

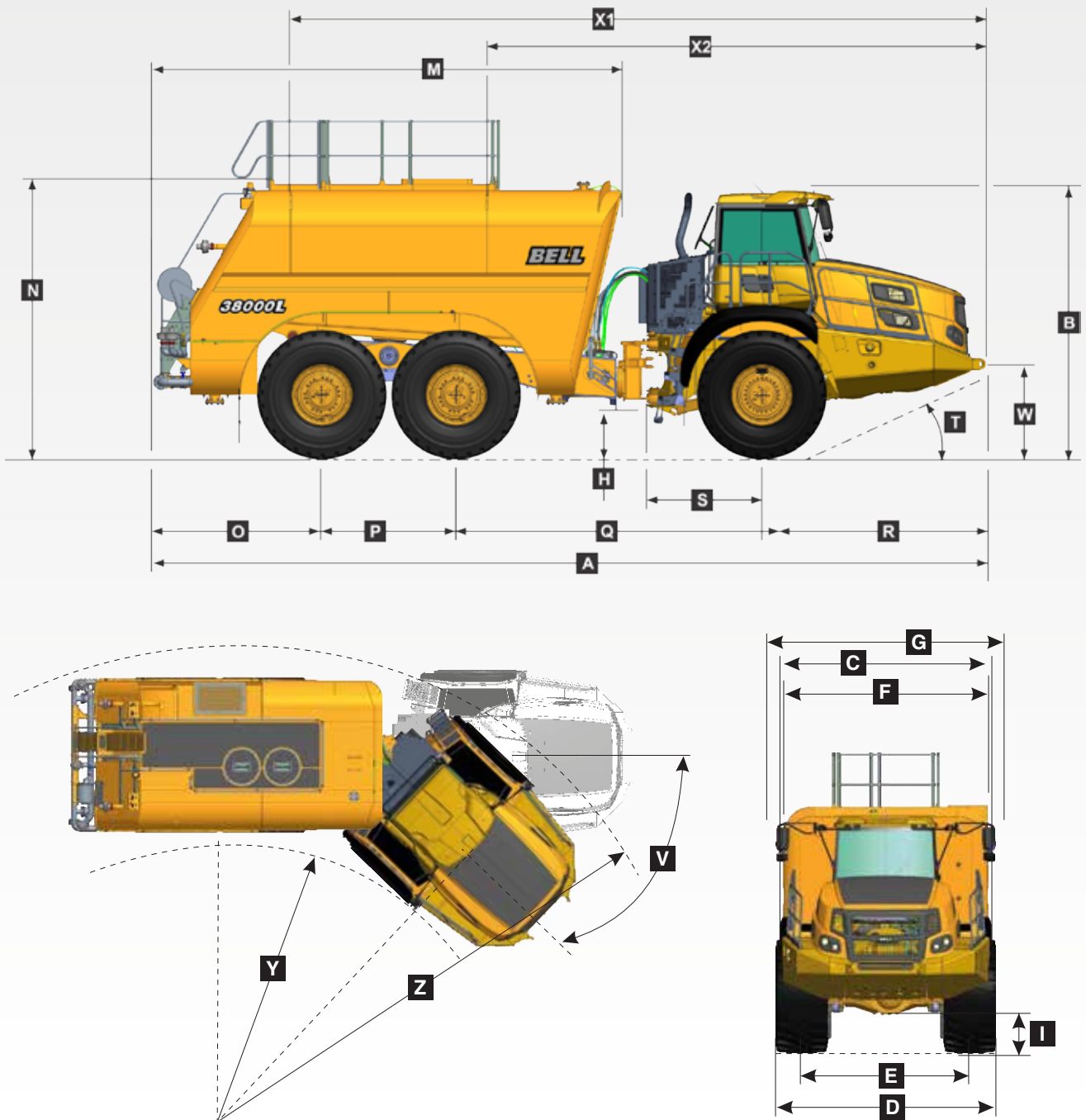
B45E 6x6 38 000 L Articulated Water Truck

