trainer seat has a retractable lap belt while the operator seat has a standard 3 point seat belt. Both have automatically locking retractors.



An optional integrated reverse camera and high visibility mirrors ensure superior all round visibility.



Keyless start, driver identity and access codes ensure no unauthorised operation of your equipment.



The exclusive on-board weighing presents the operator with real time information on the payload while the machine is being loaded. A 'speed restriction' mode can also be activated if the machine is significantly overloaded.



The incorporation of a pitch and roll sensor in the vehicle prevents bin operation if the truck is in an unsafe position.



Both operator or site selectable maximum speed control allows the vehicle to automatically decelerate and apply the retarder to prevent onsite speeding.



# Maximise your uptime

The E-series is loaded with features that make it as easy to maintain as it is to operate. Spend less time and expense getting ready for work and more time getting work done.

Easy-to-reach dipsticks, see-through reservoirs, sight gauges and grouped service points make quick work of the daily routine. Quick change filters, extended engine and hydraulic oil-service intervals lower daily operating costs and provide superior machine uptime.

An industry leading 10" colour monitor offers on-board machine diagnostics as well as automated daily service functionality, this coupled with diagnostic test ports help you troubleshoot and make informed maintenance decisions on site.



If something goes wrong, the diagnostic monitor provides service codes and supporting info to help diagnose the problem.



The cab can be tilted in minutes without special tools, for convenient service access to drivetrain components.



An in-cab load centre simplifies fuse replacement. Fewer relays, connectors and harnesses mean higher reliability.



We offer a remote transmission filter option. They make transmission filter replacement a fast and clean task.



- Automated daily service checks can be done with ease and comfort from inside the operator station using the 10" colour LCD monitor and sealed display controller.

- The load-sensing hydraulic system was designed with simplicity in mind, while maintaining efficiency. Fewer components for improved reliability and serviceability.

- Extended engine transmission and hydraulic oil-change for increased uptime and lower operating cost.

- Available environmental drains allow quick, no-spill changes.

- Your Bell Service Centre has the parts and backup you need to stay productive and offers a wide variety of preventative maintenance and support programmes to help you control costs.



See-through fluid reservoirs and sight gauges let you check fluid levels at a glance.



Easily accessible test ports allow technicians to troubleshoot problems more quickly.



The centralised lube bank places difficult-to-reach grease points within reach.



The convenient and easy to understand RSG decal details daily checks and actions (eg: greasing).

Welcome to the ...

**BELL** Family

“Power up and plug in to our end-to-end customer solutions!”

**START**

Through our living motto **‘Strong Reliable Machines, Strong Reliable Support’**, we offer both exceptional equipment and aftermarket support products because we want your Bell ownership experience to be a happy one.



### SETTING YOU UP FOR SUCCESS



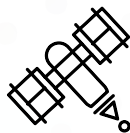
**TRAINING**



### PROTECTING YOUR ASSETS



**LUBE CHECK**



**MAINTENANCE CONTRACT**



**EXTENDED WARRANTY**



**FLEETM@TIC®**



### KEEPING YOUR MACHINE RUNNING

**LUBRICANTS**

**PARTS**

**SERVICE KITS**

**TECHNICAL SUPPORT**

**SPECIAL TOOLS**

**BELL OUTLETS**

### GIVING YOU EXTRA VALUE, LONGER LIFE



**REMAN COMPONENTS**



**PRE-OWNED EQUIPMENT**

**SUPPORTING YOU EVERY STEP OF YOUR BELL OWNERSHIP EXPERIENCE**

# **BELL**

Parts & Service



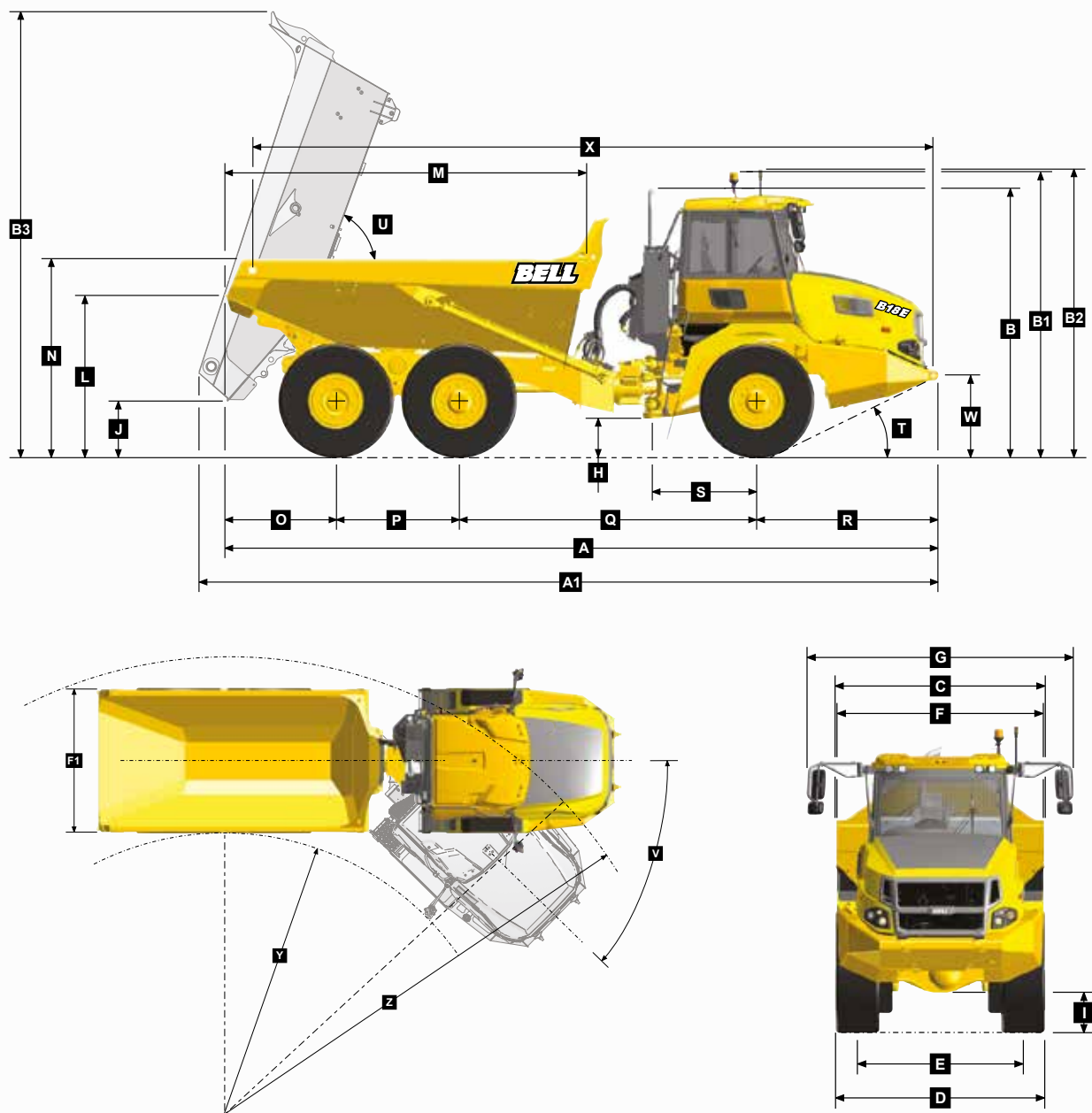
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------|-------|-----|---------|--------|-----|---------|--------|-----|---------|--------|-----|---------|--------|-----|---------|--------|---|--------|-------|
| <div>ENGINE</div> <div>Manufacturer<br/>Mercedes Benz</div> <div>Model<br/>OM924LA</div> <div>Configuration<br/>Inline 4, turbocharged and intercooled.</div> <div>Maximum Net Power<br/>163 kW (219 hp) @ 2 200 rpm in accordance with UN ECE R120</div> <div>Gross Torque<br/>810 Nm (597 lbft)<br/>@ 1 200 -1 600 rpm</div> <div>Displacement<br/>4,80 litres (293 cu.in)</div> <div>Auxiliary Brake<br/>Exhaust Valve Brake<br/>Engine Valve Brake</div> <div>Fuel Tank Capacity<br/>195 litres (53 US gal)</div> <div>Certification<br/>OM924LA meets Euro III emissions regulations</div> | <div>Torque Control<br/>Hydrodynamic with lock-up in all gears</div> <div>TRANSFER CASE</div> <div>Manufacturer<br/>Kessler</div> <div>Series<br/>W1400</div> <div>Layout<br/>Remote mounted</div> <div>Gear Layout<br/>Three in-line helical gears</div> <div>Output Differential<br/>Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.</div> <div>AXLES</div> <div>Manufacturer<br/>Bell</div> <div>Model<br/>15T</div> <div>Differential<br/>High input limited slip differential with spiral bevel gears.</div> <div>Final Drive<br/>Outboard heavy duty planetary on all axles</div> <div>BRAKING SYSTEM</div> <div>Service Brake<br/>Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers.</div> <div>Maximum brake force:<br/>244 kN (54 720 lbf)</div> <div>Park &amp; Emergency<br/>Spring applied, air released driveline mounted disc.</div> <div>Maximum brake force:<br/>182 kN (40 802 lbf)</div> <div>Auxiliary Brake<br/>Automatic exhaust valve brake and engine valve brake. Optional automatic, adjustable, integral, hydrodynamic transmission retarder. Output shaft speed dependant.</div> | <div>Total Retardation Power<br/>Continuous non-retarder: 99 kW (133 hp).<br/>Continuous retarder: 144 kW (193 hp).<br/>Maximum non-retarder: 99 kW (133 hp).<br/>Maximum retarder: 505 kW (677 hp).</div> <div>WHEELS</div> <div>Type<br/>Radial Earthmover</div> <div>Tyre<br/>20.5 R 25</div> <div>FRONT SUSPENSION<br/>Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.</div> <div>REAR SUSPENSION<br/>Pivoting walking beams with laminated rubber suspension blocks</div> <div>HYDRAULIC SYSTEM<br/>Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system.</div> <div>Pump Type<br/>Variable displacement load sensing piston</div> <div>Flow<br/>202 L/min (53 gal/min)</div> <div>Pressure<br/>310 Bar (4 500 psi)</div> <div>Filter<br/>5 microns</div> <div>STEERING SYSTEM<br/>Double-acting cylinders with ground driven emergency steering pump.</div> <div>Lock to lock turns<br/>4,5</div> <div>Steering Angle<br/>45°</div> | <div>DUMPING SYSTEM<br/>Two double-acting, single stage, dump cylinders</div> <div>Raise Time<br/>8,5 s</div> <div>Lowering Time<br/>7 s</div> <div>Tipping Angle<br/>70° standard, or any lower angle programmable</div> <div>PNEUMATIC SYSTEM<br/>Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.</div> <div>System Pressure<br/>8,1 Bar (117 psi)</div> <div>ELECTRICAL SYSTEM</div> <div>Voltage<br/>24 V</div> <div>Battery Type<br/>Two AGM (Absorption Glass Mat) type</div> <div>Battery Capacity<br/>2 X 75 Ah</div> <div>Alternator Rating<br/>28 V 80 A</div> <div>VEHICLE SPEEDS</div> <table><tr><td>1st</td><td>11 km/h</td><td>7 mph</td></tr><tr><td>2nd</td><td>20 km/h</td><td>12 mph</td></tr><tr><td>3rd</td><td>27 km/h</td><td>17 mph</td></tr><tr><td>4th</td><td>38 km/h</td><td>24 mph</td></tr><tr><td>5th</td><td>50 km/h</td><td>31 mph</td></tr><tr><td>6th</td><td>50 km/h</td><td>31 mph</td></tr><tr><td>R</td><td>7 km/h</td><td>4 mph</td></tr></table> <div>CAB<br/>ROPS/FOPS certified.</div> | 1st | 11 km/h | 7 mph | 2nd | 20 km/h | 12 mph | 3rd | 27 km/h | 17 mph | 4th | 38 km/h | 24 mph | 5th | 50 km/h | 31 mph | 6th | 50 km/h | 31 mph | R | 7 km/h | 4 mph |
| 1st                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 11 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 7 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 2nd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 20 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 12 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 3rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 27 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 17 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 4th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 38 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 24 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 5th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 50 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 31 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 6th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 50 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 31 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| <div>TRANSMISSION</div> <div>Manufacturer<br/>Allison</div> <div>Model<br/>Standard Non Retarder: 3000P ORS<br/>Optional Retarder: 3000PR ORS</div> <div>Configuration<br/>Fully automatic planetary transmission with integral retarder.</div> <div>Layout<br/>Engine mounted</div> <div>Gear layout<br/>Constant meshing planetary gears, clutch operated</div> <div>Gears<br/>6 Forward, 1 Reverse</div> <div>Clutch Type<br/>Hydraulically operated multidisc</div> <div>Control Type<br/>Electronic</div>                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |         |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |

