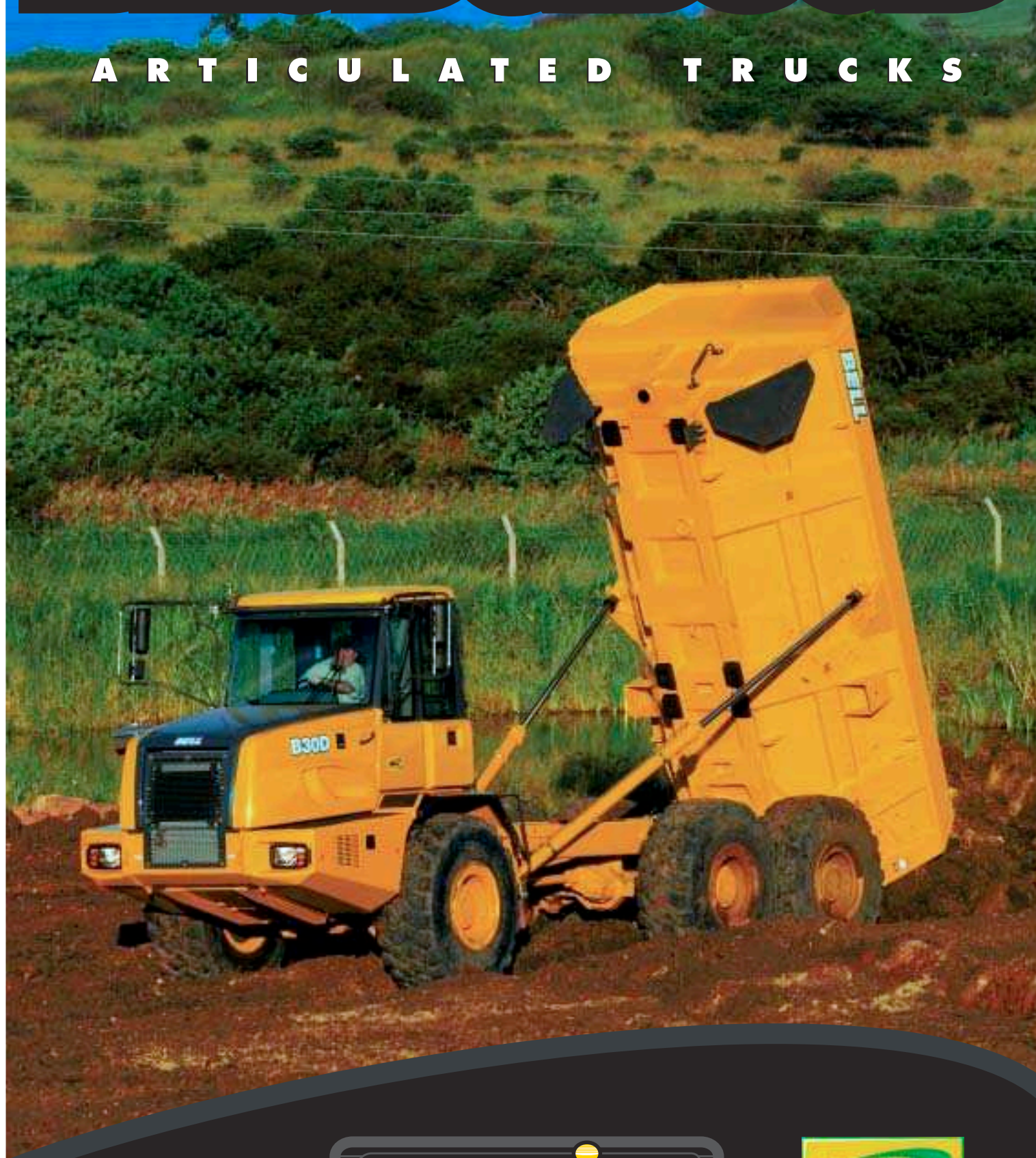


B25D & B30D

ARTICULATED TRUCKS





Engineered for **competitive advantage**

Engineering the new generation D-series has been guided by a few key goals.

These goals support the vision that Bell trucks combine the best of the best in power, drivetrain, design innovation and technology to provide our customers the very best value.

Up performance...

In previewing, the D-series customers were unanimous the B30D and B25D are hot performers. More power comes from the advanced Mercedes Benz OM906LA power plant. A true truck engine designed for hauling applications, its high power density is complemented with the right torque characteristics and effective engine braking capacity.

This extra power is not wasted on an overweight truck. New gains in reducing dead weight extends the D-series power to weight advantage, so they're quick on the haul and economical too.

To trim the deceleration part of the cycle, the D's have a powerful hydraulic transmission retarder. This works in concert with the Mercedes Benz engine valve and exhaust brake system for rapid wear-free stopping power.

Hauling up to 4 tonnes less dead weight, Bell Trucks are not only more efficient but enjoy superior flotation. Sometimes the difference between getting the job done...or not.

