

B50D 6x6 ARTICULATED DUMP TRUCK Mk VII



Blu@dvantage™

- Gross Power: 375 kW (503 hp)
- Gross Torque: 2 400 Nm (1,770 lbft)
- Rated Payload: 45 400 kg (100.090 lbs)

BELL

B50D 6x6 ARTICULATED DUMP TRUCK MKVII

ENGINE Mercedes Benz OM502LA, V-8 Turbocharged and intercooled 375 kW (503 hp) @ 1,800 rpm SAE J1349

Gross power 364 kW (488 hp) @ 1,800 rpm

Net Power 2,400 Nm (1,770 lbf) @ 1,200 rpm

Displacement 15,93 litres (730 cu.in)

AdBlue Tank Capacity 66 l (17.4 US gal)

Fuel tank capacity 575 litres (152 US gal)

Certification OM 502 LA meets Europe (EU) stage 3b emissions regulations

TRANSMISSION Full automatic planetary transmission with integral retarder

Engine mounted with rear output Constant meshing planetary gears, clutch operated

Gears 6 Forward, 1 Reverse

Clutch type Hydraulically operated multi-disc Electronic

Control type Hydrodynamic, with lockup in all gears

Torque Converter

TRANSFER BOX Bell

Manufacturer 17100

Model Three in-line helical gears

Layout Interaxle 33/67 proportional differential, pneumatically/spring lockable whilst stationary or on the move

Output Differential

AXLES High strength steel fabricated with spiral bevel type gears on the Controlled Traction differential and heavy duty outboard planetary gears

Final drive type Outboard heavy duty planetary on all axles

Housing type Steel fabricated

BRAKING SYSTEM

SERVICE BRAKE Dual circuit, full hydraulic oil immersed wet multidisc brakes on all three axles

Maximum brake force PARK & EMERGENCY 399 kN (89,699 lbf)

Maximum brake force AUXILIARY BRAKE Spring applied, air released driveline mounted disc. 440 kN (98,920 lbf)-Static 105 kN (23,605 lbf)-Dynamic Automatic exhaust brake Engine Valve Brake (EVB)

RETARDATION SYSTEM

ENGINE BRAKE Automatic exhaust brake and Engine Valve Brake (EVB)

Maximum retardation power 340 kW (456 hp)



Transmission retarder Integral hydrodynamic, output speed dependant, six selectable levels of retardation 550 kW (737 hp)

Total retardation power

WHEELS Radial Earthmover

Tyre size 875/65R29

FRONT SUSPENSION Semi-independent, leading A-frame supported by nitrogen/oil struts

REAR SUSPENSION Pivoting walking beams equalise the load on each axle with laminated suspension blocks. Each axle is coupled to the chassis by a Tri-Link system of four rubber-bushed links for ideal vertical movement and a transverse link for lateral restraint.

HYDRAULIC SYSTEM Full load sensing system serving the prioritized steering, body tipping, suspension and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system

Pump type Variable displacement, load-sensing piston

Application Steering, tipping, hydraulic brake charging, suspension and cooling fan drive

Flow 350 l/min (92.5 US gal/min)

Pressure Filter 25 MPa (3,626 psi) 5 microns

STEERING SYSTEM Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns 4.2

Steering Angle 42°

DUMPING SYSTEM Two double-acting, single stage, dump cylinders

Raise Time 11.2 s (60° tip angle)

Lowering Time 9.9 s (60° tip angle)

Tipping Angle 70° standard, or any lower angle programmable

PNEUMATIC SYSTEM Air drier with heater and integral unloader valve, serving park brake and auxilliary functions

System Pressure 810 kPa (117 psi)

ELECTRICAL SYSTEM

Voltage 24 V

Battery Type Two maintenance free permanently sealed

Battery Capacity 2 X 105 Ah (optional 2 extra batteries)