## Load Capacity & Ground Pressure

| OPERATING WEIGHTS |                 | GROUND PRESSURE                    |            | LOAD CAPACITY    |              | OPTION WEIGHTS    |             |
|-------------------|-----------------|------------------------------------|------------|------------------|--------------|-------------------|-------------|
| UNLADEN*          |                 | LADEN                              |            | BODY             | m³ (yd³)     |                   | kg (lb)     |
| Tare              | kg (lb)**       | (No sinkage or Total Contact Area) |            | Struck Capacity  | 9 (11)       | Bin liner         | 779 (1 718) |
| Front             | 7 888 (17 390)  | 20.5 R 25                          | kPa (Psi)  | SAE 2:1 Capacity | 11 (14,4)    | Tailgate          | 633 (1 396) |
| Middle            | 4 430 (9 766)   | Front                              | 236 (34,2) | SAE 1:1 Capacity | 13,5 (17,5)  |                   |             |
| Rear              | 4 084 (9 004)   | Middle                             | 310 (45)   |                  |              | EXTRA WHEELSET    |             |
| Total             | 16 402 (36 160) | Rear                               | 310 (45)   | Rated Payload    | 18 000 kg    | 20.5 R 25         |             |
| ISO 6016          | kg (lb)***      |                                    |            |                  | (39 690 lbs) | (per vehicle) Add | 132 (291)   |
| Front             | 9 688 (21 358)  |                                    |            |                  |              |                   |             |
| Middle            | 12 420 (27 381) |                                    |            |                  |              |                   |             |
| Rear              | 12 294 (27 104) |                                    |            |                  |              |                   |             |
| Total             | 34 402 (75 843) |                                    |            |                  |              |                   |             |

\* Includes additional mass. \*\* No fuel, no operator. \*\*\* Full fuel and operator

## Dimensions

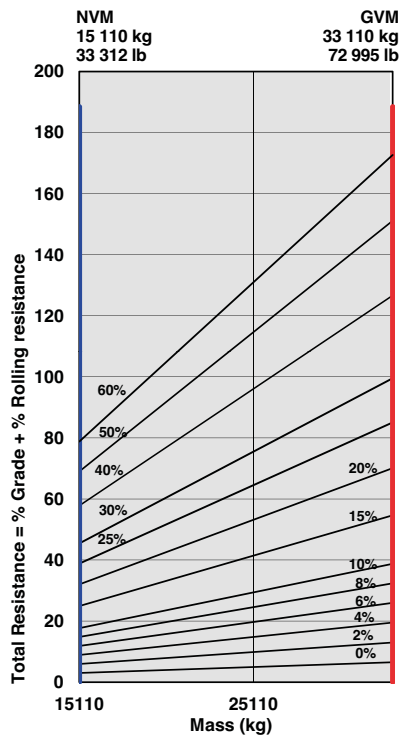
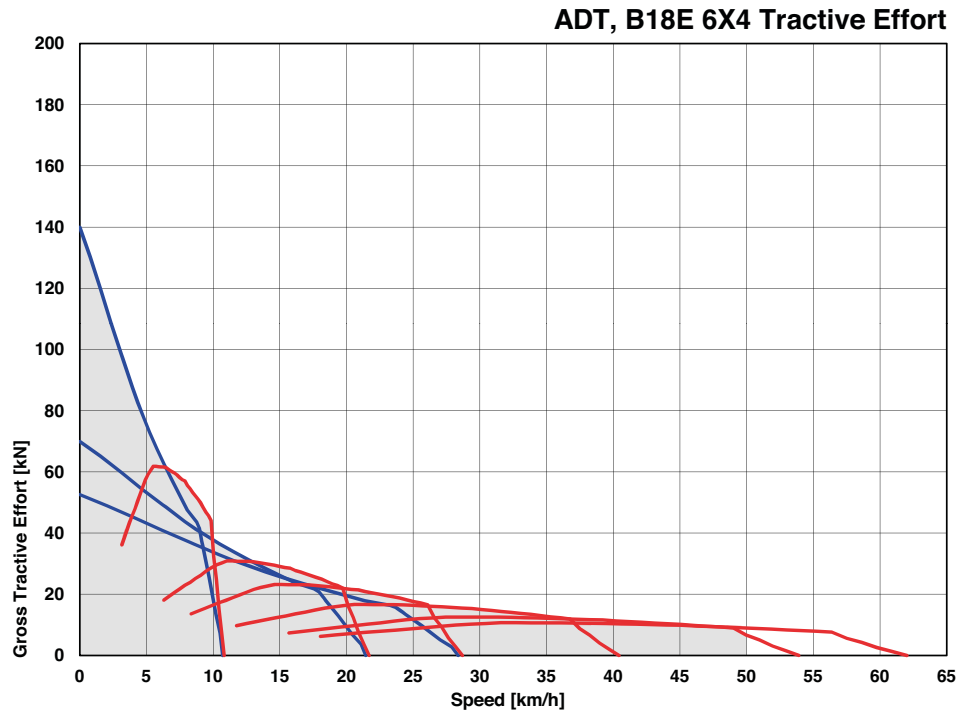


### Machine Dimensions

|    |                                           |                          |   |                                       |                          |
|----|-------------------------------------------|--------------------------|---|---------------------------------------|--------------------------|
| A  | Length - Transport Position w/o Tailgate  | 9 271 mm (30 ft. 5 in.)  | L | Bin Lip Height - Transport Position   | 2 073 mm (6 ft. 10 in.)  |
| A  | Length - Transport Position with Tailgate | 9 368 mm (30 ft. 9 in.)  | M | Bin Length                            | 4 709 mm (15 ft. 5 in.)  |
| A1 | Length - Bin Fully Tipped                 | 9 560 mm (31 ft. 4 in.)  | N | Load over Height                      | 2 544 mm (8 ft. 4 in.)   |
| B  | Height - Transport Position               | 3 461 mm (11 ft. 4 in.)  | O | Rear Axle Centre to Bin Rear          | 1 449 mm (4 ft. 9 in.)   |
| B1 | Height - Rotating Beacon                  | 3 675 mm (12 ft. 1 in.)  | P | Mid Axle Centre to Rear Axle Centre   | 1 600 mm (5 ft. 2 in.)   |
| B2 | Height - Load Light                       | 3 701 mm (12 ft. 2 in.)  | Q | Mid Axle Centre to Front Axle Centre  | 3 865 mm (12 ft. 8 in.)  |
| B3 | Bin Height - Fully Tipped                 | 5 747 mm (18 ft. 10 in.) | R | Front Axle Centre to Machine Front    | 2 357 mm (7 ft. 8 in.)   |
| C  | Width over Mudguards                      | 2 568 mm (8 ft. 5 in.)   | S | Front Axle Centre to Artic Centre     | 1 361 mm (4 ft. 5 in.)   |
| D  | Width over Tyres - 20.5R25                | 2 550 mm (8 ft. 4 in.)   | T | Approach Angle                        | 26°                      |
| E  | Tyre Track Width - 20.5R25                | 2 022 mm (6 ft. 7 in.)   | U | Maximum Bin Tip Angle                 | 70°                      |
| F  | Width over Bin                            | 2 540 mm (8 ft. 4 in.)   | V | Maximum Articulation Angle            | 45°                      |
| F1 | Width over Tailgate                       | 2 838 mm (9 ft. 4 in.)   | W | Front Tie Down Height                 | 1 035 mm (3 ft. 5 in.)   |
| G  | Width over Mirrors - Operating Position   | 3 260 mm (10 ft. 8 in.)  | X | Machine Lifting Centres               | 8 845 mm (29 ft.)        |
| H  | Ground Clearance - Artic                  | 480 mm (18.90 in.)       | Y | Inner Turning Circle Radius - 23.5R25 | 3 954 mm (12 ft. 11 in.) |
| I  | Ground Clearance - Front Axle             | 452 mm (17.80 in.)       | Z | Outer Turning Circle Radius - 23.5R25 | 7 309 mm (23 ft. 11 in.) |
| J  | Ground Clearance - Bin Fully Tipped       | 684 mm (26.93 in.)       |   |                                       |                          |

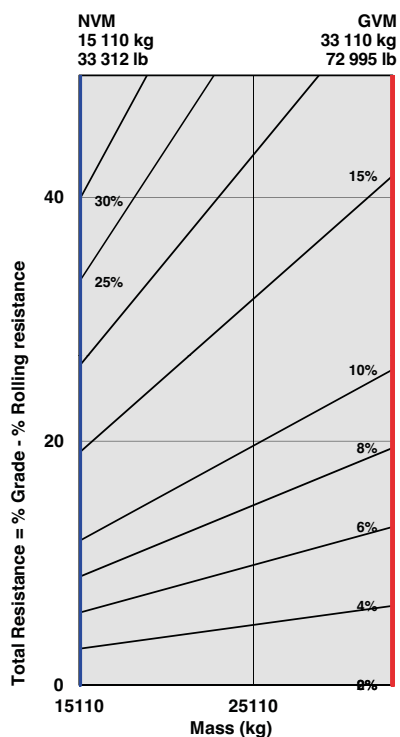
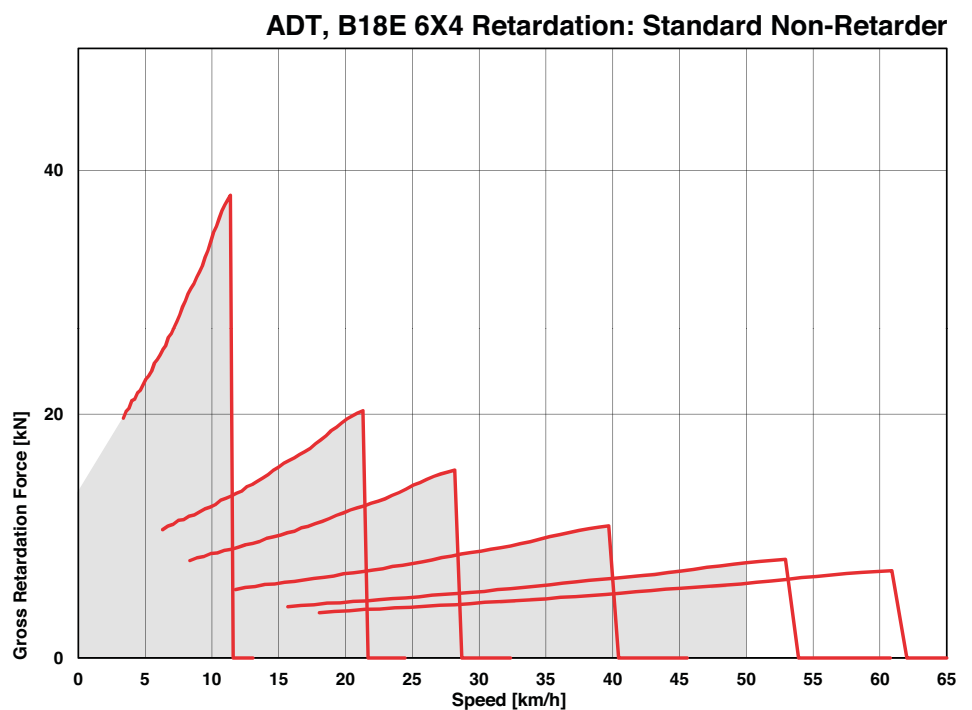
## Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.



## Retardation

1. Determine retardation force required by finding intersection of vehicle mass line.
2. From this intersection, move straight right across charts until line intersects the curve. NOTE: 2% typical rolling resistance is already assumed in chart.
3. Read down from this point to determine maximum speed.