Fleet-footed and more stable too, by virtue of the new chassis design that's lowered C of G while providing greater axle walking action.

This combined with a new V-link bogie system that provides more

parallel tracking, the D's can better maintain traction in rough terrain.

With the Bell D series...performance is up all round.



Raise efficiency

If it's not payload it's dead weight and it's costing money to haul. Bell Equipment's weight saving design focus sees extensive use of high strength steel and composite materials in the D-series.

Custom fabricated axles, a high power density engine and aluminium transmission housings help provide the B25D and B30D with class leading payload to weight ratios.

With Mercedes Benz' leading fuel saving technology, efficient planetary transmission gearing and a simple hydraulic system with a single main pump, Bell Equipment's

efficiency drive has a great payoff... more tonnes delivered per unit of fuel used.



Perfect the ride

The operator's ultimate Truck in all respects. On the way to this goal, engineering have used every clean sheet opportunity to the maximum.

Starting with the new composite cab that combines luxury, ergonomics and good vision out with simple pleasing aesthetics and durable finishes.

With sound levels of just 72db in the cab the D's are the quietest earthmovers yet. Large rubber cabin mounts isolate vibration and the transmission's adaptive shift technology makes gear changes virtually seamless.

Likewise ride dynamics are addressed with an all-new nitrogen over oil strut front suspension. Employing a semi-independent design with a reduced unsprung mass the resulting ride quality must be experienced to be appreciated.

Down to the finer details, like well thought out storage spaces including a temperature controlled lunch box compartment, a more powerful climate control system and a luxury air suspension seat - all standard equipment.

No matter how rough it gets outside, the D-series operator is confident, in control and cradled in comfort. Ready to be productive over the longest shift. The kind of job everyone should have.



Make operating **simpler**

Simple for everyone: the operator, the service technician and the operations manager.

Points like operator friendly foolproof controls to help unskilled operators pick up production quickly.

Constant electronic monitoring of all vital machine conditions further lessens demands on the operator as protection is automatic. Should a parameter go out of range the controller reduces power or limits shifts as appropriate to prevent damage.

Engineering advances have cut service and maintenance needs with fewer service points and extended service intervals. Fast, easy access to all systems and components is appreciated by service personnel, while finding and fixing faults is made easy with built in electronic trouble shooting.

To cap it, Bell Equipment's worldwide support commitment is second to none. Our Service Partner Programme is backed by a 24 hour Technical Assistance Centre dedicated to minimizing downtime and operating cost, maximizing your peace of mind.



Cut cost

Great Trucks but can they cut costs and boost the bottom line? Absolutely! Many factors contribute to the D-series unsurpassed short and long term economics.

Superior fuel efficiency and reduced service needs save money every day.

Long term, improved durability on all major components extends

times between overhauls. Because all major components are manufactured in volume, Bell Truck users are never held captive to exotic components or astronomical parts prices.

From the first day on the job the D-series will deliver extra production economically with a long life ahead. The bottom line - absolutely the lowest cost per tonne in the business.