ENGINE	TRANSFER CASE	WHEELS	PNEUMATIC SYSTEM
Manufacturer Mercedes Benz (MTU)	Manufacturer Kessler	Type Radial Earthmover	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions
Model OM471LA (MTU 6R 1300)	Model W2400	Tyre 29.5 R 25 (875/65 R 29 optional)	System Pressure 810 kPa (117 psi)
Configuration Inline 6, turbocharged and intercooled	Layout Remote mounted	FRONT SUSPENSION Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts Option: Electronically controlled adaptive suspension with ride height adjustment	ELECTRIC SYSTEM
Net Power 390 kW (523 hp) @ 1 600 rpm	Gear Layout Three in-line helical gears	REAR SUSPENSION Pivoting walking beams with laminated rubber suspension blocks Option: Comfort Ride suspension walking beams, with two-stage sandwich block	Voltage 24 V
Gross Torque 2 600 Nm (1 918 lbft) @ 1 300 rpm	Output Differential Interaxle 29/71 proportional differential. Automatic inter-axle differential lock.	HYDRAULIC SYSTEM Full load sensing system serving the prioritised 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
Displacement 12,8 litres (781 cu.in)	AXLES		Battery Capacity 2 X 75 Ah
Auxiliary Brake Jacobs Engine Brake®	Manufacturer Bell		Alternator Rating 28V 80A
Fuel Tank Capacity 533 litres (140.8 US gal)	Model 30T		MAX VEHICLE SPEED
Certification OM471LA (MTU 6R 1300) is EU Stage IIIA / EPA Tier 3 emission level equivalent	Differential High input controlled traction differential with spiral bevel gears		1st 4 km/h 2,5 mph
TRANSMISSION	Final Drive Outboard heavy duty planetary on all axles		2nd 9 km/h 6 mph
Manufacturer Allison	BRAKING SYSTEM		3rd 17 km/h 11 mph
Model 4700 ORS	Service Brake Dual circuit, full hydraulic actuation wet disc brakes on front and middle axles. Wet brake oil is circulated through a filtration and cooling system.		4th 23 km/h 14 mph
Configuration Fully automatic planetary transmission			5th 33 km/h 21 mph
Layout Engine mounted			6th 44 km/h 27,3 mph
Gear Layout Constant meshing planetary gears, clutch operated			7th 51 km/h 32 mph
Gears 7 Forward, 1 reverse			R 7 km/h 4 mph
Clutch Type Hydraulically operated multi-disc			WATER TANK
Control Type Electronic			Tank capacity 38 000 Litres
Torque Control Hydrodynamic with lock-up in all gears			WATER TANKER PLUMBING Centrifugal water pump
			Rate of Flow 5 400 L/min
			Head 70 m
			CAB ROPS/FOPS certified 76 dBA internal sound level measured according to ISO 6396

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY	
UNLADEN		LADEN (No sinkage/Total Contact Area Method)			
	kg (lb)	29.5 R 25 (kPa/Psi)	875/65 R29 (kPa/Psi)		
Total	35 479 (78 218)	Front: 314 (45,5)	Front: 295 (42,8)	Rated Payload	38 000 litres
		Mid/Rear: 370 (53,7)	Mid/Rear: 331 (48)		(10 000 gallons)
LADEN		Calculation method used by competition			
	kg (lb)	29.5 R 25 (kPa/Psi)	875/65 R29 (kPa/Psi)		
Front	22 739 (50 131)	Front: 153 (22,2)	Front: 135 (19,6)		
Middle	27 115 (59 778)	Mid/Rear: 176 (25,5)	Mid/Rear: 154 (22,3)		
Rear	26 626 (58 700)				
Total	76 479 (168 607)				