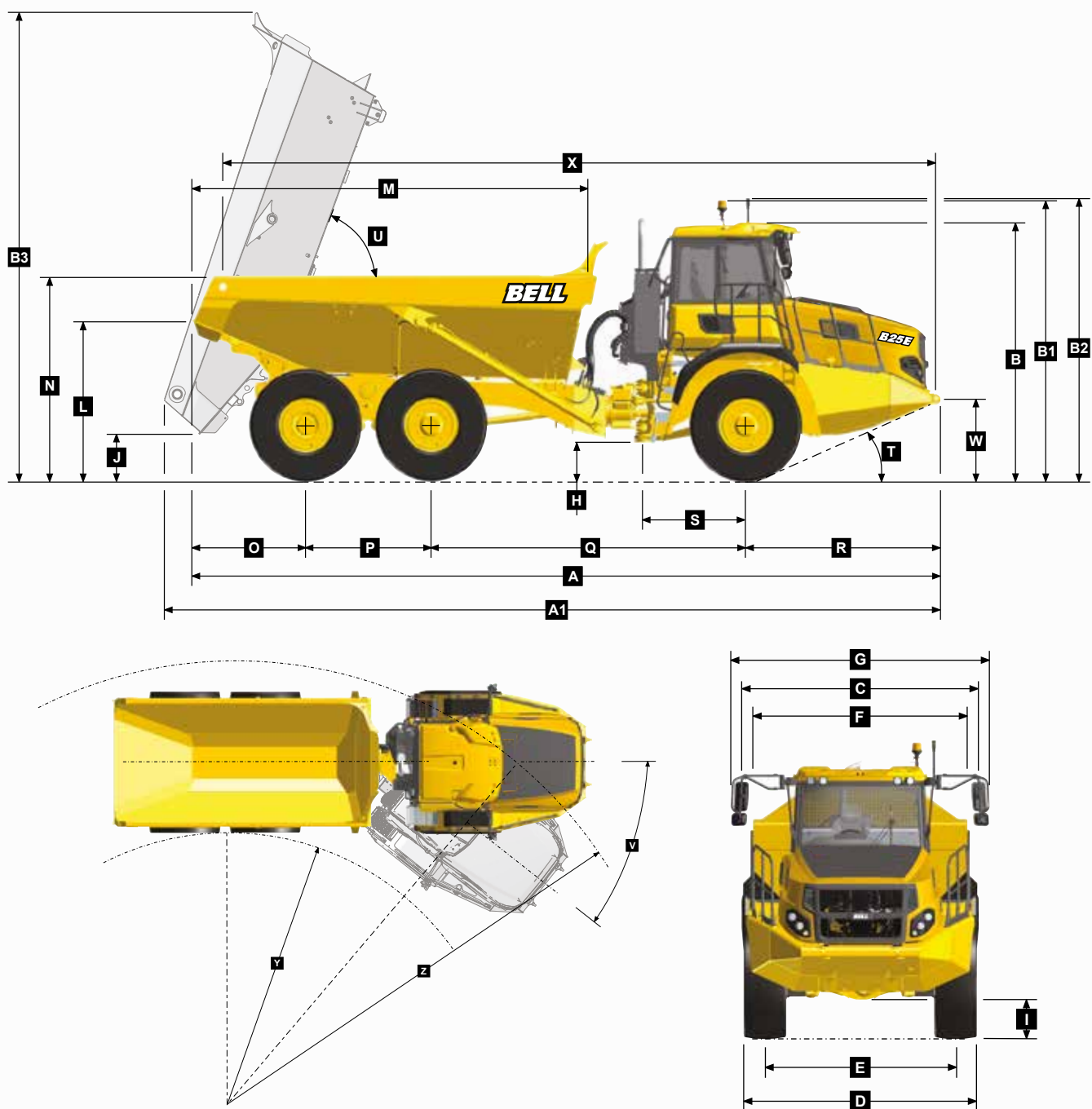
# B25E 6x4 Supertruck Articulated Dump Truck

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------|-------|-----|---------|--------|-----|---------|--------|-----|---------|--------|-----|---------|--------|-----|---------|--------|---|--------|-------|
| <div>ENGINE</div> <div>Manufacturer<br/>Mercedes Benz</div> <div>Model<br/>OM926LA</div> <div>Configuration<br/>Inline 6, turbocharged and intercooled.</div> <div>Maximum Net Power<br/>205 kW (275 hp) @ 2 200 rpm in accordance with UN ECE R120</div> <div>Gross Torque<br/>1 100 Nm (811 lbft) @ 1 200 -1 600 rpm</div> <div>Displacement<br/>6,37 litres (389 cu.in)</div> <div>Auxiliary Brake<br/>Exhaust Valve Brake<br/>Engine Valve Brake</div> <div>Fuel Tank Capacity<br/>379 litres (100 US gal)</div> <div>Certification<br/>OM906LA meets EU Stage II / EPA Tier 2 emissions regulations</div> | <div>TRANSFER CASE</div> <div>Manufacturer<br/>Kessler</div> <div>Series<br/>W1400</div> <div>Layout<br/>Remote mounted</div> <div>Gear Layout<br/>Three in-line helical gears</div> <div>Output Differential<br/>Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.</div> <div>AXLES</div> <div>Manufacturer<br/>Bell</div> <div>Model<br/>15T</div> <div>Differential<br/>High input limited slip differential with spiral bevel gears</div> <div>Final Drive<br/>Outboard heavy duty planetary on all axles</div>                                                                              | <div>WHEELS</div> <div>Type<br/>Radial Earthmover</div> <div>Tyre<br/>20.5 R 25</div> <div>FRONT SUSPENSION<br/>Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.</div> <div>REAR SUSPENSION<br/>Pivoting walking beams with laminated rubber suspension blocks</div> <div>HYDRAULIC SYSTEM<br/>Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system.</div> <div>Pump Type<br/>Variable displacement load sensing piston</div> <div>Flow<br/>202 L/min (53 gal/min)</div> <div>Pressure<br/>310 Bar (4 500 psi)</div> <div>Filter<br/>5 microns</div> <div>STEERING SYSTEM<br/>Double acting cylinders, with ground-driven emergency steering pump</div> <div>Lock to lock turns<br/>4,1</div> <div>Steering Angle<br/>45°</div> <div>DUMPING SYSTEM<br/>Two double-acting, single stage, dump cylinders</div> <div>Raise Time<br/>12 s</div> <div>Lowering Time<br/>10 s</div> | <div>Tipping Angle<br/>70° standard, or any lower angle programmable</div> <div>PNEUMATIC SYSTEM<br/>Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.</div> <div>System Pressure<br/>8,1 Bar (117 psi)</div> <div>ELECTRICAL SYSTEM</div> <div>Voltage<br/>24 V</div> <div>Battery Type<br/>Two AGM (Absorption Glass Mat) type</div> <div>Battery Capacity<br/>2 X 75 Ah</div> <div>Alternator Rating<br/>28 V 80 A</div> <div>VEHICLE SPEEDS</div> <table><tr><td>1st</td><td>9 km/h</td><td>6 mph</td></tr><tr><td>2nd</td><td>18 km/h</td><td>11 mph</td></tr><tr><td>3rd</td><td>27 km/h</td><td>17 mph</td></tr><tr><td>4th</td><td>41 km/h</td><td>25 mph</td></tr><tr><td>5th</td><td>50 km/h</td><td>31 mph</td></tr><tr><td>6th</td><td>50 km/h</td><td>31 mph</td></tr><tr><td>R</td><td>8 km/h</td><td>5 mph</td></tr></table> <div>CAB<br/>ROPS/FOPS certified 74 dBA internal sound pressure measured according to ISO 6396.</div> | 1st | 9 km/h | 6 mph | 2nd | 18 km/h | 11 mph | 3rd | 27 km/h | 17 mph | 4th | 41 km/h | 25 mph | 5th | 50 km/h | 31 mph | 6th | 50 km/h | 31 mph | R | 8 km/h | 5 mph |
| 1st                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 9 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 6 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 2nd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 18 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 11 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 3rd                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 27 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 17 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 4th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 41 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 25 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 5th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 31 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| 6th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 31 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| R                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8 km/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5 mph                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |
| <div>TRANSMISSION</div> <div>Manufacturer<br/>Allison</div> <div>Model<br/>3500PR ORS</div> <div>Configuration<br/>Fully automatic planetary transmission with integral retarder.</div> <div>Layout<br/>Engine mounted</div> <div>Gear layout<br/>Constant meshing planetary gears, clutch operated</div> <div>Gears<br/>6 Forward, 1 Reverse</div> <div>Clutch Type<br/>Hydraulically operated multi-disc</div> <div>Control Type<br/>Electronic</div> <div>Torque Control<br/>Hydrodynamic with lock-up in all gears</div>                                                                                   | <div>BRAKING SYSTEM</div> <div>Service Brake<br/>Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers.</div> <div>Maximum brake force:<br/>175,5 kN (39 004 lbf)</div> <div>Park &amp; Emergency<br/>Spring applied, air released driveline mounted disc.</div> <div>Maximum brake force:<br/>170 kN (38 217 lbf)</div> <div>Auxiliary Brake<br/>Automatic exhaust valve brake and engine valve brake. Automatic, adjustable, integral, hydrodynamic transmission retarder. Output shaft speed dependant.</div> <div>Total Retardation Power<br/>250 kW (335 hp) Continuous.<br/>539 kW (723 hp) Maximum.</div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |        |       |     |         |        |     |         |        |     |         |        |     |         |        |     |         |        |   |        |       |

## Load Capacity & Ground Pressure

| OPERATING WEIGHTS |                 | GROUND PRESSURE                    |            | LOAD CAPACITY    |                        | OPTION WEIGHTS    |           |
|-------------------|-----------------|------------------------------------|------------|------------------|------------------------|-------------------|-----------|
| UNLADEN           | kg (lb)         | LADEN                              |            | BODY             | m³ (yd³)               | EXTRA WHEELSET    | kg (lb)   |
| Front             | 9 640 (21 256)  | (No sinkage or Total Contact Area) |            | Struck Capacity  | 11,5 (15)              | 20.5 R 25         |           |
| Middle            | 4 190 (9 237)   | 20.5 R 25                          | kPa (Psi)  | SAE 2:1 Capacity | 15 (19,5)              | (per vehicle) Add | 156 (344) |
| Rear              | 3 930 (8 664)   | Front                              | 306 (44,4) | SAE 1:1 Capacity | 18 (23,5)              |                   |           |
| Total             | 17 760 (39 154) | Middle                             | 359 (52)   |                  |                        |                   |           |
|                   |                 | Rear                               | 359 (52)   | Rated Payload    | 24 000 kg (52 911 lbs) |                   |           |
| LADEN             | kg (lb)         |                                    |            |                  |                        |                   |           |
| Front             | 12 370 (27 271) |                                    |            |                  |                        |                   |           |
| Middle            | 14 760 (32 540) |                                    |            |                  |                        |                   |           |
| Rear              | 14 630 (32 254) |                                    |            |                  |                        |                   |           |
| Total             | 41 760 (92 065) |                                    |            |                  |                        |                   |           |

## Dimensions

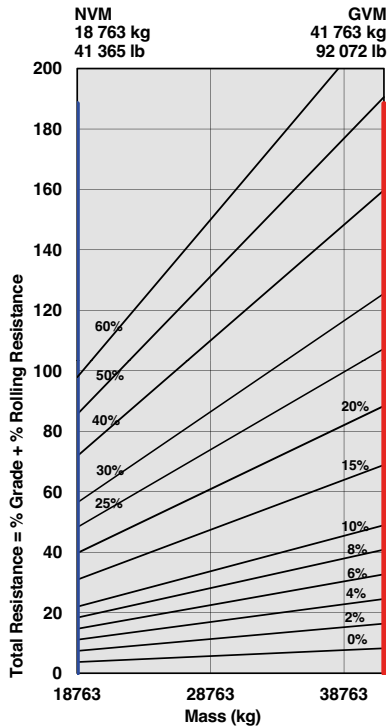
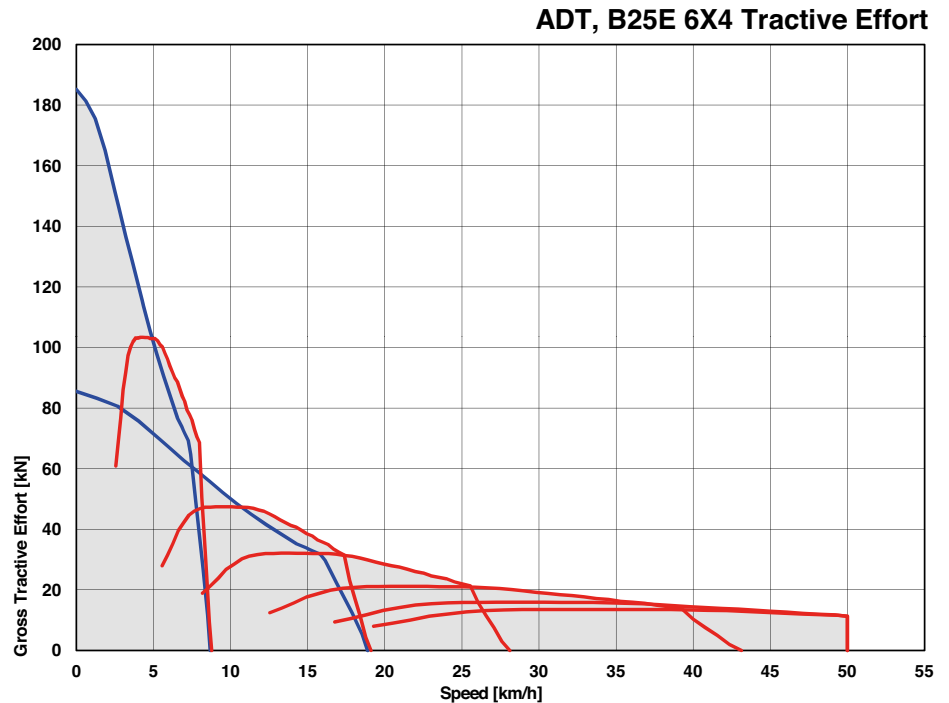