	B25D SPECIFICATIONS	B30D SPECIFICATIONS																																										
ENGINE	Mercedes Benz OM906LA	Mercedes Benz OM906LA																																										
<i>Configuration</i>	I-6 with exhaust brake and Engine Valve Brake (EVB)	I-6 with exhaust brake and Engine Valve Brake (EVB)																																										
<i>Aspiration</i>	Turbocharged and intercooled	Turbocharged and intercooled																																										
<i>Cooling system</i>	Single pass radiator & charge air cooler	Single pass radiator & charge air cooler																																										
<i>Gross power</i>	205 kW (275 hp) @ 2 200 rpm SAE J1349	205 kW (275 hp) @ 2 300 rpm SAE J1349																																										
<i>Net Power</i>	198 kW (266 hp) @ 2 200 rpm	198 kW (266 hp) @ 2 200 rpm																																										
<i>Gross torque</i>	1 000 Nm (736 lbft) @ 1 050 - 1 850 rpm SAE J1349	1 100 Nm (810 lbft) @ 1 250 - 1 500 rpm SAE J1349																																										
<i>Net torque</i>	970 Nm (714 lbft) @ 1 050 - 1 850 rpm	1 070 Nm (788 lbft) @ 1 200 - 1 600 rpm																																										
<i>Displacement</i>	6,37 litres (389 cu.in)	6,37 litres (389 cu.in)																																										
<i>Fuel tank capacity</i>	340 l (90 US gal)	340 l (90 US gal)																																										
TRANSMISSION	ZF 6HP592C with integral retarder	ZF6 HP 592C with integral retarder																																										
<i>Layout</i>	Engine mounted box with rear output	Engine mounted box with rear output																																										
<i>Gear layout</i>	Constant meshing planetary gears	Constant meshing planetary gears																																										
<i>Gears</i>	6 Forward, 1 Reverse	6 Forward, 1 Reverse																																										
<i>Clutch type</i>	Hydraulically operated multidisc	Hydraulically operated multidisc																																										
<i>Control type</i>	Electronic	Electronic																																										
<i>Torque converter layout</i>	Hydrodynamic, with lock-up in all gears	Hydrodynamic, with lock-up in all gears																																										
<i>Vehicle speeds</i>	<table border="1"> <tr> <td>1st</td> <td>2nd</td> <td>3rd</td> <td>4th</td> <td>5th</td> <td>6th</td> <td>R</td> </tr> <tr> <td>8</td> <td>13</td> <td>22</td> <td>31</td> <td>44</td> <td>53</td> <td>8 km/h</td> </tr> <tr> <td>5</td> <td>8</td> <td>14</td> <td>19</td> <td>27</td> <td>33</td> <td>5 mph</td> </tr> </table>	1 st	2 nd	3 rd	4 th	5 th	6 th	R	8	13	22	31	44	53	8 km/h	5	8	14	19	27	33	5 mph	<table border="1"> <tr> <td>1st</td> <td>2nd</td> <td>3rd</td> <td>4th</td> <td>5th</td> <td>6th</td> <td>R</td> </tr> <tr> <td>8</td> <td>13</td> <td>22</td> <td>31</td> <td>44</td> <td>53</td> <td>8 km/h</td> </tr> <tr> <td>5</td> <td>8</td> <td>14</td> <td>19</td> <td>27</td> <td>33</td> <td>5 mph</td> </tr> </table>	1 st	2 nd	3 rd	4 th	5 th	6 th	R	8	13	22	31	44	53	8 km/h	5	8	14	19	27	33	5 mph
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5	8	14	19	27	33	5 mph																																						
TRANSFER CASE	VGR 13 100	VGR 13 100																																										
<i>Layout</i>	Three in-line helical gears.	Three in-line helical gears.																																										
<i>Output differential</i>	Interaxle 33/67 proportional differential, pneumatically lockable whilst stationary or on the move.	Interaxle 33/67 proportional differential, pneumatically lockable whilst stationary or on the move.																																										
AXLES	Bell 15T	Bell 18T																																										
<i>Differential type</i>	Spiral bevel type with Limited Slip	Spiral bevel type with Limited Slip																																										
<i>Final drive type</i>	Outboard heavy duty planetary	Outboard heavy duty planetary																																										
<i>Housing type</i>	Steel fabricated	Steel fabricated																																										
BRAKING SYSTEM																																												
SERVICE BRAKE	Dual circuit, full hydraulic actuation caliper brakes on all wheels	Dual circuit, full hydraulic actuation caliper brakes on all wheels																																										
<i>Maximum brake force</i>	164 kN (36,900 lbf)	164 kN (36,900 lbf)																																										
PARK & EMERGENCY	Spring applied, air released driveline mounted disc.	Spring applied, air released driveline mounted disc.																																										
<i>Maximum brake force</i>	396 kN (89,000 lbf)	396 kN (89,000 lbf)																																										
AUXILLIARY BRAKE	Automatic exhaust brake and Engine Valve Brake (EVB)	Automatic exhaust brake and Engine Valve Brake (EVB)																																										
<i>Maximum retardation</i>	442 kW (593 hp)	442 kW (593 hp)																																										
WHEELS	23,5R25	23,5R25 (750/65/R25 - Optional)																																										
<i>Tyre: Size</i>	Radial Earthmover	Radial Earthmover																																										
<i>Type</i>																																												
<i>Maximum ground pressure (laden)</i>	135 kPa (19.5 psi)	145 kPa (21 psi)																																										
SUSPENSION SYSTEM																																												
<i>Front: Type</i>	Semi-independent leading arm type linkages supported by nitrogen/oil struts	Semi-independent leading arm type linkages supported by nitrogen/oil struts																																										
<i>Rear: Type</i>	Pivoting walking beams equalize the load on each axle with laminated suspension blocks. Each axle is coupled to the chassis by a system of four rubber-bushed links for ideal vertical movement.	Pivoting walking beams equalize the load on each axle with laminated suspension blocks. Each axle is coupled to the chassis by a system of four rubber-bushed links for ideal vertical movement.																																										
HYDRAULIC SYSTEM	Full load sensing system. A ground-driven, load sensing emergency steering pump is integrated into the main system	Full load sensing system. A ground-driven, load sensing emergency steering pump is integrated into the main system																																										
<i>Flow</i>	184 l/min (48.6 US gal/min)	184 l/min (48.6 US gal/min)																																										
<i>Pressure</i>	25 MPa (3,915 psi)	25 MPa (3,915 psi)																																										
<i>Filter</i>	10 micron	10 micron																																										

