

BI8E 6x4 18 000 L Articulated Water Tanker

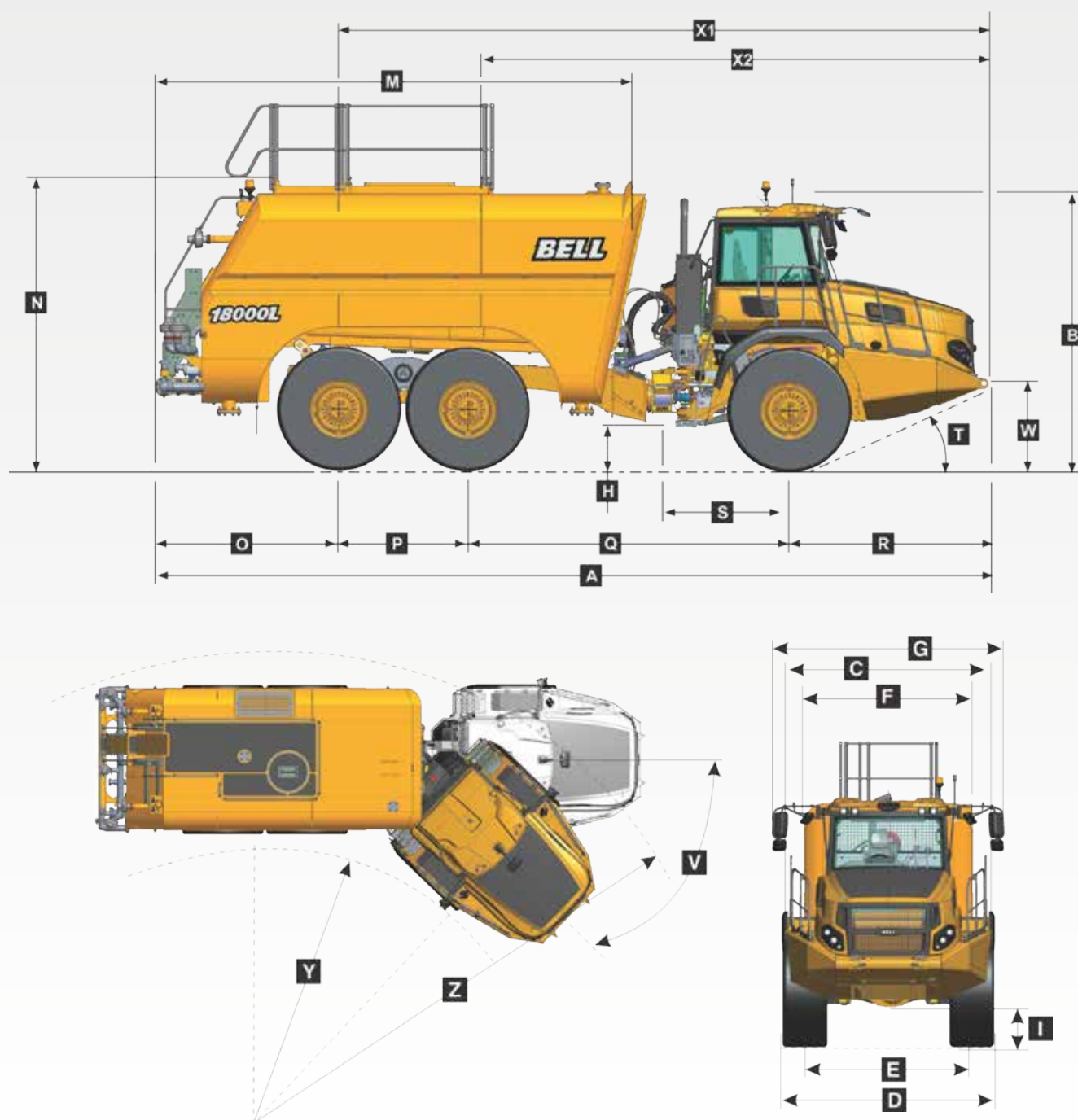


ENGINE	TRANSFER CASE	99kW (133 hp) Maximum non-retarder. 505kW (677 hp) Maximum retarder.	Raise Time 10 s
Manufacturer Mercedes Benz	Manufacturer Kessler		Lowering Time 5,5 s
Model OM924LA	Series W1400		Tipping Angle 70° standard, or any lower angle programmable
Configuration Inline 4, turbocharged and intercooled.	Layout Remote mounted	WHEELS	
Net Power 163 kW (219 hp) @ 2 200 rpm in accordance with UN ECE R120	Gear Layout Three in-line helical gears	Type Radial Earthmover	
Gross Torque 810 Nm (597 lbf) @ 1 200 -1 600 rpm	Output Differential Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.	Tyre 20.5 R 25	PNEUMATIC SYSTEM Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.
Displacement 4,80 litres (293 cu.in)	AXLES	FRONT SUSPENSION Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.	System Pressure 810 kPa (117 psi)
Auxiliary Brake Exhaust Valve Brake Engine Valve Brake	Manufacturer Bell	REAR SUSPENSION Pivoting walking beams with laminated rubber suspension blocks	ELECTRICAL SYSTEM
Fuel Tank Capacity 195 litres (53 US gal)	Model 15T		Voltage 24 V
Certification OM924LA meets Euro III emissions regulations	Differential High input limited slip differential with spiral bevel gears.	HYDRAULIC SYSTEM 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.	Battery Type Two AGM (Absorption Glass Mat) type
TRANSMISSION	Final Drive Outboard heavy duty planetary on all axles		Battery Capacity 2 X 75 Ah
Manufacturer Allison	BRAKING SYSTEM	Pump Type Variable displacement load sensing piston	Alternator Rating 28 V 80 A
Model Standard Non Retarder: 3000P ORS Optional Retarder: 3000PR ORS	Service Brake Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers (4F, 2M, 2R). Maximum brake force: 244 kN (54 720 lbf)	Flow 155 l/min (41,5 gal/min)	VEHICLE SPEEDS