### Machine Dimensions

|    |                                         |                          |   |                                       |                         |
|----|-----------------------------------------|--------------------------|---|---------------------------------------|-------------------------|
| A  | Length - Transport Position             | 9 953 mm (32 ft. 7 in.)  | M | Bin Length                            | 5 272 mm (17 ft. 3 in.) |
| A1 | Length - Bin Fully Tipped               | 10 311 mm (33 ft. 9 in.) | N | Load over Height                      | 2 697 mm (8 ft. 8 in.)  |
| B  | Height - Transport Position             | 3 443 mm (11 ft. 3 in.)  | O | Rear Axle Centre to Bin Rear          | 1 500 mm (4 ft. 11 in.) |
| B1 | Height - Rotating Beacon                | 3 670 mm (12 ft.)        | P | Mid Axle Centre to Rear Axle Centre   | 1 670 mm (5 ft. 5 in.)  |
| B2 | Height - Load Light                     | 3 695 mm (12 ft. 1 in.)  | Q | Mid Axle Centre to Front Axle Centre  | 4 181 mm (13 ft. 8 in.) |
| B3 | Bin Height - Fully Tipped               | 6 198 mm (20 ft. 4 in.)  | R | Front Axle Centre to Machine Front    | 2 602 mm (8 ft. 6 in.)  |
| C  | Width over Mudguards                    | 2 985 mm (9 ft. 9 in.)   | S | Front Axle Centre to Artic Centre     | 1 362 mm (4 ft. 5 in.)  |
| D  | Width over Tyres - 20.5R25              | 2 850 mm (9 ft. 4 in.)   | T | Approach Angle                        | 24 °                    |
| E  | Tyre Track Width - 20.5R25              | 2 322 mm (7 ft. 6 in.)   | U | Maximum Bin Tip Angle                 | 70 °                    |
| F  | Width over Bin                          | 2 700 mm (8 ft. 9 in.)   | V | Maximum Articulation Angle            | 45 °                    |
| G  | Width over Mirrors - Operating Position | 3 260 mm (10 ft. 8 in.)  | W | Front Tie Down Height                 | 1 024 mm (3 ft. 4 in.)  |
| H  | Ground Clearance - Artic                | 490 mm (1 ft. 7 in.)     | X | Machine Lifting Centres               | 9 477 mm (31 ft. 1 in.) |
| I  | Ground Clearance - Front Axle           | 435 mm (1 ft. 5 in.)     | Y | Inner Turning Circle Radius - 20.5R25 | 4 155 mm (13 ft. 7 in.) |
| J  | Ground Clearance - Bin Fully Tipped     | 615 mm (2 ft.)           | Z | Outer Turning Circle Radius - 20.5R25 | 7 955 mm (26 ft. 1 in.) |
| L  | Bin Lip Height - Transport Position     | 2 116 mm (6 ft. 11 in.)  |   |                                       |                         |

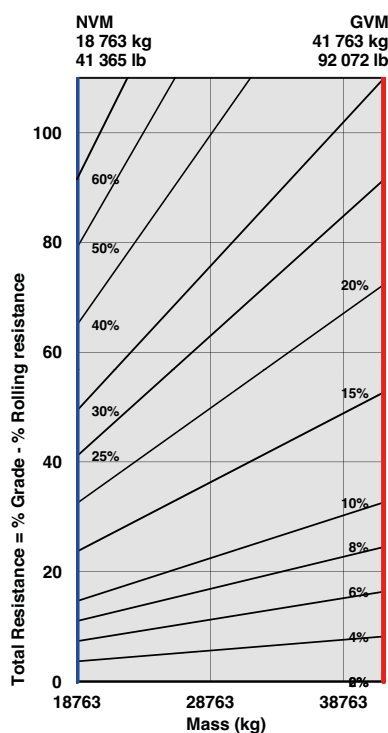
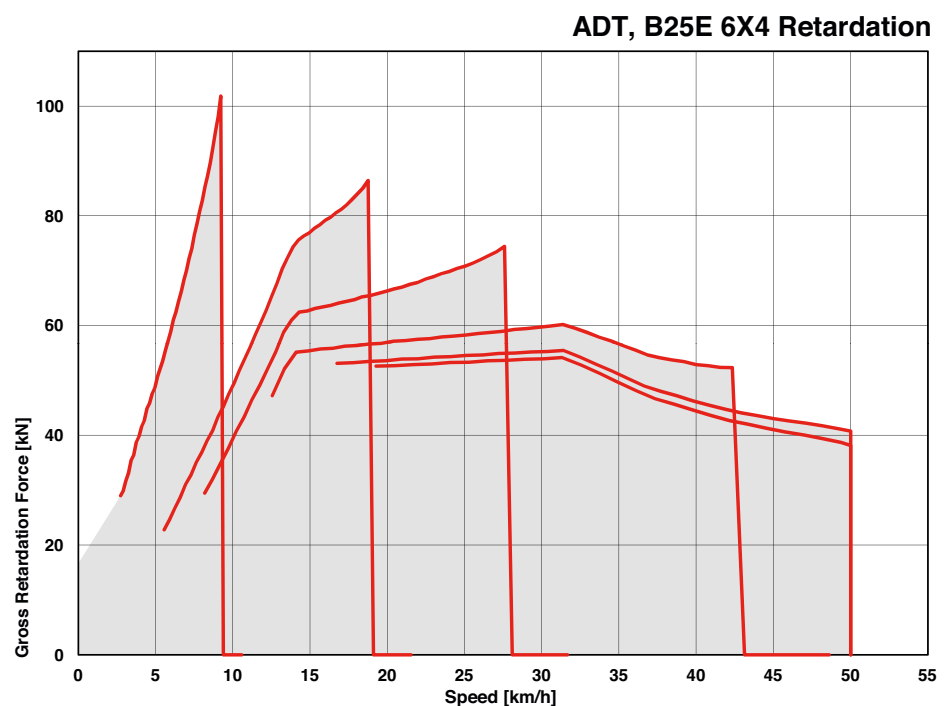
## Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.



## Retardation

1. Determine retardation force required by finding intersection of vehicle mass line.
2. From this intersection, move straight right across charts until line intersects the curve. NOTE: 2% typical rolling resistance is already assumed in chart.
3. Read down from this point to determine maximum speed.