	B25D SPECIFICATIONS	B30D SPECIFICATIONS
PNEUMATIC SYSTEM <i>System pressure</i>	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions 850 kPa (123 psi)	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions 850 kPa (123 psi)
ELECTRICAL SYSTEM <i>Voltage</i> <i>Battery Type</i> <i>Battery capacity</i> <i>Alternator rating</i>	24 V Two maintenance free permanently sealed 2 x 105 Ah (optional 2 extra batteries) 28 V 80 A	24 V Two maintenance free permanently sealed 2 x 105 Ah (optional 2 extra batteries) 28 V 80 A
STEERING SYSTEM <i>Angle</i> <i>Lock to lock turns</i>	Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump. +- 45 degrees 4,1	Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump. +- 45 degrees 4,1
BODY <i>Capacity: Struck</i> <i>Heaped, SAE 2:1</i> <i>SAE 1:1</i> <i>Rated payload</i> <i>Raise time</i> <i>Power down time</i> <i>Tipping angle</i>	10,5 m ³ (13.7 cu.yd) 13,8 m ³ (18.1 cu.yd) 16,9 m ³ (22.1 cu.yd ³) 23 200 kg (51,156 lbs) 12 s 6 s 70 degrees	12,6 m ³ (16.5 cu.yd) 16,5 m ³ (21.6 cu.yd) 20,3 m ³ (24.5 cu.yd) 27 300 kg (59,535 lbs) 12 s 6 s 70 degrees
OPERATING WEIGHTS <i>Empty: Front</i> <i>Middle</i> <i>Rear</i> <i>Total</i> <i>Laden: Front</i> <i>Middle</i> <i>Rear</i> <i>Total</i>	9 350 kg (20,617 lbs) 4 150 kg (9,151 lbs) 4 000 kg (8,820 lbs) 17 500 kg (38,588 lbs) 12 400 kg (27,342 lbs) 14 225 kg (31,366 lbs) 14 075 kg (31,035 lbs) 40 700 kg (89,744 lbs)	9 550 kg (21,058 lbs) 4 300 kg (9,482 lbs) 4 150 kg (9,151 lbs) 18 000 kg (39,690 lbs) 13 200 kg (29,106 lbs) 16 125 kg (35,556 lbs) 15 975 kg (35,225 lbs) 45 300 kg (99,887 lbs)
STANDARD EQUIPMENT <i>Cab</i>	Cab • ROPS/FOPS certification • Protective rear window guard • Handrails on fenders • Tilt cab for service access • Gas strut supported door • Tinted safety glass • Sliding windows • Rear view mirrors- regular and wide angle • Electric adjust and heated mirrors (one per side) • Sun visor • Wiper/washer with intermittent control • Tilt and telescoping steering wheel • Adjustable, air suspension seat with retractable seat belt • Fold-away trainer seat with retractable seat belt • HVAC climate control system with filtered and ducted air • Air horn • Over head console for FM and 2-way radio, compartments for, storage electrical relays and circuit breakers • 12 V power outlet/12 V cigarette lighter • Ash tray • Drinks holder • Cooled/heated lunch box • Wheel spanner set MDU Features • Tipping counter • Trip timer • Trip distance • Fuel Consumption • Diagnostics • Intermittent wiper timing control • Speedo calibration for alternative tyre sizes • Metric /Imperial unit selection • Warning lights with audible buzzer Analogue Gauges • Engine coolant temperature • Engine oil pressure • System air pressure • Transmission oil temperature • Fuel • Speedometer LCD Display • Transmission gear selection • Tachometer • Battery voltage • Hourmeter • Odometer Retarder • Integral transmission output retarder with 6 settings Other Ground driven emergency steering	Cab • ROPS/FOPS certification • Protective rear window guard • Handrails on fenders • Tilt cab for service access • Gas strut supported door • Tinted safety glass • Sliding windows • Rearview mirrors- regular and wide angle • Sun visor • Wiper/washer with intermittent control • Tilt and telescoping steering wheel • Adjustable, air suspension seat with retractable seat belt • Fold-away trainer seat with retractable seat belt • HVAC climate control system with filtered and ducted air • Air horn • Over head console for FM and 2-way radio, compartments for, storage electrical relays and circuit breakers • 12V power outlet/12V cigarette lighter • Ash tray • Drinks holder • Cooled/heated lunch box • Wheel spanner set MDU Features • Tipping counter • Trip timer • Trip distance • Fuel Consumption • Diagnostics • Intermittent wiper timing control • Speedometer calibration for alternative tyre sizes • Metric /Imperial unit selection • Warning lights with audible buzzer Analogue Gauges • Engine coolant temperature • Engine oil pressure • System air pressure • Transmission oil temperature • Fuel • Speedometer LCD Display • Transmission gear selection • Tachometer • Battery voltage • Hourmeter • Odometer Other Ground driven emergency steering
OPTIONAL EQUIPMENT	(Factory or field installed) • Exhaust body heating • Autogate • Body liners • Work lights • Artic reverse light • 2 extra batteries • Electrically adjustable rearview mirrors (two) • Head light grills • Fuel heater	(Factory or field installed) • Exhaust body heating • Autogate • Body liners • Work lights • Artic reverse light • 2 extra batteries • Electrically adjustable rearview mirrors (two) • Tyre 750/65R25 • Head light grills • Fuel heater