Configuration Fully automatic planetary transmission with integral retarder.	Park & Emergency Spring applied, air released driveline mounted disc. Maximum brake force: 182 kN (40 802 lbf)	Pressure 27 MPa (3 915 psi)	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
Layout Engine mounted	Auxiliary Brake Automatic exhaust valve brake and engine valve brake. Optional automatic, adjustable, integral, hydrodynamic transmission retarder. Output shaft speed dependant.	Filter 5 microns	WATER TANK
Gear layout Constant meshing planetary gears, clutch operated		STEERING SYSTEM Double-acting cylinders with ground driven emergency steering pump.	Tank capacity 18 000 Litres
Gears 6 Forward, 1 Reverse		Lock to lock turns 4,32	WATER TANKER PLUMBING Centrifugal water pump
Clutch Type Hydraulically operated multidisc		Steering Angle 45°	Rate of Flow Standard: 1 800 L/min with 50 m head Option: 5 400 L/min with 70 m head
Control Type Electronic	Total Retardation Power 99kW (133 hp) Continuous non-retarder. 144kW (193 hp) Continuous retarder.	DUMPING SYSTEM Two double-acting, single stage, dump cylinders	CAB ROPS/FOPS certified 71 dBA internal sound level measured according to ISO 6396.
Torque Control Hydrodynamic with lock-up in all gears			

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN - Tare**		LADEN (No sinkage/Total Contact Area Method)			
	kg (lb)	20.5 R 25	kPa (Psi)	Rated Payload	18 000 litres (4 700 gallons)
Total	19 651 (43 323)	Front	236 (34,2)		
		Middle	310 (45)		
		Rear	310 (43)		
LADEN					
	kg (lb)				
Front	8 613 (18 988)				
Middle	14 453 (31 863)				
Rear	14 130 (31 151)				
Total	37 195 (82 001)				