Dimensions

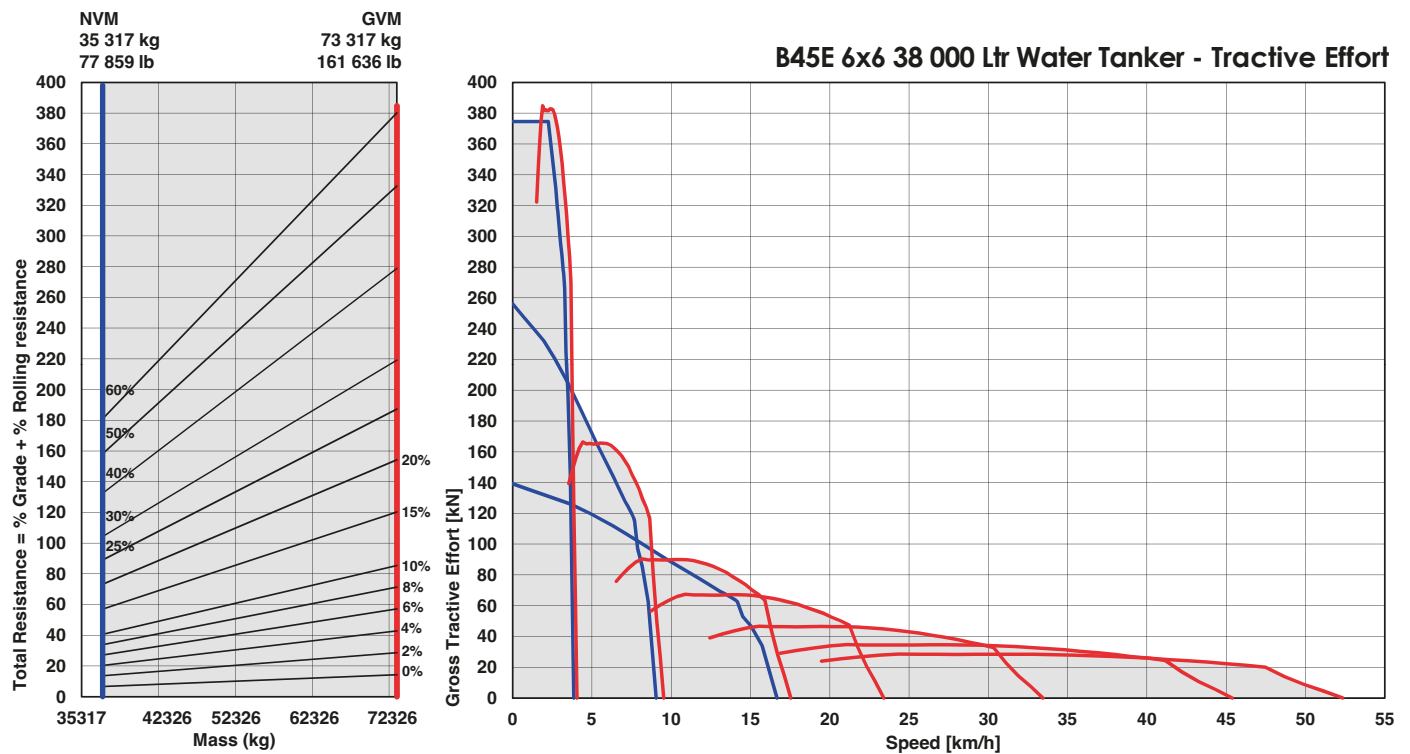


Machine Dimensions

A	Length - Transport Position	12 084 mm	(39 ft. 8 in.)
B	Height - Transport Position	3 802 mm	(12 ft. 6 in.)
C	Width over Mudguards	3 495 mm	(11 ft. 6 in.)
D	Width over Tyres - 875/65 R29	3 656 mm	(11 ft. 12 in.)
D	Tyre Track Width - 29.5R25	3 487 mm	(11 ft. 5 in.)
E	Tyre Track Width - 875/65 R29	2 773 mm	(9 ft. 1 in.)
E	Tyre Track Width - 29.5R25	2 725 mm	(8 ft. 11 in.)
F	Width over Tank / Bowser	3 379 mm	(11 ft. 1 in.)
G	Width over Mirrors - Operating Position	4 027 mm	(13 ft. 3 in.)
H	Ground Clearance - Artic	545 mm	(1 ft. 9 in.)
I	Ground Clearance - Front Axle	543 mm	(1 ft. 9 in.)
M	Tank / Bowser Length	6 797 mm	(22 ft. 4 in.)
N	Maximum Tank Height	4 002 mm	(13 ft. 2 in.)
O	Rear Axle Centre to Bowser / Tank Rear	2 443 mm	(8 ft. 0 in.)
P	Mid Axle Centre to Rear Axle Centre	1 950 mm	(6 ft. 5 in.)
Q	Mid Axle Centre to Front Axle Centre	4 438 mm	(14 ft. 7 in.)
R	Front Axle Centre to Machine Front	3 253 mm	(10 ft. 8 in.)
S	Front Axle Centre to Artic Centre	1 558 mm	(5 ft. 1 in.)
T	Approach Angle	25°	
V	Maximum Articulation Angle	45°	
W	Front Tie Down Height	1 282 mm	(4 ft. 2 in.)
X1	Tank Lifting Centres	10 023 mm	(32 ft. 10 in.)
X2	Front Lifting Centres to Tank Lifting Centre	7 173 mm	(23 ft. 6 in.)
Y	Inner Turning Circle Radius - 875/65 R29	4 782 mm	(15 ft. 8 in.)
Y	Inner Turning Circle Radius - 29.5R25	4 866 mm	(15 ft. 12 in.)
Z	Outer Turning Circle Radius - 875/65 R29	9 320 mm	(30 ft. 7 in.)
Z	Outer Turning Circle Radius - 29.5R25	9 235 mm	(30 ft. 4 in.)