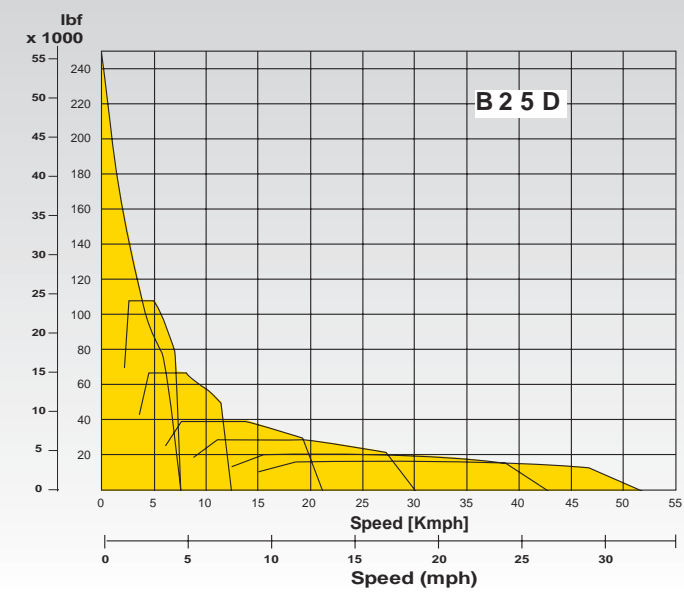
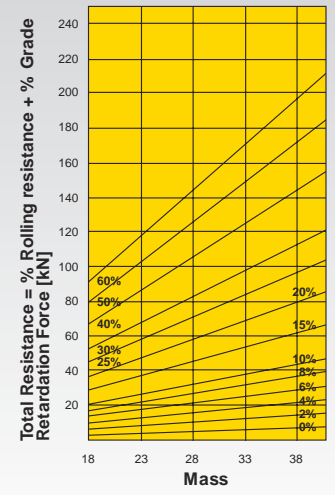
All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. Photographs featured in this brochure may include optional equipment.

B25D

SPECIFICATIONS

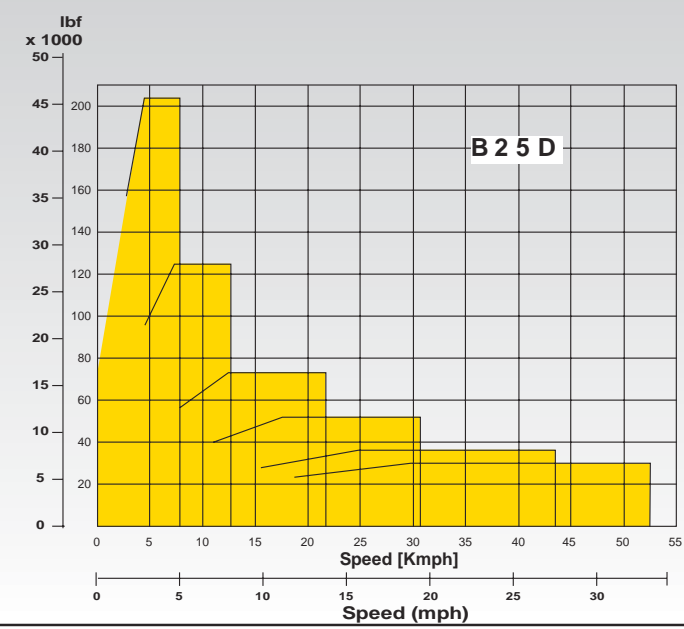
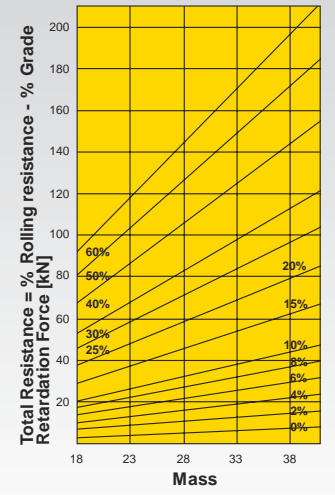
**GRADEABILITY/
RIMPULL**

NVM 17500 kg / 38581 lb
GVM 40300 kg / 88846 lb



RETARDATION

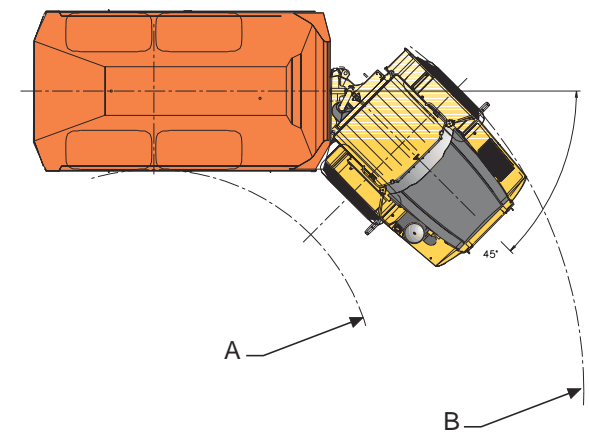
NVM 17500 kg / 38581 lb
GVM 40300 kg / 88846 lb