Dimensions

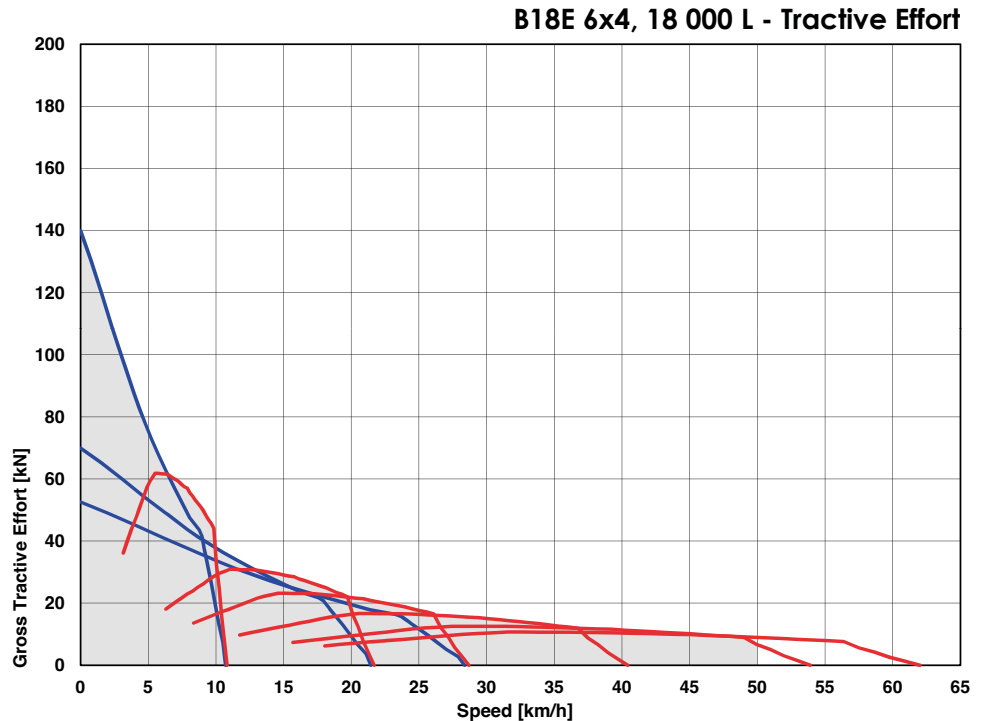
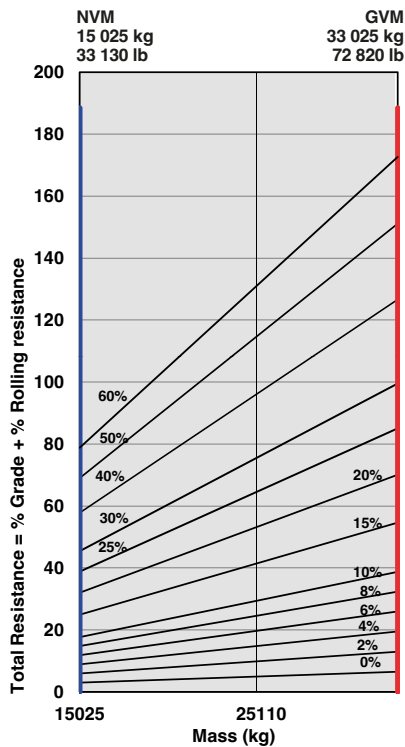