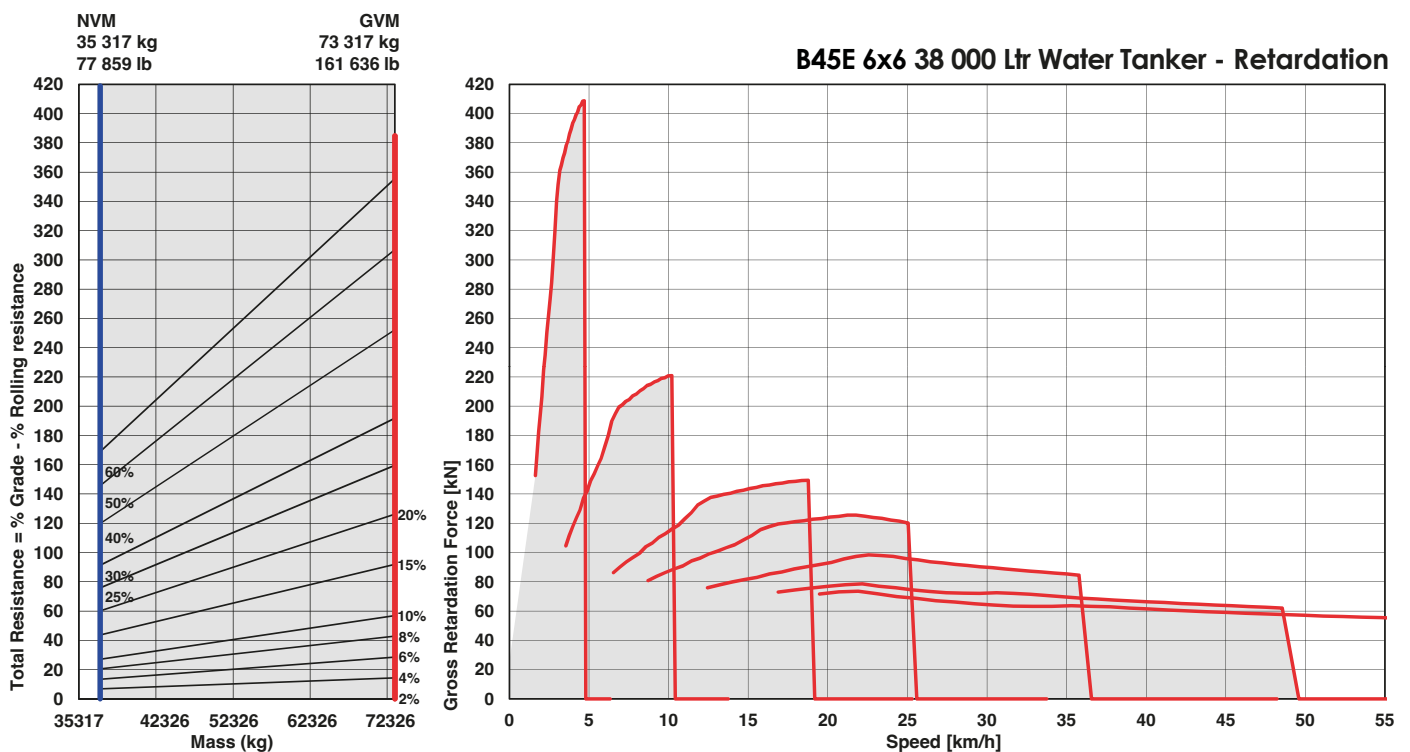
Gradeability/Rimpull

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.



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.