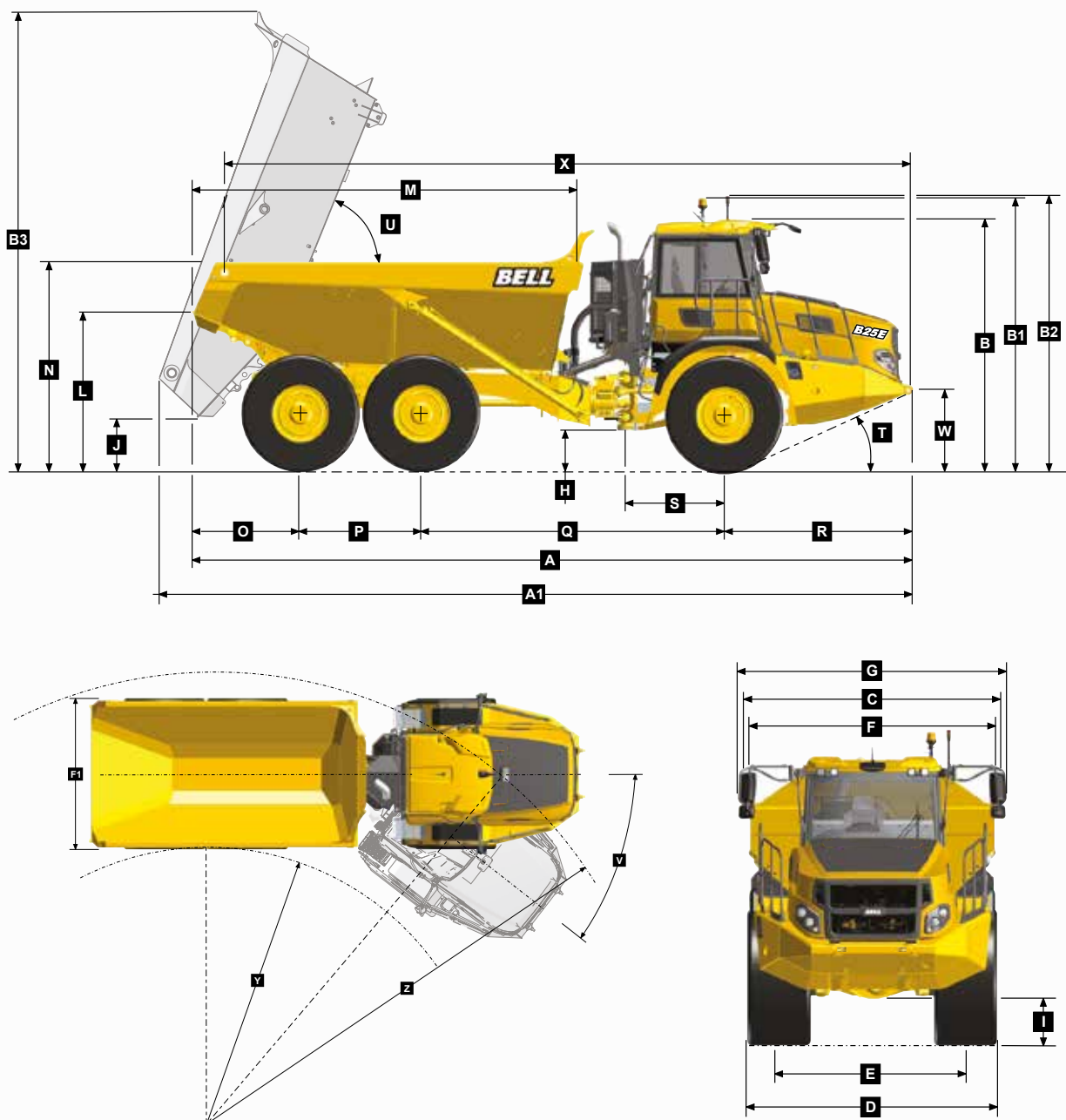
# B25E Articulated Dump Truck

| ENGINE                                                                          |  | TRANSFER CASE                                                                                                                                                               |  | WHEELS                                                                                                                                                                                                     |  | DUMPING SYSTEM                                                                                                     |  |
|---------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|
| Manufacturer<br>Mercedes Benz                                                   |  | Manufacturer<br>Kessler                                                                                                                                                     |  | Type<br>Radial Earthmover                                                                                                                                                                                  |  | Two double-acting, single stage, dump cylinders                                                                    |  |
| Model<br>OM926LA                                                                |  | Series<br>W1400                                                                                                                                                             |  | Tyre<br>23.5 R 25 (750/65 R 25 Optional)                                                                                                                                                                   |  | Raise Time<br>12 s                                                                                                 |  |
| Configuration<br>Inline 6, turbocharged and intercooled.                        |  | Layout<br>Remote mounted                                                                                                                                                    |  | FRONT SUSPENSION<br>Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.<br>Optional active dual springrate Comfort Ride suspension available, including height control.      |  | Lowering Time<br>10 s                                                                                              |  |
| Maximum Net Power<br>205 kW (275 hp) @ 2 200 rpm in accordance with UN ECE R120 |  | Gear Layout<br>Three in-line helical gears                                                                                                                                  |  | REAR SUSPENSION<br>Pivoting walking beams with laminated rubber suspension blocks.<br>Optional passive dual-springrate Comfort Ride walkingbeam available.                                                 |  | Tipping Angle<br>70° standard, or any lower angle programmable                                                     |  |
| Gross Torque<br>1 100 Nm (811 lbft) @ 1 200 -1 600 rpm                          |  | Output Differential<br>Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.                                                                   |  |                                                                                                                                                                                                            |  | PNEUMATIC SYSTEM<br>Air drier with heater and integral unloader valve, serving park brake and auxiliary functions. |  |
| Displacement<br>6,37 litres (389 cu.in)                                         |  | AXLES<br>Manufacturer<br>Bell                                                                                                                                               |  | HYDRAULIC SYSTEM<br>Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system. |  | System Pressure<br>8,1 Bar (117 psi)                                                                               |  |
| Auxiliary Brake<br>Exhaust Valve Brake<br>Engine Valve Brake                    |  | Model<br>15T                                                                                                                                                                |  |                                                                                                                                                                                                            |  | ELECTRICAL SYSTEM<br>Voltage<br>24 V                                                                               |  |
| Fuel Tank Capacity<br>379 litres (100 US gal)                                   |  | Differential<br>High input limited slip differential with spiral bevel gears.                                                                                               |  | STEERING SYSTEM<br>Double acting cylinders, with ground-driven emergency steering pump.<br>Lock to lock turns<br>4,1<br>Steering Angle<br>45°                                                              |  | Battery Type<br>Two AGM (Absorption Glass Mat) type                                                                |  |
| Certification<br>OM906LA meets EU Stage II / EPA Tier 2 emissions regulations   |  | Final Drive<br>Outboard heavy duty planetary on all axles                                                                                                                   |  |                                                                                                                                                                                                            |  | Battery Capacity<br>2 X 75 Ah                                                                                      |  |
| TRANSMISSION<br>Manufacturer<br>Allison                                         |  | BRAKING SYSTEM<br>Service Brake<br>Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers.<br>Maximum brake force:<br>160,5 kN (36 081 lbf)                 |  | Pump Type<br>Variable displacement load sensing piston                                                                                                                                                     |  | Alternator Rating<br>28 V 80 A                                                                                     |  |
| Model<br>3500PR ORS                                                             |  | Park & Emergency<br>Spring applied, air released driveline mounted disc.<br>Maximum brake force:<br>195 kN (43 900 lbf)                                                     |  | Flow<br>202 L/min (53 gal/min)                                                                                                                                                                             |  | VEHICLE SPEEDS                                                                                                     |  |
| Configuration<br>Fully automatic planetary transmission with integral retarder. |  | Auxiliary Brake<br>Automatic exhaust valve brake and engine valve brake. Automatic, adjustable, integral, hydrodynamic transmission retarder. Output shaft speed dependant. |  | Pressure<br>310 Bar (4 500 psi)                                                                                                                                                                            |  | 1st 7 km/h 4 mph                                                                                                   |  |
| Layout<br>Engine mounted                                                        |  | Total Retardation Power<br>250kW (335 hp) Continuous<br>539 kW (723 hp) Maximum                                                                                             |  | Filter<br>5 microns                                                                                                                                                                                        |  | 2nd 15 km/h 9 mph                                                                                                  |  |
| Gear layout<br>Constant meshing planetary gears, clutch operated                |  |                                                                                                                                                                             |  | STEERING SYSTEM<br>Double acting cylinders, with ground-driven emergency steering pump.                                                                                                                    |  | 3rd 23 km/h 14 mph                                                                                                 |  |
| Gears<br>6 Forward, 1 Reverse                                                   |  |                                                                                                                                                                             |  |                                                                                                                                                                                                            |  | 4th 35 km/h 22 mph                                                                                                 |  |
| Clutch Type<br>Hydraulically operated multi-disc                                |  |                                                                                                                                                                             |  |                                                                                                                                                                                                            |  | 5th 47 km/h 29 mph                                                                                                 |  |
| Control Type<br>Electronic                                                      |  |                                                                                                                                                                             |  |                                                                                                                                                                                                            |  | 6th 50 km/h 31 mph                                                                                                 |  |
| Torque Control<br>Hydrodynamic with lock-up in all gears                        |  |                                                                                                                                                                             |  |                                                                                                                                                                                                            |  | R 7 km/h 4 mph                                                                                                     |  |
|                                                                                 |  |                                                                                                                                                                             |  |                                                                                                                                                                                                            |  | CAB<br>ROPS/FOPS certified 74 dBA internal sound pressure measured according to ISO 6396.                          |  |

## Load Capacity & Ground Pressure

| OPERATING WEIGHTS |                 | GROUND PRESSURE                                                           |                                           |             |            | LOAD CAPACITY    |              | OPTION WEIGHTS     |             |
|-------------------|-----------------|---------------------------------------------------------------------------|-------------------------------------------|-------------|------------|------------------|--------------|--------------------|-------------|
| UNLADEN           | kg (lb)         | LADEN                                                                     |                                           |             |            | BODY             | m³ (yd³)     |                    | kg (lb)     |
| Front             | 9 832 (21 676)  | No sinkage/Total Contact Area<br>(as recommended by<br>tyre manufacturer) | Calculation method used by<br>competition |             |            | Struck Capacity  | 11,5 (15)    | Bin liner          | 751 (1 656) |
| Middle            | 4 697 (10 335)  |                                                                           |                                           |             |            | SAE 2:1 Capacity | 15 (19,5)    | Tailgate           | 735 (1 621) |
| Rear              | 4 657 (10 267)  | 23.5 R 25                                                                 | kPa (Psi)                                 | 23.5 R 25   | kPa (Psi)  | SAE 1:1 Capacity | 18 (23,5)    | Wheelset 750/65R25 |             |
| Total             | 19 186 (42 298) | Front                                                                     | 267 (38,7)                                | Front       | 131 (19)   | SAE 2:1 Capacity | 15 (19,6)    | (per vehicle) Add  | 642 (1 415) |
|                   |                 | Mid/Rear                                                                  | 357 (51,8)                                | Mid/Rear    | 155 (22,5) | with tailgate    |              |                    |             |
| LADEN             | kg (lb)         |                                                                           |                                           |             |            |                  |              | EXTRA WHEELSET     |             |
| Front             | 12 572 (27 716) | 750/65 R 25                                                               |                                           | 750/65 R 25 |            | Rated Payload    | 24 000 kg    | 23.5 R 25          |             |
| Middle            | 15 327 (33 790) | Front                                                                     | 229 (33,2)                                | Front       | 106 (15,4) |                  | (52 911 lbs) | (per vehicle) Add  | 544 (1 199) |
| Rear              | 15 287 (33 702) | Mid/Rear                                                                  | 270 (39,1)                                | Mid/Rear    | 128 (18,6) |                  |              | 750/65R25          |             |
| Total             | 43 186 (95 209) |                                                                           |                                           |             |            |                  |              | (per vehicle) Add  | 656 (1 446) |

## Dimensions

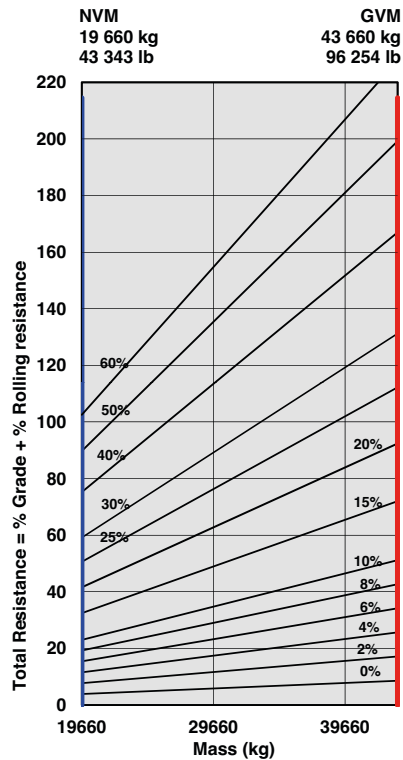


### Machine Dimensions

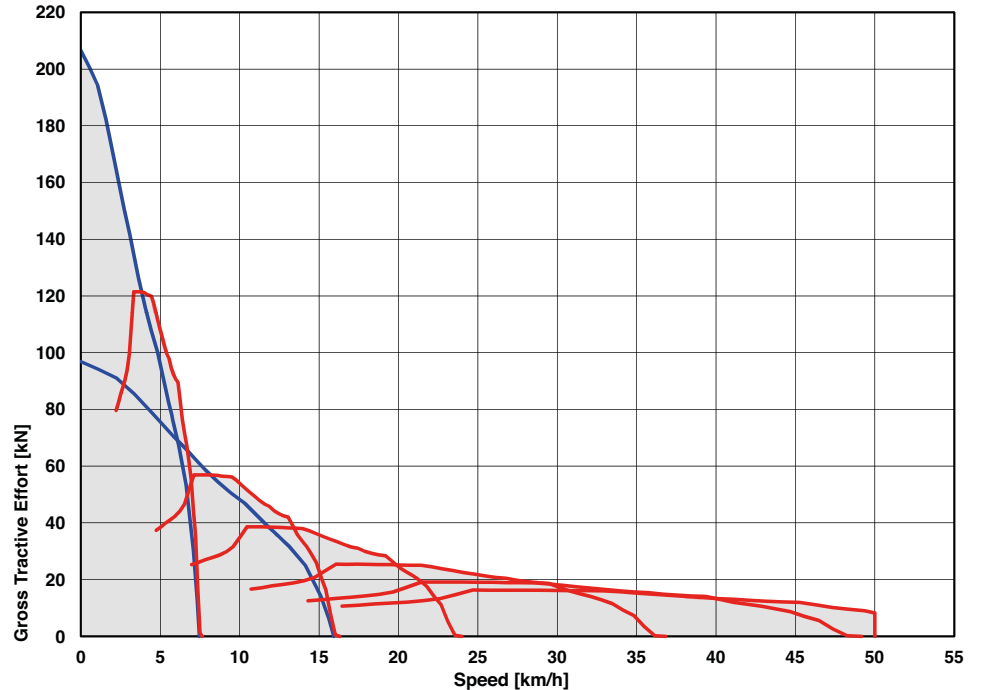
|    |                                           |                           |   |                                       |                         |
|----|-------------------------------------------|---------------------------|---|---------------------------------------|-------------------------|
| A  | Length - Transport Position w/o Tailgate  | 9 953 mm (32 ft. 7 in.)   | L | Bin Lip Height - Transport Position   | 2 176 mm (7 ft. 1 in.)  |
| A  | Length - Transport Position with Tailgate | 10 035 mm (32 ft. 11 in.) | M | Bin Length                            | 5 272 mm (17 ft. 3 in.) |
| A1 | Length - Bin Fully Tipped                 | 10 311 mm (33 ft. 9 in.)  | N | Load over Height                      | 2 755 mm (9 ft.)        |
| B  | Height - Transport Position S5            | 3 426 mm (11 ft. 2 in.)   | O | Rear Axle Centre to Bin Rear          | 1 500 mm (4 ft. 11 in.) |
| B  | Height - Transport Position S2            | 3 500 mm (11 ft. 6 in.)   | P | Mid Axle Centre to Rear Axle Centre   | 1 670 mm (5 ft. 5 in.)  |
| B1 | Height - Rotating Beacon                  | 3 723 mm (12 ft. 3 in.)   | Q | Mid Axle Centre to Front Axle Centre  | 4 181 mm (13 ft. 8 in.) |
| B2 | Height - Load Light                       | 3 748 mm (12 ft. 4 in.)   | R | Front Axle Centre to Machine Front    | 2 602 mm (8 ft. 6 in.)  |
| B3 | Bin Height - Fully Tipped                 | 6 258 mm (20 ft. 6 in.)   | S | Front Axle Centre to Artic Centre     | 1 362 mm (4 ft. 5 in.)  |
| C  | Width over Mudguards                      | 2 985 mm (9 ft. 9 in.)    | T | Approach Angle                        | 25°                     |
| D  | Width over Tyres - 23.5R25                | 2 940 mm (9 ft. 7 in.)    | U | Maximum Bin Tip Angle                 | 70°                     |
| F  | Width over Bin                            | 2 700 mm (8 ft. 10 in.)   | V | Maximum Articulation Angle            | 45°                     |
| F1 | Width over Tailgate                       | 2 998 mm (9 ft. 10 in.)   | W | Front Tie Down Height                 | 1 075 mm (3 ft. 6 in.)  |
| G  | Width over Mirrors - Operating Position   | 3 260 mm (10 ft. 8 in.)   | X | Machine Lifting Centres               | 9 477 mm (31 ft. 1 in.) |
| H  | Ground Clearance - Artic                  | 537 mm (21.14 in.)        | Y | Inner Turning Circle Radius - 23.5R25 | 4 110 mm (13 ft. 5 in.) |
| I  | Ground Clearance - Front Axle             | 488 mm (19.21 in.)        | Z | Outer Turning Circle Radius - 23.5R25 | 8 000 mm (26 ft. 2 in.) |
| J  | Ground Clearance - Bin Fully Tipped       | 675 mm (26.57 in.)        |   |                                       |                         |

## Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.