Alternator Rating 28 V 80 A

VEHICLE SPEEDS

1st	7 km/h	5th	41 km/h
2nd	14 km/h	6th	47 km/h
3rd	21 km/h	R	7 km/h
4th	31 km/h		

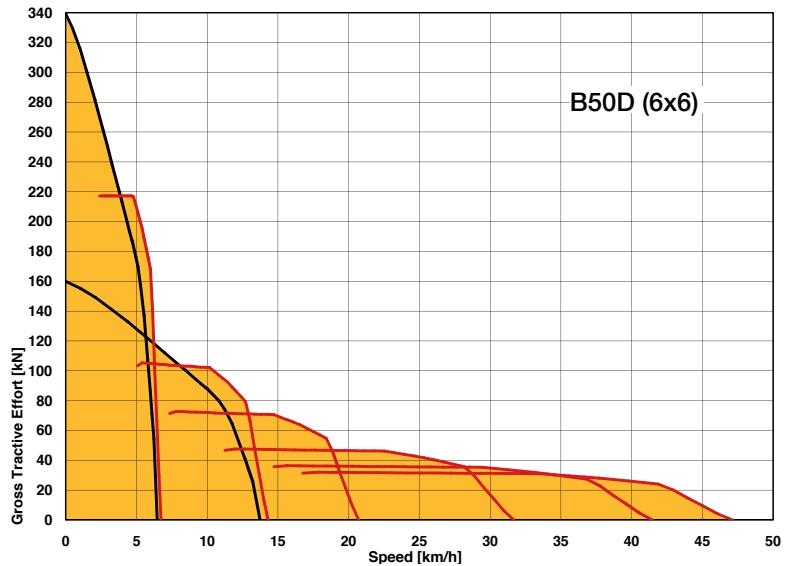
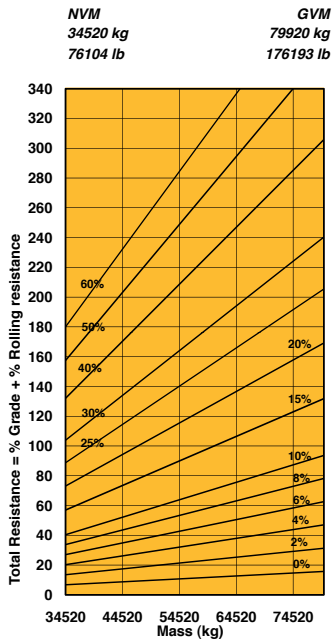


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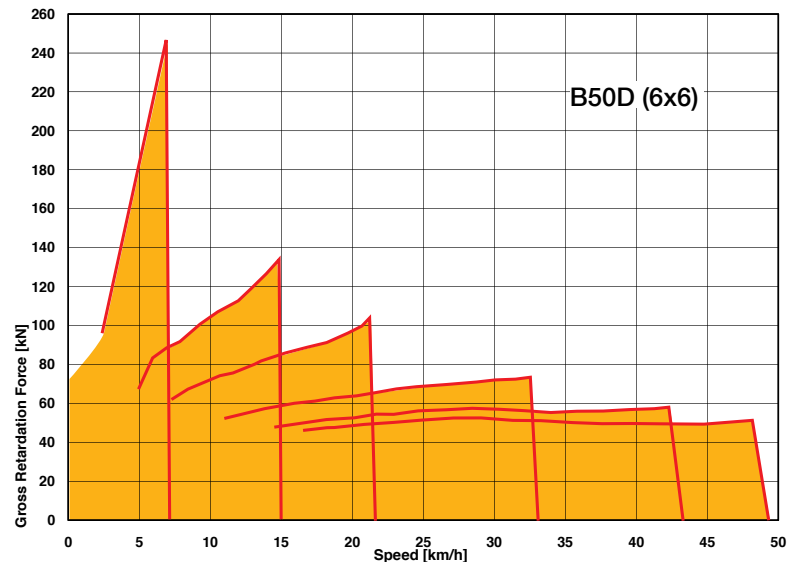
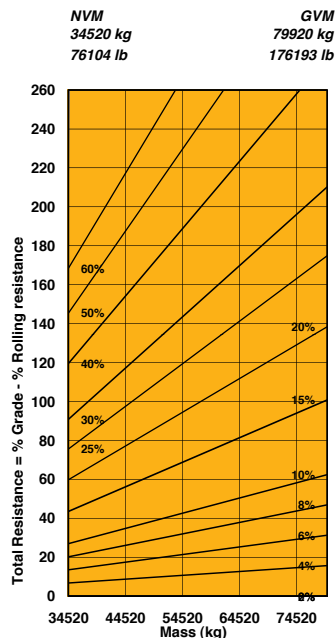
LOAD CAPACITY & GROUND PRESSURE