**SAE TURNING RADIUS
DIMENSIONS**

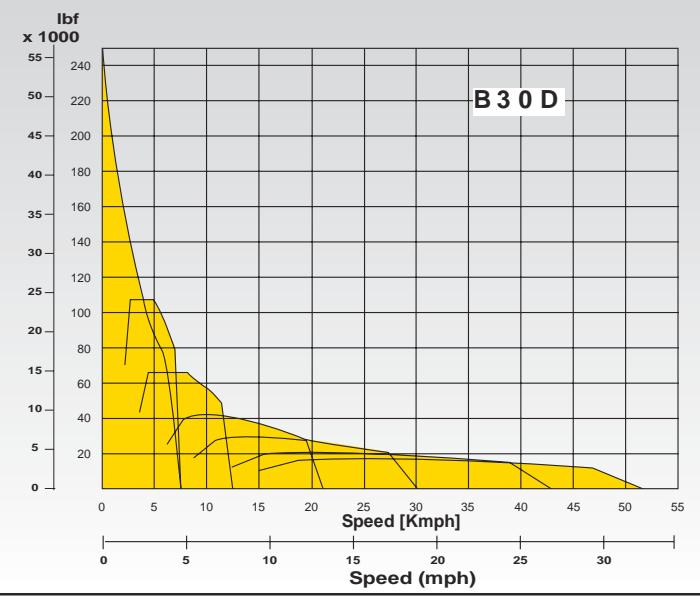
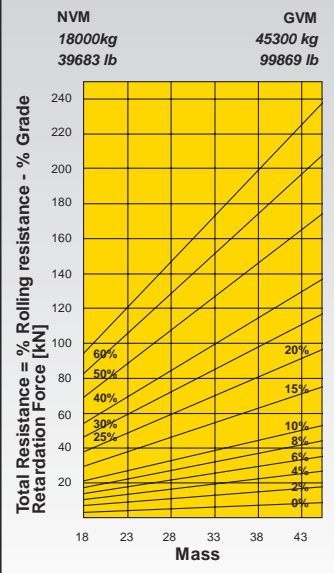
A Inside turning circle radius
4 167 mm (13'8")

B Outside turning circle radius
7 935 mm (26'0")

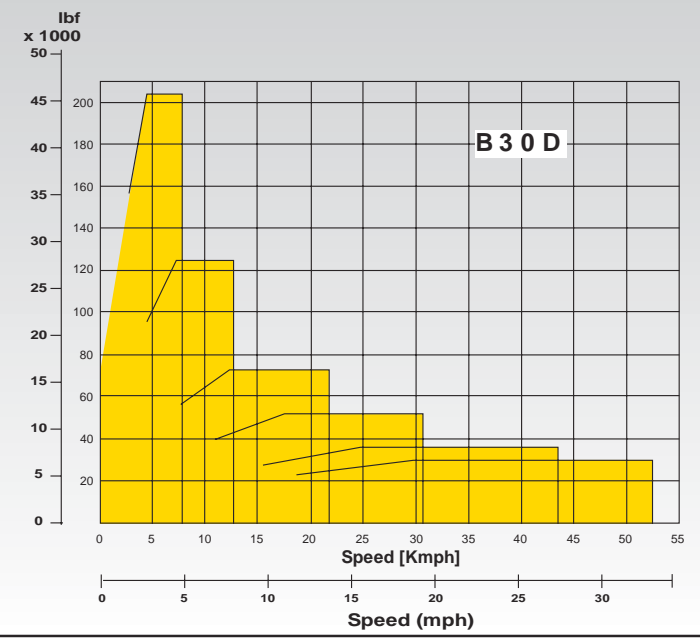
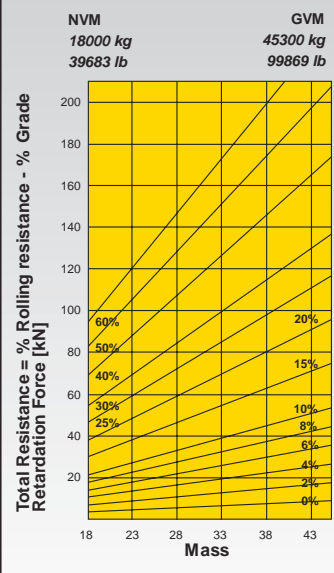