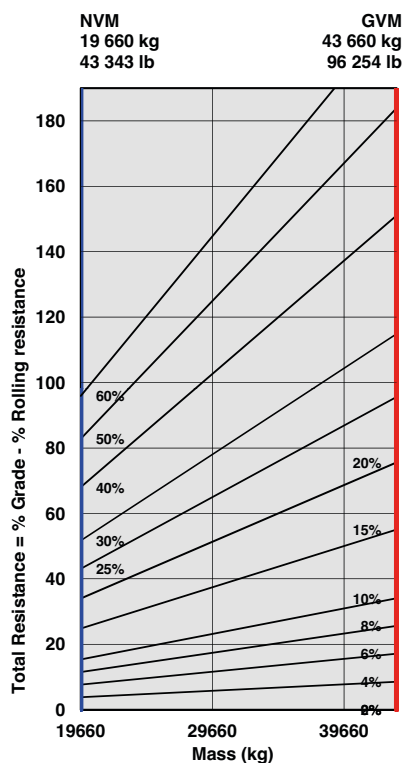


**ADT, B25E 6X6 - Tractive Effort**

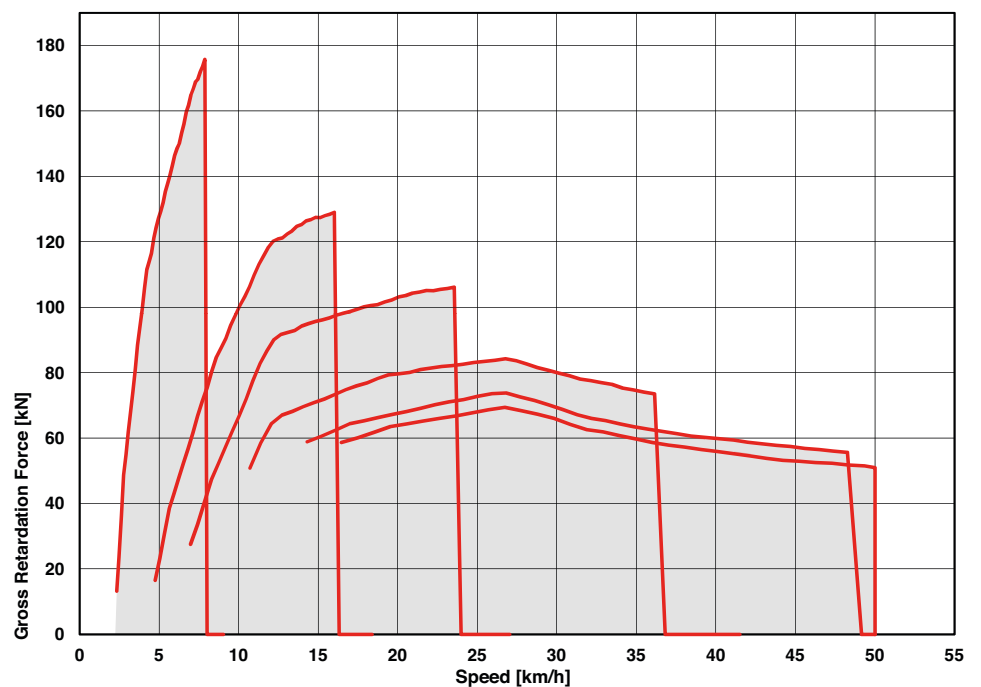


## Retardation

1. Determine retardation force required by finding intersection of vehicle mass line.
2. From this intersection, move straight right across charts until line intersects the curve. NOTE: 2% typical rolling resistance is already assumed in chart.
3. Read down from this point to determine maximum speed.



**ADT, B25E 6X6 - Retardation**



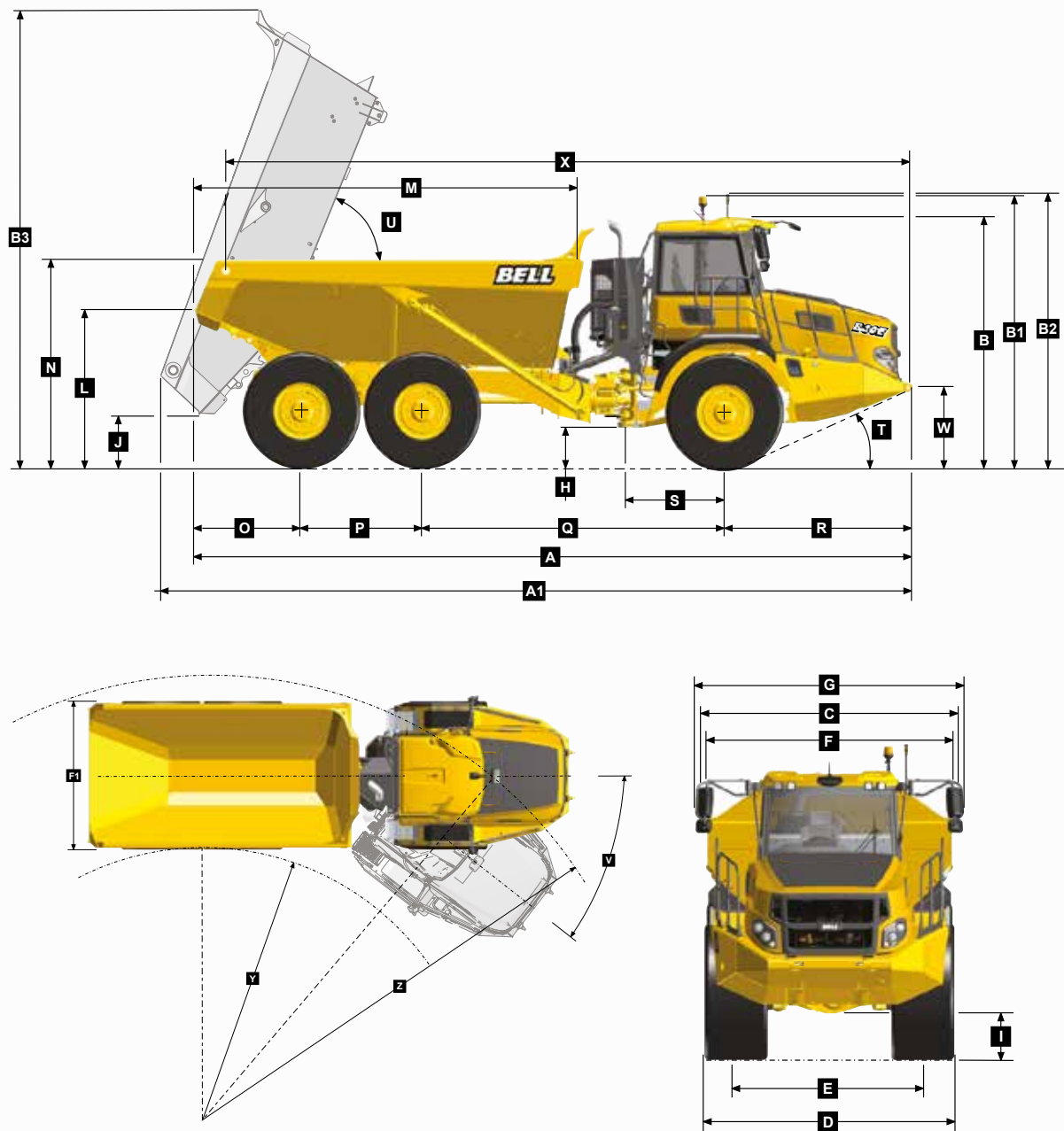
# B30E Articulated Dump Truck

| ENGINE                                                                                 | TRANSFER CASE                                                                                                                                                                  | WHEELS                                                                                                                                                                                                            | DUMPING SYSTEM                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Manufacturer</b><br>Mercedes Benz                                                   | <b>Manufacturer</b><br>Kessler                                                                                                                                                 | <b>Type</b><br>Radial Earthmover                                                                                                                                                                                  | Two double-acting, single stage, dump cylinders                                                                                                                                                                                                                                                   |
| <b>Model</b><br>OM926LA                                                                | <b>Series</b><br>W1400                                                                                                                                                         | <b>Tyre</b><br>23.5 R 25 (750/65 R 25 Optional)                                                                                                                                                                   | <b>Raise Time</b><br>12 s                                                                                                                                                                                                                                                                         |
| <b>Configuration</b><br>Inline 6, turbocharged and intercooled.                        | <b>Layout</b><br>Remote mounted                                                                                                                                                | <b>FRONT SUSPENSION</b><br>Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.<br><br>Optional active dual springrate Comfort Ride suspension available, including height control.  | <b>Lowering Time</b><br>10 s                                                                                                                                                                                                                                                                      |
| <b>Maximum Net Power</b><br>240 kW (322 hp) @ 2 200 rpm in accordance with UN ECE R120 | <b>Gear Layout</b><br>Three in-line helical gears                                                                                                                              |                                                                                                                                                                                                                   | <b>Tipping Angle</b><br>70° standard, or any lower angle programmable                                                                                                                                                                                                                             |
| <b>Gross Torque</b><br>1 300 Nm (959 lbft) @ 1 200 -1 600 rpm                          | <b>Output Differential</b><br>Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.                                                               |                                                                                                                                                                                                                   | <b>PNEUMATIC SYSTEM</b><br>Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.                                                                                                                                                                         |
| <b>Displacement</b><br>7,2 litres (439 cu.in)                                          | <b>AXLES</b><br><b>Manufacturer</b><br>Bell                                                                                                                                    | <b>REAR SUSPENSION</b><br>Pivoting walking beams with laminated rubber suspension blocks.<br><br>Optional passive dual-springrate Comfort Ride walkingbeam available.                                             | <b>System Pressure</b><br>8,1 Bar (117 psi)                                                                                                                                                                                                                                                       |
| <b>Auxiliary Brake</b><br>Exhaust Valve Brake<br>Engine Valve Brake                    | <b>Model</b><br>18T                                                                                                                                                            | <b>HYDRAULIC SYSTEM</b><br>Full load sensing system serving the prioritized steering, body tipping and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system. | <b>ELECTRICAL SYSTEM</b><br><b>Voltage</b><br>24 V                                                                                                                                                                                                                                                |
| <b>Fuel Tank Capacity</b><br>379 litres (100 US gal)                                   | <b>Differential</b><br>High input limited slip differential with spiral bevel gears.                                                                                           |                                                                                                                                                                                                                   | <b>Battery Type</b><br>Two AGM (Absorption Glass Mat) type                                                                                                                                                                                                                                        |
| <b>Certification</b><br>OM926LA meets EU Stage II / EPA Tier 2 emissions regulations   | <b>Final Drive</b><br>Outboard heavy duty planetary on all axles                                                                                                               |                                                                                                                                                                                                                   | <b>Battery Capacity</b><br>2 X 75 Ah                                                                                                                                                                                                                                                              |
| TRANSMISSION                                                                           | BRAKING SYSTEM                                                                                                                                                                 |                                                                                                                                                                                                                   | Alternator Rating                                                                                                                                                                                                                                                                                 |
| <b>Manufacturer</b><br>Allison                                                         | <b>Service Brake</b><br>Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system. | <b>Pump Type</b><br>Variable displacement load sensing piston.                                                                                                                                                    | 28 V 80 A                                                                                                                                                                                                                                                                                         |
| <b>Model</b><br>3400P ORS                                                              | <b>Maximum brake force:</b><br>174 kN (39 116 lbf)                                                                                                                             | <b>Flow</b><br>202 L/min (53 gal/min)                                                                                                                                                                             | <b>VEHICLE SPEEDS</b>                                                                                                                                                                                                                                                                             |
| <b>Configuration</b><br>Fully automatic planetary transmission with integral retarder  | <b>Park &amp; Emergency</b><br>Spring applied, air released driveline mounted disc.                                                                                            | <b>Pressure</b><br>310 Bar (4 500 psi)                                                                                                                                                                            | 1st            8 km/h            5 mph<br>2nd           14 km/h           9 mph<br>3rd           20 km/h           12 mph<br>4th           29 km/h           18 mph<br>5th           43 km/h           26 mph<br>6th           50 km/h           31 mph<br>R             8 km/h             5 mph |
| <b>Layout</b><br>Engine mounted                                                        | <b>Auxiliary Brake</b><br>Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.                                               | <b>Filter</b><br>5 microns                                                                                                                                                                                        | <b>CAB</b><br>ROPS/FOPS certified 74 dBA internal sound pressure measured according to ISO 6396.                                                                                                                                                                                                  |
| <b>Gear layout</b><br>Constant meshing planetary gears, clutch operated                | <b>Maximum brake force:</b><br>251 kN (56 400 lbf)                                                                                                                             | <b>STEERING SYSTEM</b><br>Double acting cylinders, with ground-driven emergency steering pump.                                                                                                                    |                                                                                                                                                                                                                                                                                                   |
| <b>Gears</b><br>6 Forward, 1 Reverse                                                   | <b>Total Retardation Power</b><br>265 kW (355 hp) Continuous<br>494 kW (662 hp) Maximum                                                                                        | <b>Lock to lock turns</b><br>4,1                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                   |
| <b>Clutch Type</b><br>Hydraulically operated multi-disc                                |                                                                                                                                                                                | <b>Steering Angle</b><br>45°                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                   |
| <b>Control Type</b><br>Electronic                                                      |                                                                                                                                                                                |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                   |
| <b>Torque Control</b><br>Hydrodynamic with lock-up in all gears.                       |                                                                                                                                                                                |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                   |