Machine Dimensions

A	Length - Transport Position	9 932 mm	(29 ft. 4 in.)	O	Rear Axle Centre to Bowser / Tank Rear	2 108 mm	(6 ft. 5 in.)
B	Height - Transport Position	3 454 mm	(11 ft. 3 in.)	P	Mid Axle to Rear Axle Centre	1 600 mm	(5 ft. 3 in.)
C	Width over Mudguards	2 568 mm	(9 ft. 9 in.)	Q	Mid Axle Centre to Front Axle Centre	3 865 mm	(14 ft. 5 in.)
D	Width over Tyres-23.5R25	2 550 mm	(9 ft. 7 in.)	R	Front Axle Centre to Machine Front	2 357 mm	(8 ft. 6 in.)
E	Tyre Track Width-23.5R25	2 022 mm	(7 ft. 8 in.)	S	Front Axle Centre to Artic Centre	1 361 mm	(4 ft. 5 in.)
F	Width over Tank / Bowser	2 491 mm	(9 ft. 4 in.)	T	Approach Angle	26°	
F	Width over Tank / Bowser (with hose)	2 570 mm	(10 ft. 8 in.)	V	Maximum Articulation Angle	45°	
G	Width over Mirrors - Operating Position	3 260 mm	(10 ft. 8 in.)	W	Front Tie Down Height	1 028 mm	(3 ft. 7 in.)
H	Ground Clearance - Artic	479 mm	(22.17 in.)	X1	Tank Lifting Centres	7 833 mm	(22 ft. 11 in.)
I	Ground Clearance - Front Axle	444 mm	(18.5 in.)	X2	Machine Lifting Centres	6 207 mm	(15 ft. 11 in.)
M	Tank / Bowser Length	5 624 mm	(11 ft. 1 in.)	Y	Inner Turning Circle Radius - 23.5R25	3 954 mm	(11 ft. 5 in.)
N	Maximum Tank Height	3 343 mm	(10 ft. 1 in.)	Z	Outer Turning Circle Radius - 23.5R25	7 309 mm	(23 ft. 6 in.)

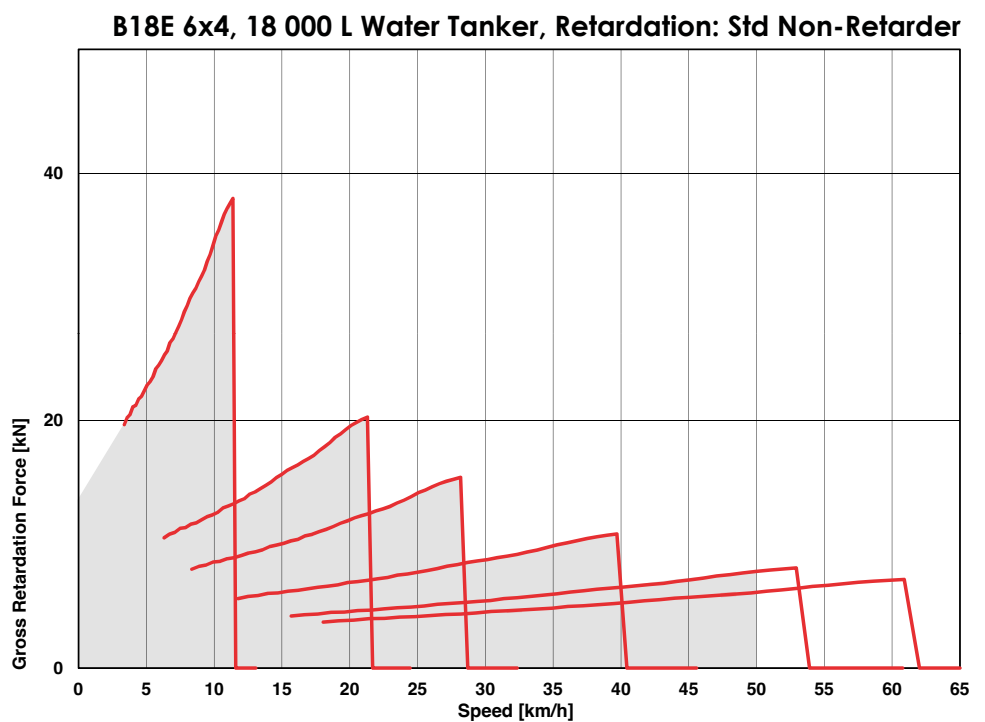
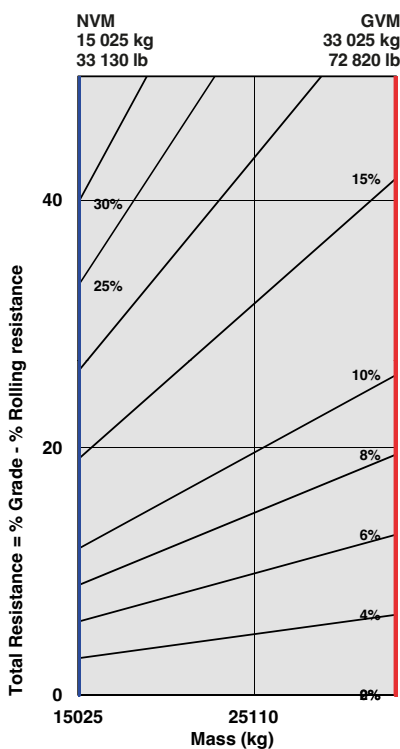
Gradeability/Rimpull

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.