WEIGHTS			GROUND PRESSURE		LOAD CAPACITY			OPTION WEIGHTS	
UNLADEN	kg	lbs	LADEN (No sinkage)	kPa	BODY	m ³	cu.yd		kg
Front	17,550	38,691	Front	274	Struck Capacity	22	28,8	Bin liner	1,740
Middle	8,500	18,739	Middle	335	SAE 2:1 Capacity	28	36,6	Tailgate	998
Rear	8,470	18,673	Rear	335	SAE 1:1 Capacity	34	44,5	Extra wheelset	1,031
Total	34,520	76,104			SAE 2:1 Capacity with Autogate	29,5	38,6		
LADEN			LADEN (With sinkage)						
Front	23,440	51,676	Front	145					
Middle	28,225	62,292	Middle	178	Rated Payload	45 400kg (100,090 lbs)			
Rear	28,255	62,225	Rear	178					
Total	79,920	176,193							

GRADEABILITY/RIMPULL

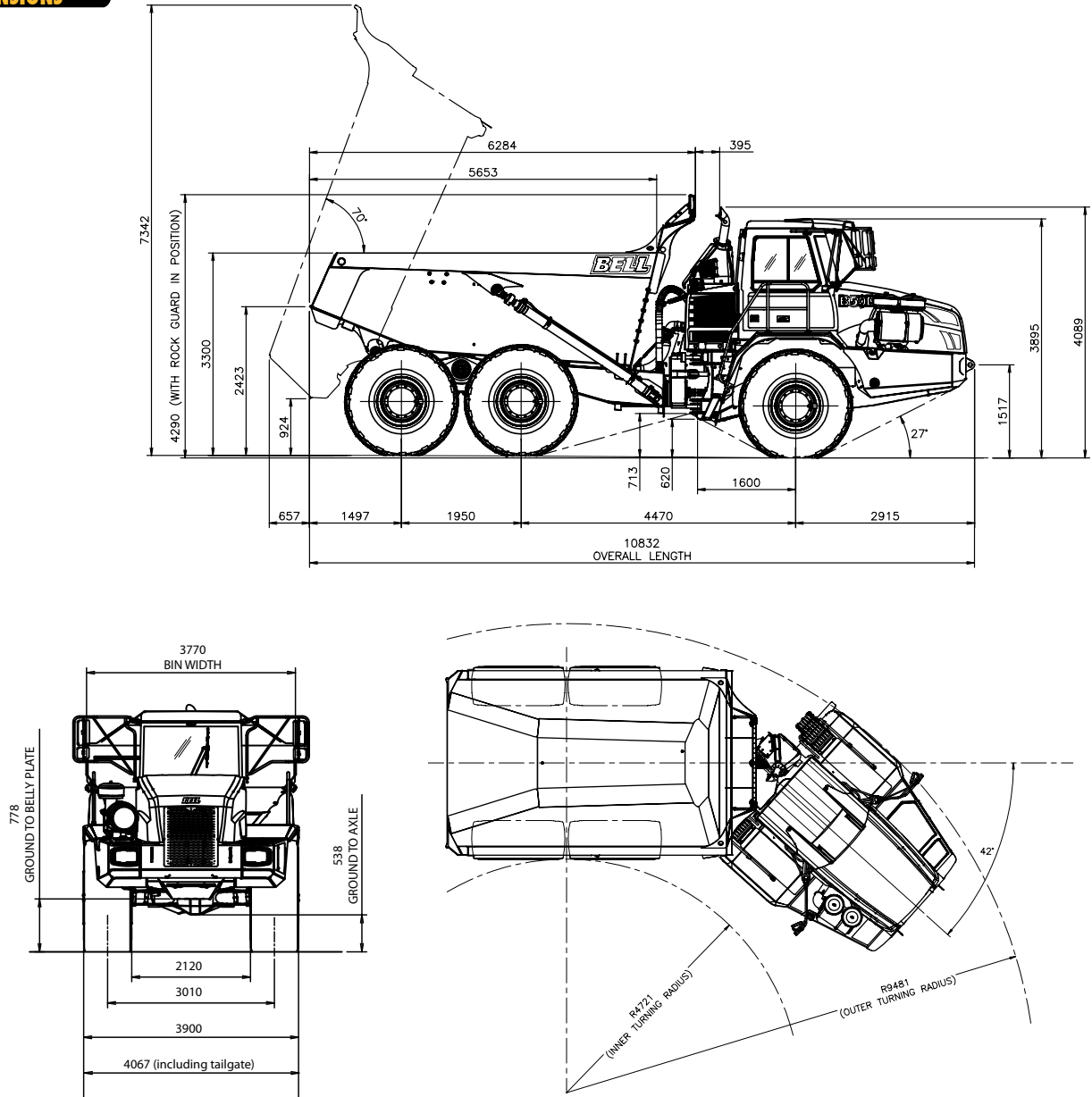


RETARDATION



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DIMENSIONS



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AVAILABLE EQUIPMENT*

Cab

- ROPS/FOPS certification
- Protective rear window guard
- Tilt cab for service access
- Gas strut supported door
- Tinted safety glass
- Sliding windows
- Rear view mirrors- regular and wide angle
- Electrically adjustable rearview 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
- Rotating beacon
- 12 V power outlet/12 V cigarette lighter
- Ash tray
- Drinks holder
- Cooled/heated lunch box
- I-Tip programmable bin tip
- Sound insulated to 74 dB(A) to ISO 6396
- Radio/CD/Tape
- Memory Module
- Air horn

MDU Features

- Operator / Site selected speed control
- Tipping counter
- Trip timer
- Trip distance
- On Board Weigh System (OBW)
- Transmission gear selection
- Fuel Consumption
- Diagnostics
- Intermittent wiper timing control
- Speedo calibration for alternative tyre sizes
- Metric /Imperial unit selection
- Warning lights with audible buzzer

Gauges

- Engine coolant temperature
- Engine oil pressure
- Transmission oil temperature
- Fuel
- Tachometer
- Battery voltage
- Hourmeter
- Odometer
- System air pressure

Vehicle

- Ground driven emergency steering
- Bin safety prop