## Load Capacity & Ground Pressure

| *OPERATING WEIGHTS |                  | GROUND PRESSURE                                                     |                                        |             |            | LOAD CAPACITY    |              | OPTION WEIGHTS     |             |
|--------------------|------------------|---------------------------------------------------------------------|----------------------------------------|-------------|------------|------------------|--------------|--------------------|-------------|
| UNLADEN            | kg (lb)          | LADEN                                                               |                                        |             |            | BODY             | m³ (yd³)     |                    | kg (lb)     |
| Front              | 11 147 (24 575)  | No sinkage/Total Contact Area (as recommended by tyre manufacturer) | Calculation method used by competition | 23.5 R 25   | kPa (Psi)  | Struck Capacity  | 13,5 (17,6)  | Bin liner          | 853 (1 881) |
| Middle             | 5 232 (11 535)   |                                                                     |                                        |             |            | SAE 2:1 Capacity | 17,5 (22,9)  | Tailgate           | 785 (1 731) |
| Rear               | 4 776 (10 529)   | 23.5 R 25                                                           |                                        | 23.5 R 25   | kPa (Psi)  | SAE 1:1 Capacity | 21 (27,5)    | Wheelset 750/65R25 |             |
| Total              | 21 155 (46 639)  | Front                                                               | 298 (43,2)                             | Front       | 134 (19,4) | SAE 2:1 Capacity | 18 (23,5)    | (per vehicle) Add  | 642 (1 415) |
|                    |                  | Mid/Rear                                                            | 405 (58,7)                             | Mid/Rear    | 169 (24,5) | with tailgate    |              | EXTRA WHEELSET     |             |
| LADEN              | kg (lb)          |                                                                     |                                        |             |            |                  |              |                    |             |
| Front              | 14 517 (32 005)  | 750/65 R 25                                                         |                                        | 750/65 R 25 |            | Rated Payload    | 28 000 kg    | 23.5 R 25          |             |
| Middle             | 17 547 (38 685)  | Front                                                               | 240 (34,8)                             | Front       | 111 (16,1) |                  | (61 740 lbs) | (per vehicle) Add  | 544 (1 199) |
| Rear               | 17 091 (37 679)  | Mid/Rear                                                            | 310 (45)                               | Mid/Rear    | 143 (20,7) |                  |              | 750/65R25          |             |
| Total              | 49 155 (108 368) |                                                                     |                                        |             |            |                  |              | (per vehicle) Add  | 656 (1 446) |

## Dimensions

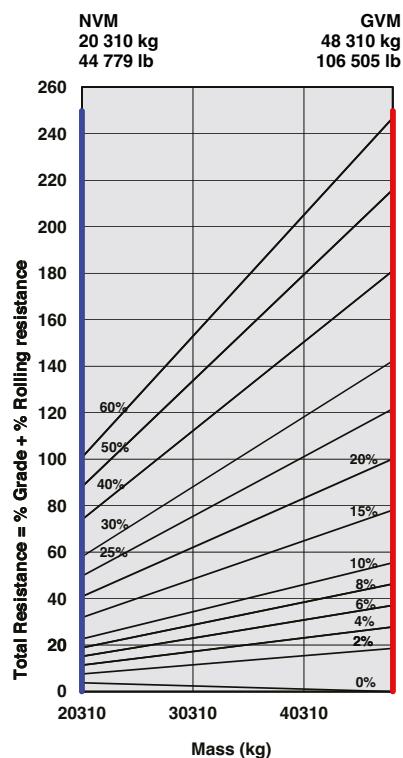


### Machine Dimensions

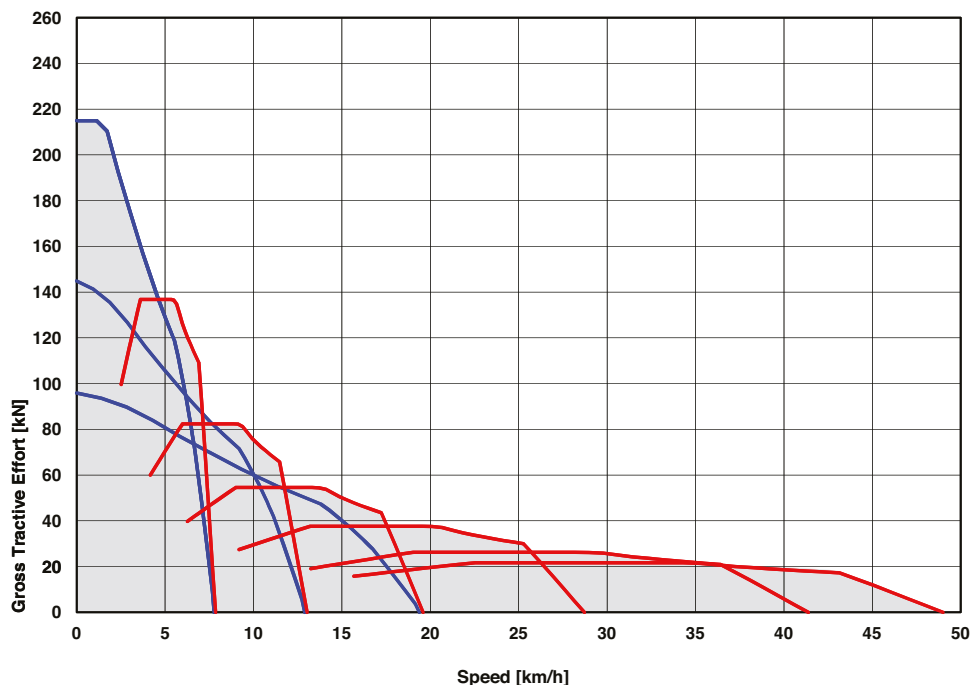
|    |                                           |                          |    |                                          |                          |
|----|-------------------------------------------|--------------------------|----|------------------------------------------|--------------------------|
| A  | Length - Transport Position w/o Tailgate  | 9 953 mm (32 ft. 7 in.)  | J  | Ground Clearance - Bin Fully Tipped      | 675 mm (26.57 in.)       |
| A  | Length - Transport Position with Tailgate | 9 976 mm (32 ft. 9 in.)  | L  | Bin Lip Height - Transport Position      | 2 176 mm (7 ft. 1 in.)   |
| A1 | Length - Bin Fully Tipped                 | 10 395 mm (34 ft. 1 in.) | M  | Bin Length                               | 5 294 mm (17 ft. 4 in.)  |
| B  | Height - Transport Position S5            | 3 426 mm (11 ft. 2 in.)  | N  | Load over Height                         | 2 864 mm (9 ft. 4 in.)   |
| B  | Height - Transport Position S2            | 3 500 mm (11 ft. 6 in.)  | O  | Rear Axle Centre to Bin Rear             | 1 500 mm (4 ft. 11 in.)  |
| B1 | Height - Rotating Beacon                  | 3 723 mm (12 ft. 3 in.)  | P  | Mid Axle Centre to Rear Axle Centre      | 1 670 mm (5 ft. 5 in.)   |
| B2 | Height - Load Light                       | 3 748 mm (12 ft. 4 in.)  | Q  | Mid Axle Centre to Front Axle Centre     | 4 181 mm (13 ft. 8 in.)  |
| B3 | Bin Height - Fully Tipped                 | 6 311 mm (20 ft. 8 in.)  | R  | Front Axle Centre to Machine Front       | 2 602 mm (8 ft. 6 in.)   |
| C  | Width over Mudguards                      | 2 985 mm (9 ft. 9 in.)   | S  | Front Axle Centre to Artic Centre        | 1 362 mm (4 ft. 5 in.)   |
| D  | Width over Tyres - 23.5R25                | 2 940 mm (9 ft. 7 in.)   | T  | Approach Angle                           | 25°                      |
| D1 | Width over Tyres - 750/65 R25             | 2 998 mm (9 ft. 10 in.)  | U  | Maximum Bin Tip Angle                    | 70°                      |
| E  | Tyre Track Width - 23.5R25                | 2 356 mm (7 ft. 8 in.)   | V  | Maximum Articulation Angle               | 45°                      |
| E1 | Tyre Track Width - 750/65 R25             | 2 260 mm (7 ft. 4 in.)   | W  | Front Tie Down Height                    | 1 075 mm (3 ft. 6 in.)   |
| F  | Width over Bin                            | 2 968 mm (9 ft. 8 in.)   | X  | Machine Lifting Centres                  | 9 443 mm (30 ft. 11 in.) |
| F1 | Width over Tailgate                       | 3 268 mm (10 ft. 8 in.)  | Y  | Inner Turning Circle Radius - 23.5R25    | 4 110 mm (13 ft. 5 in.)  |
| G  | Width over Mirrors - Operating Position   | 3 260 mm (10 ft. 8 in.)  | Y1 | Inner Turning Circle Radius - 750/65 R25 | 4 081 mm (13 ft. 4 in.)  |
| H  | Ground Clearance - Artic                  | 537 mm (21.14 in.)       | Z  | Outer Turning Circle Radius - 23.5R25    | 8 000 mm (26 ft. 2 in.)  |
| I  | Ground Clearance - Front Axle             | 488 mm (19.21 in.)       | Z1 | Outer Turning Circle Radius - 750/65 R25 | 8 029 mm (26 ft. 4 in.)  |

## Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.