BATTER SPRAYS

- Two additional spray valves that expand the spray patterns reach on the sides of the tank
- Remotely activated from inside the cab



HOSE REEL

- 30m hose reel
- 1.5" adjustable fog/stream nozzle
- Spring retractable



DRIBBLE BAR

- Gravity fed dribble bar
- Remotely activated from inside the cab
- Even spread pattern covering the width of the vehicle



PENETRATION SPRAY BARS

- Available with nozzles or holes
- Remotely activated from inside the cab
- Pressurised by the pump to create a jet of water





REMOTE WATER CANNON

- Adjustable fog/stream pattern
- A variety of flow settings between 250 and 700 GPM
- Remotely controlled via a joystick inside the cab
- High quality components built to last in heavy duty applications

MANUAL WATER CANNON

- Long range spray nozzle
- High quality components built to last in heavy duty applications



16 000 L	18 000 L	23 000 L	27 000 L	35 000 L	38 000 L	45 000 L	
●	●	●	●	●	●	●	ENGINE
●	●	●	●	●	●	●	Engine valve brake and exhaust brake
●	●	●	●	●	●	●	Dual element air cleaner with dust ejector valve
●	●	●	●	●	●	●	Precleaner with auto dust scavenging
●	●	●	●	●	●	●	Water separator
●	●	●	●	●	●	●	Serpentine drive belt with automatic tensioner
▲	▲	▲	▲	●	●	●	Provision for fast fill
▲	▲	▲	▲	●	●	●	Wet-sleeve cylinder liners
							COOLING
●	●	●	●	●	●	●	Crank-shaft mounted viscous-drive fan
●	●	●	●	●	●	●	Fan guard
							PNEUMATIC SYSTEM
●	●	●	●	●	●	●	Engine-mounted compressor
●	●	●	●	●	●	●	Air drier with heater
●	●	●	●	●	●	●	Integral unloader valve
							ELECTRICAL SYSTEM
●	●	●	●	●	●	●	Battery disconnect
●	●	●	●	●	●	●	Drive lights
●	●	●	●	●	●	●	Air horn
●	●	●	●	●	●	●	Reverse alarm
●	▲	▲	▲	▲	▲	▲	White noise reverse alarm
●	●	●	●	●	●	●	Rotating beacon
●	●	●	●	●	●	●	Pitch roll sensor
▲	▲	▲	▲	▲	▲	▲	LED drive lights
▲	▲	▲	▲	●	●	●	Halogen artic reverse light
▲	▲	▲	▲	▲	▲	▲	LED artic reverse light
●	●	●	●	●	●	●	LED reverse light
							STEERING SYSTEM
●	●	●	●	●	●	●	Uni-directional ground-driven secondary steering pump
▲	▲	▲	▲	▲	▲	▲	Bi-directional ground-driven secondary steering pump
							CAB
●	●	●	●	●	●	●	ROPS/FOPS certification
●	●	●	●	●	●	●	Tilt cab
●	●	●	●	●	●	●	Gas strut-supported door
●	●	●	●	●	●	●	HVAC Climate control system
●	●	●	●	●	●	●	AM/FM radio/CD player + USB
●	●	●	●	●	●	●	Rear window guard
●	●	●	●	●	●	●	Wiper/washer with intermittent control
●	●	●	●	●	●	●	Tilt and telescoping steering wheel
●	●	●	●	●	●	●	Centre-mount air-suspension seat
●	●	●	●	●	●	●	Halogen work lights
▲	▲	▲	▲	▲	▲	▲	LED work lights
▲	▲	▲	▲	▲	▲	▲	Rotating beacon: seat belt installation
▲	▲	▲	▲	▲	▲	▲	Remote engine and machine isolation
●	●	●	●	●	●	●	Remote battery jump start
●	●	▲	▲	●	●	●	High visibility mirrors
●	●	●	●	●	●	●	Retractable 3-point seat belt
●	●	●	●	●	●	●	Foldaway trainer seat with retractable seat belt