B30D
SPECIFICATIONS

**GRADEABILITY/
RIMPULL**



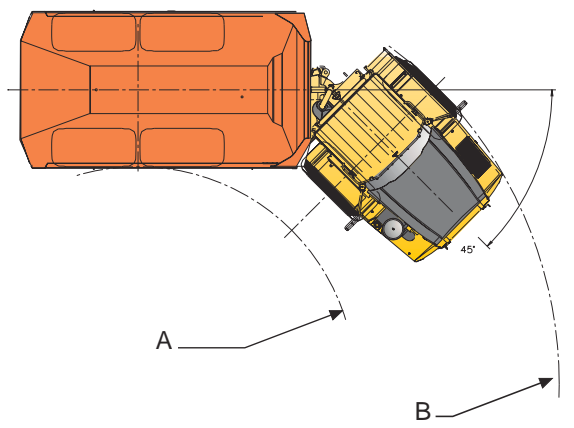
RETARDATION



**SAE TURNING RADIUS
DIMENSIONS**

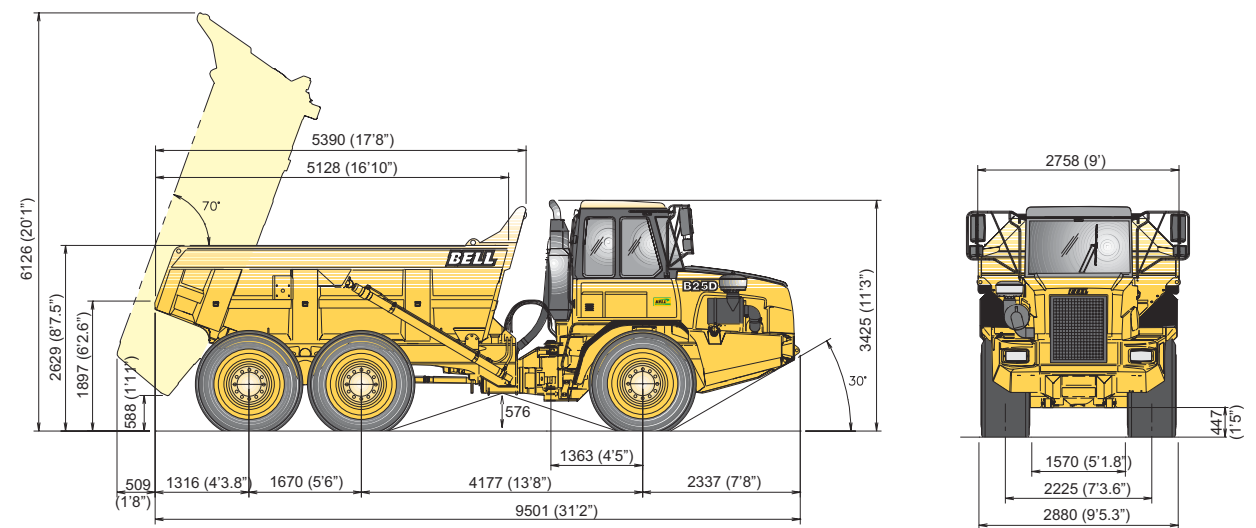
A Inside turning circle radius
4 122 mm (13'6")

B Outside turning circle radius
7 980 mm (26'2")



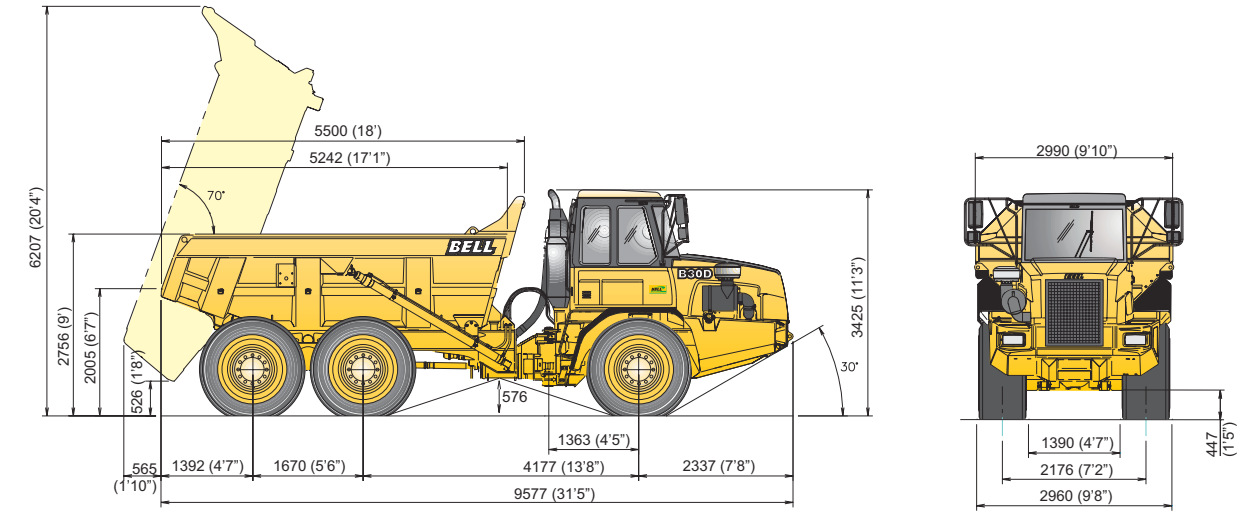
B25D

SPECIFICATIONS



B30D

SPECIFICATIONS



notes

Four horizontal lines for notes.