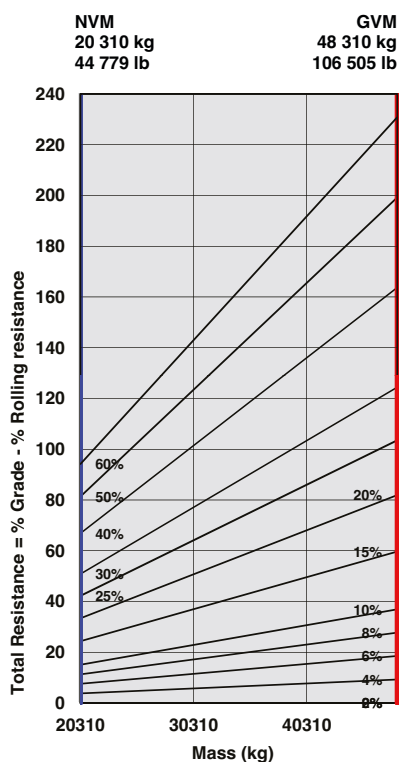


ADT, B30E 6X6 - Tractive Effort

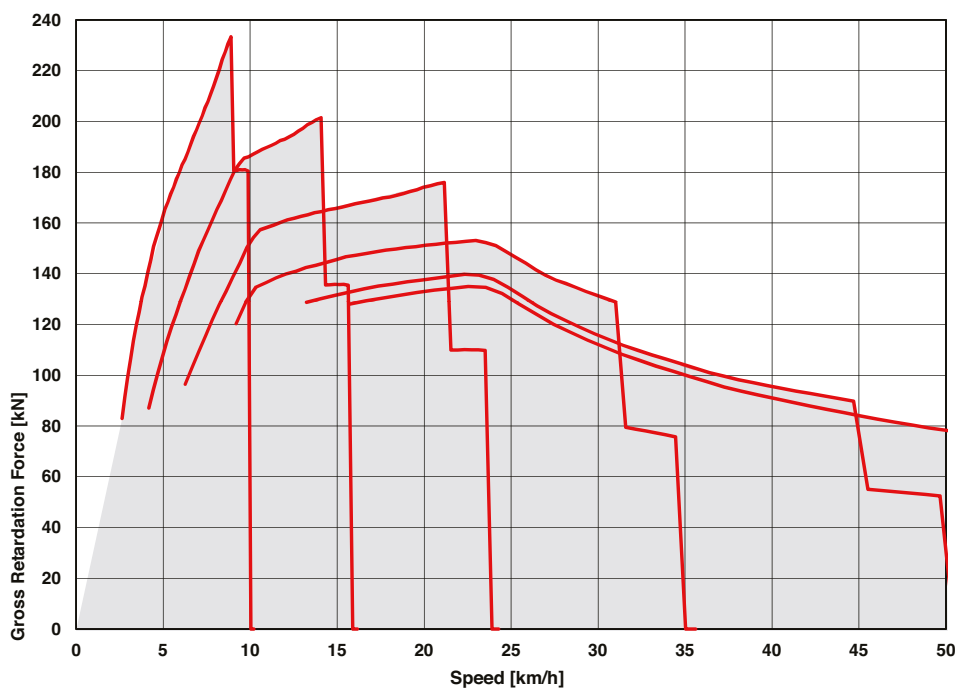


## Retardation

1. Determine retardation force required by finding intersection of vehicle mass line.
2. From this intersection, move straight right across charts until line intersects the curve. NOTE: 2% typical rolling resistance is already assumed in chart.
3. Read down from this point to determine maximum speed.



ADT, B30E 6X6 - Retardation



| B18E | B25E (6x4) | B25E | B30E |                                                                |  | B18E | B25E (6x4) | B25E | B30E |                                                     |  |
|------|------------|------|------|----------------------------------------------------------------|--|------|------------|------|------|-----------------------------------------------------|--|
|      |            |      |      | <b>ENGINE</b>                                                  |  |      |            |      |      | <b>CAB (continued)</b>                              |  |
| ●    | ●          | ●    | ●    | Engine valve brake and exhaust brake                           |  | ●    | ▲          | ▲    | ▲    | High visibility mirrors                             |  |
| ●    | ●          | ●    | ●    | Dual element air cleaner with dust ejector valve               |  | ●    | ●          | ●    | ●    | 12-volt power outlet                                |  |
| ●    | ●          | ●    | ●    | Precleaner with automatic dust scavenging                      |  | ▲    | ▲          | ▲    | ▲    | Cup holder                                          |  |
| ●    | ●          | ●    | ●    | Water separator                                                |  | ●    | ●          | ●    | ●    | Electric adjustable and heated mirrors              |  |
| ●    | ●          | ●    | ●    | Serpentine drive belt with automatic tensioner                 |  | ●    | ●          | ●    | ●    | Cooled/heated lunch box                             |  |
|      |            |      |      | <b>COOLING</b>                                                 |  |      |            |      |      | Backlit sealed switch module functions with:        |  |
| ●    | ●          | ●    | ●    | Crankshaft mounted electronically controlled viscous fan drive |  |      |            |      |      | Wiper control / Lights / Heated mirrors /           |  |
| ●    | ●          | ●    | ●    | Fan guard                                                      |  |      |            |      |      | Retarding aggressiveness / Transfer case            |  |
|      |            |      |      | <b>PNEUMATIC SYSTEM</b>                                        |  |      |            |      |      | differential lock / Transmission gear hold /        |  |
| ●    | ●          | ●    | ●    | Engine-mounted compressor                                      |  | ●    | ●          | ●    | ●    | Dump-body tip limit / Automatic dump-               |  |
| ●    | ●          | ●    | ●    | Air drier with heater                                          |  |      |            |      |      | body tip settings / Airconditioner/Heater           |  |
| ●    | ●          | ●    | ●    | Integral unloader valve                                        |  |      |            |      |      | controls / Preselected Speed Control                |  |
|      |            |      |      | <b>ELECTRICAL SYSTEM</b>                                       |  |      |            |      |      | Deluxe 10" colour LCD:                              |  |
| ●    | ●          | ●    | ●    | Battery disconnect                                             |  |      |            |      |      | Speedometer / Fuel gauge /                          |  |
| ●    | ●          | ●    | ●    | Drive lights                                                   |  |      |            |      |      | Transmission oil temperature gauge /                |  |
| ●    | ●          | ●    | ●    | Air horn                                                       |  |      |            |      |      | Engine coolant temperature gauge /                  |  |
| ●    | ●          | ●    | ●    | Reverse alarm                                                  |  |      |            |      |      | LED function/warning indicators and                 |  |
| ▲    | ▲          | ▲    | ▲    | White noise reverse alarm                                      |  |      |            |      |      | audible alarm / Transmission gear selection /       |  |
| ●    | ●          | ●    | ●    | Rotating beacon                                                |  |      |            |      |      | Tachometer / Battery voltage / Hour meter /         |  |
| ●    | ●          | ●    | ●    | Pitch Roll sensor                                              |  |      |            |      |      | Odometer / Fuel consumption / Tip counter /         |  |
| ▲    | ▲          | ▲    | ▲    | LED Artic reverse light                                        |  |      |            |      |      | Trip timer / Trip distance / Metric/English units / |  |
| ▲    | ▲          | ▲    | ▲    | Halogen Artic reverse light                                    |  |      |            |      |      | Service codes/diagnostics                           |  |
| ●    | ●          | ●    | ●    | LED reverse light                                              |  |      |            |      |      | <b>DUMP BODY</b>                                    |  |
|      |            |      |      | <b>STEERING SYSTEM</b>                                         |  | ●    | ●          | ●    | ●    | Partial up dump-body mechanical                     |  |
| ▲    | ▲          | ▲    | ▲    | Bi-directional ground driven secondary steering pump           |  | ▲    | ▲          | ●    | ●    | Fully up dump-body mechanical lock                  |  |
| ●    | ●          | ●    | ●    | Ground-driven secondary steering pump                          |  | ▲    | ▲          | ▲    | ▲    | Body liner                                          |  |
|      |            |      |      | <b>CAB</b>                                                     |  | ▲    |            | ▲    | ▲    | Tailgate                                            |  |
| ●    | ●          | ●    | ●    | ROPS/FOPS certification                                        |  |      |            | ▲    | ▲    | Body heater                                         |  |
| ●    | ●          | ●    | ●    | Tilt cab                                                       |  |      |            |      |      | Less dump body and cylinders                        |  |
| ●    | ●          | ●    | ●    | Gas strut-supported door                                       |  | ▲    | ▲          | ▲    | ▲    | Greedy boards (200 mm)                              |  |
| ●    | ●          | ●    | ●    | I-Tip programmable dump-body tip settings                      |  |      |            |      |      | Triangular bin caps                                 |  |
| ●    | ●          | ●    | ●    | HVAC Climate control system                                    |  |      |            |      |      | <b>OTHER</b>                                        |  |
| ●    | ●          | ●    | ●    | AM/FM radio with Aux + USB                                     |  | ●    | ●          | ●    | ●    | Automatic Traction Control (ATC)                    |  |
| ●    | ●          | ●    | ●    | Rear window guard                                              |  | ●    |            | ●    | ●    | 20.5R25 Radial earthmover tyres                     |  |
| ●    | ●          | ●    | ●    | Wiper/washer with intermittent control                         |  | ▲    | ▲          | ▲    | ▲    | 23.5R25 Radial earthmover tyres                     |  |
| ▲    | ▲          | ▲    | ▲    | Extra wide wiper system                                        |  |      |            |      |      | 750/65R25 Radial earthmover tyres                   |  |
| ●    | ●          | ●    | ●    | Tilt and telescoping steering wheel                            |  |      |            |      |      | Remote grease banks                                 |  |
| ●    | ●          | ●    | ●    | Centre-mount air-suspension seat                               |  | ▲    | ▲          | ▲    | ▲    | Automatic greasing                                  |  |
| ●    | ●          | ●    | ●    | Retractable 3-point seat belt                                  |  | ●    | ●          | ●    | ●    | Onboard weighing                                    |  |
| ●    | ●          | ●    | ●    | Foldaway trainer seat with retractable seat belt               |  | ▲    | ▲          | ▲    | ▲    | Load lights: stack                                  |  |
| ▲    | ▲          | ▲    | ▲    | Rotating beacon: seat belt installation                        |  |      |            |      |      | Comfort ride suspension (Front)                     |  |
| ●    | ●          | ●    | ●    | Halogen work lights                                            |  | ▲    | ▲          | ▲    | ▲    | Comfort ride suspension (Rear)                      |  |
| ▲    | ▲          | ▲    | ▲    | LED work lights                                                |  |      |            |      |      | Reverse camera                                      |  |
| ▲    | ▲          | ▲    | ▲    | Remote engine and machine isolation                            |  | ●    | ●          | ●    | ●    | HSE hand rails                                      |  |
| ●    | ●          | ●    | ●    | Remote battery jump start                                      |  | ▲    | ▲          | ▲    | ▲    | Cab peak                                            |  |
|      |            |      |      |                                                                |  | ▲    | ▲          | ▲    | ▲    | High pressure hydraulic filter                      |  |
|      |            |      |      |                                                                |  | ●    | ●          | ●    | ●    | Fuel heater                                         |  |
|      |            |      |      |                                                                |  |      |            |      |      | Belly cover                                         |  |
|      |            |      |      |                                                                |  | ▲    | ▲          | ▲    | ▲    | Cross member cover                                  |  |
|      |            |      |      |                                                                |  | ▲    | ▲          | ▲    | ▲    | Remote transmission filters                         |  |
|      |            |      |      |                                                                |  | ▲    | ▲          | ▲    | ▲    | Window smash button                                 |  |
|      |            |      |      |                                                                |  | ●    | ●          | ●    | ●    | Electronic bonnet opening                           |  |
|      |            |      |      |                                                                |  | ▲    | ▲          | ▲    | ▲    | Engine oil quick drain connector                    |  |



# Enhanced safety and choice

Get  
your ADT  
**PDS/CAS\***  
**Level 9**  
ready

**Bell ADTs can be fitted with** the latest and most advanced **PDS/CAS\* technology** on the market to comply with mining regulations and ensure the safety of operators, pedestrians, and other mobile equipment on the job site.



Contact your nearest  
**Bell Customer  
Care Centre** today  
to enquire about  
**upgrading your  
Bell ADT.**

At the same time, owners have the flexibility to choose a **PDS/CAS\*** solution that best suits their needs and budget, and the option of fitting this solution to a new **PDS/CAS\*-ready Bell ADT**, or an **older Bell ADT retrofitted with a PDS kit.**



\* Proximity Detection System / Collision Avoidance System

All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change technical data and design without prior notice. Photographs featured in this brochure may include optional equipment. Blu@dvantage™ is a trademark of Bell Equipment Co. (PTY) Ltd AdBlue® is a registered trademark of VDA.



• A817E30 • A820E30 • A824E30 • A825E30 • A830E30

**BELL INTERNATIONAL: Tel: +27 (0)35-907 9431**

**E-mail: connect@bellequipment.com • www.bellequipment.com**

Tel: +61 (0)8-9355-2442

Tel: +27 (0)11-928-9700

Tel: +49 (0)6631 / 91-13-0

Tel: +44 (0)1283-712862

Tel: +33 (0)5-55-89-23-56

Tel: +1 (854) 855 7507

**Strong Reliable Machines  
Strong Reliable Support**

**BELL**