							CAB (continued)
●	●	●	●	●	●	●	12-volt power outlet
●	●	●	●	●	●	●	Cup holder
●	●	●	●	●	●	●	Cooled/heated lunch box
●	●	●	●	●	●	●	Utility bin (removable)
●	●	●	●	●	●	●	Manually adjustable mirrors
▲	▲	▲	▲	▲	▲	▲	Electric adjustable & heated mirrors
●	●	●	●	●	●	●	Deluxe 10" colour LCD:
							Speedometer / Fuel gauge /
							Transmission oil temperature gauge /
							Engine coolant temperature gauge /
							LED function/warning indicators and
							audible alarm / Transmission gear
							selection / Tachometer / Battery
							voltage / Hour meter / Odometer /
							Fuel consumption / Trip timer /
							Trip distance / Metric/English units /
							Service codes/diagnostics
●	●	●	●	●	●	●	Backlit sealed switch module
							functions with:
							Wiper control / Lights / Heated mirrors /
							Retarding aggressiveness / Transfer
							case differential lock / Transmission
							gear hold / Airconditioner/ Heater
							controls / Preselected Speed Control
●	●	●	●	●	●	●	Backlit Plumbing sealed switch module
							functions with:
							Battery / Spray / Pulse / Tank fill /
							Hose reel / Pump / Dribble bar
							PLUMBING
●	●	●	●	●	●	●	Dribble bar
●	●	●	●	●	●	●	1 800 lpm 50 m head pump
▲	▲	▲	▲	●	●	●	5 400 lpm 70 m head pump*
▲	▲	▲	▲	▲	▲	▲	Pressurised dribble bar system
							with nozzles
●	●	●	●	●	●	●	Spray valves (in-cab activation)
●	●	●	●	●	●	●	Batter spray valves
●	●	●	●	●	●	●	Fold down top rails
▲	▲	▲	▲	▲	▲	▲	Suction pipe for filling from dam
●	●	●	●	●	●	●	Step ladder access
●	●	●	●	●	●	●	Inspection access
▲	▲	▲	▲	▲	▲	▲	Manual water canon
▲	▲	▲	▲	▲	▲	▲	Remote control water canon
▲	▲	▲	▲	▲	▲	▲	Hose reel
							OTHER
●	●	●	●	●	●	●	20.5 R 25 Radial earthmover tyres
▲							23.5 R 25 tyres
	●	●	●				620/75 R26 tyres
				●	●	▲	29.5 R 25 Radial Earthmover tyres
					▲	▲	875/65 R 29 Radial Earthmover tyres
●	●	●	●	●	●	●	Remote grease banks
▲	▲	▲	▲	▲	▲	▲	Automatic greasing
▲	▲	▲	▲	▲	▲	▲	Cab peak
▲	▲	▲	▲	▲	▲	▲	High pressure hydraulic filter
▲	▲	▲	▲	▲	▲	▲	Fuel heater
●	●	●	●	●	●	●	Belly cover
▲	▲	▲	▲	▲	▲	▲	Handrails
▲	▲	▲	▲	▲	▲	▲	Remote transmission filter
●	▲	▲	▲	▲	▲	▲	Reverse camera

* (Option only): Larger centrifugal pump available if suction pipe option is not fitted.

FEATURES OF THE ARTICULATED WATER TRUCK

- **PRODUCTIVE:** Powerful built-for hauling ADT drivetrains are well matched for pulling and retarding heavy loads. Nitrogen over oil strut suspension smooths the ride for operator and machine.
- **ECONOMY:** Modern fuel efficient engine, lockup torque converter and planetary transmission deliver more work per unit of fuel used
- **EASY TO OPERATE:** High quality cab is conducive to operator care. Simple to use controls and electronic interfaces protect the machine from accidental misuse.