Respect the environment

While some manufacturers are just meeting environmental legislation by patching old generation technology, the Mercedes Benz OM906LA is a completely modern design proven with a few years in the field.

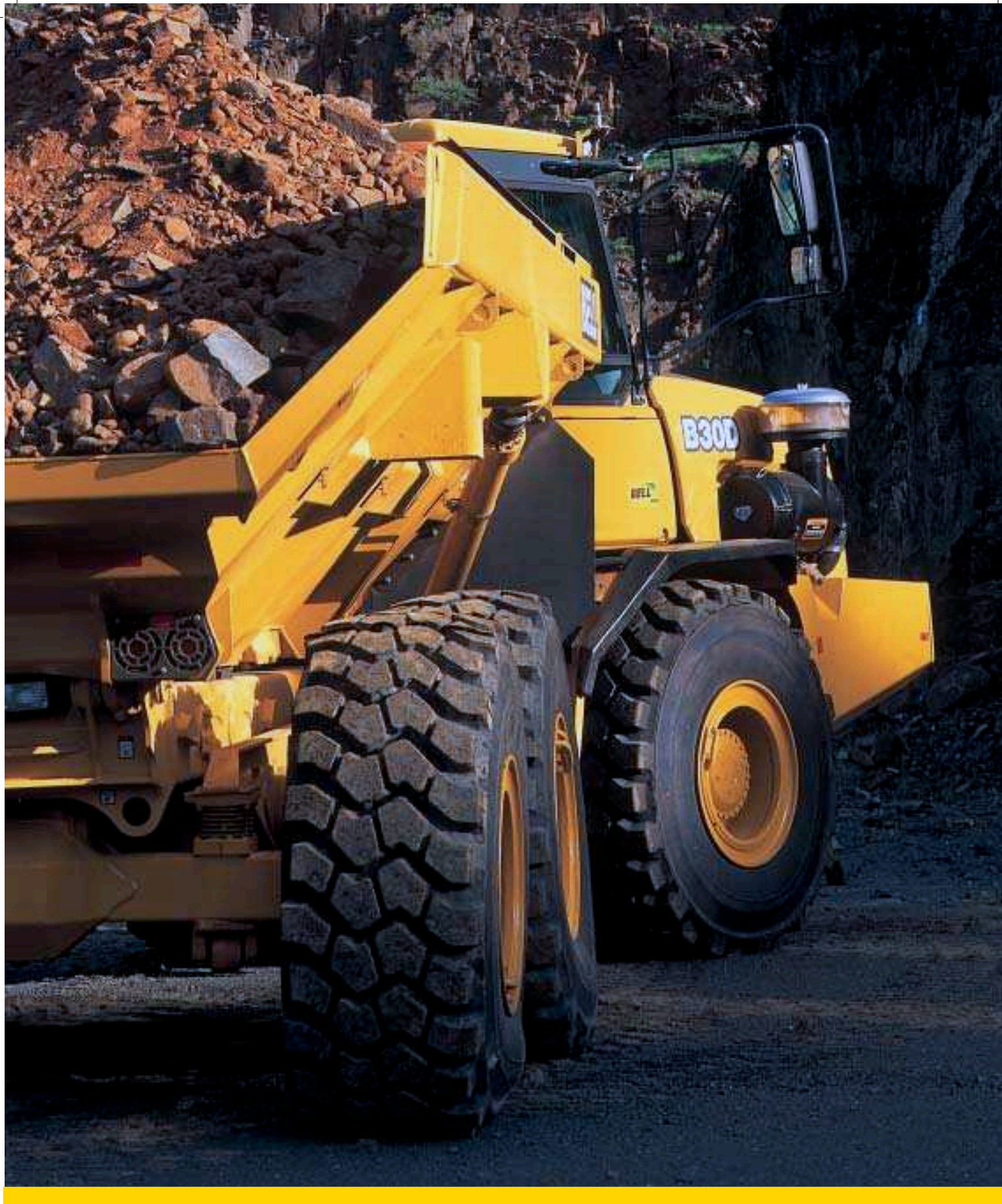
A product of Mercedes Benz' multi-million dollar research efforts, the D-series power plant utilizes reliable high pressure unit injectors, multi-valve aspiration and electronically managed injection timing. To maximize fuel economy while minimizing emissions,

with a design that will meet even tougher future standards.

Bell D-series Artic Truck operators can rest assured that their trucks are emitting the lowest possible emissions while at the same conserving limited resources, with efficient fuel use and extended fluid change intervals.

Good environmental stewardship is upheld through Bell Equipment's operations, and by virtue of our products it's a priority with our family of customers too.





BELL EQUIPMENT Co SA (PTY) LTD, Reg.No: 1968/013656/06

- Richards Bay, South Africa • tel: 27-(0)35-907 9111 Fax: 27-(0)35-797 4323
- www.bellequipment.com

**Strong Reliable Machines
Strong Reliable Support**



Body 1801 02 / 02-BE-SD B30D Brochure