- Articulation lock
- Integral transmission output retarder with 6 settings

Other

- (Factory or field installed)
- Groeneveld auto greasing system
 - Retractable sun visor
 - Exhaust body heating
 - Autogate
 - Body liners
 - Fleetmatic Satellite Monitoring System
 - Driver ID and immobiliser
 - Forward working lights
 - Artic reverse light
 - Fuel heater
 - External windshield visor
 - Headlight protection grills
 - Rear window wiper
 - Antenna mounting bracket
 - System for reverse camera
 - Wiggins quick fuelling system
 - Tyre pressure monitoring

*standard specification for machines may vary according to region



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



- 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.



- The incorporation of a Pitch and Roll sensor in the vehicle allows the bin to not be operated if the truck is in an unsafe position.



- Full hand-rails kit can be installed to provide even more safety when performing engine checks.



- Keyless start, driver identity, and access codes ensures no unauthorized operation of your equipment.



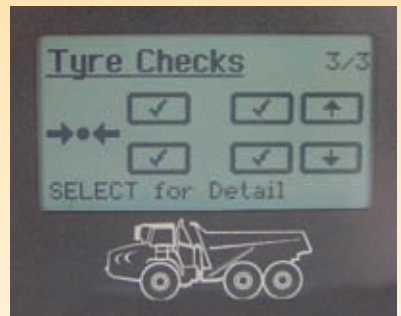
- Both operator or site selectable maximum speed control allows the vehicle to automatically de-accelerate and apply the retarder to prevent onsite speeding.



- Reverse cameras are available for factory or on site fitment ensuring full view when reversing.



- Optional Tyre pressure - monitoring System ensures that the operator has real time information on all tyres pressure and temperature conditions.




- The 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.


- All trucks can be set up to automatically sound the horn when starting or switching between forward and reverse.

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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.

**Strong Reliable Machines
Strong Reliable Support**

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