

B50D 6x6 **ARTICULATED DUMP TRUCK** Mk VI



Gross Power: 390 kw (523 hp)
Gross Torque: 2 200 Nm (1,622 lbft)
Rated Payload: 45 400 kg (100 090 lbs)

B50D 6x6 ARTICULATED DUMP TRUCK MKVI

ENGINE Mercedes Benz OM502LA V-8
Configuration Turbocharged and intercooled
Aspiration Liquid cooled with single pass radiator as well as charge air cooler
Cooling system 390 kW (523 hp) @ 1 800 rpm SAE J1349
Gross power 382 kW (512 hp) @ 1 800 rpm
Net power 2 200 Nm (1,622 lbf) @ 1 200 rpm SAE J1349
Gross torque 2 147 Nm (1,584 lbf) @ 1 200 rpm
Net torque 15,93 litres (730 cu.in)
Displacement 640 litres (169 US gal)
Fuel tank capacity Automatic exhaust brake
Auxilliary Brake Engine Valve Brake (EVB)
Certification OM 502 LA.E2/1-00 meets Europe (EU) step2;
Non Regulated OM 502 LA.E3A/1 meets Europe (EU) step 3
Regulated

TRANSMISSION Full automatic planetary transmission with integral retarder
Layout Engine mounted with rear output
Gear layout Constant meshing planetary gears, clutch operated
Gears 6 Forward, 1 Reverse
Clutch type Hydraulically operated multi-disc
Control type Electronic
Torque converter layout Hydrodynamic, with lock-up in all gears

TRANSFER CASE AGR 17100
Layout Three in-line helical gears
Output differential Interaxle 33/67 proportional differential, pneumatically/spring lockable whilst stationary or on the move.

WHEELS 875/65 R29
Tyre size Radial Earthmover
Type

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 multi-disc brakes on all three axles

Maximum brake force 399 kN (89,699 lbf)

PARK & EMERGENCY Spring applied, air released driveline mounted disc.

Maximum brake force 440 kN (98,920 lbf)-Static
 105 kN (23,605 lbf)-Dynamic

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

Total retardation power (excl. service brakes) 550 kW (737 hp)

SUSPENSION
Front type Semi-independent leading A-frame supported by nitrogen/oil struts
 Pivoting walking beams equalize the load on each axle with laminated suspension blocks. Each axle is coupled to the chassis by a Tri-Link system of three rubber-bushed links for ideal vertical movement and a transverse link for lateral restraint

Rear type

HYDRAULIC SYSTEM Variable displacement with 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 25 MPa (3,626 psi)
Filter 5 micron

PNEUMATIC SYSTEM Air drier with heater and integral unloader valve, serving park brake and auxiliary functions
System pressure 750 kPa (109 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 100 A

STEERING SYSTEM Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump.
Angle +/- 42°
Lock to lock turns 4,2

DUMPING SYSTEM Two double-acting, single stage, dump cylinders
Raise time 11.2 s (60° tip angle)
Power down time 9.9 s (60° tip angle)
Tipping angle 70° standard, or any lower angle programmable

VEHICLE SPEEDS

1st	6,9 km/h	(4,3125 mph)
2nd	14,6 km/h	(9,125 mph)
3rd	21,2 km/h	(13,25 mph)
4th	32,4 km/h	(20,25 mph)
5th	42,4 km/h	(26,5 mph)
6th	48,2 km/h	(30,125 mph)
Reverse	5,7 km/h	(3,7 mph)

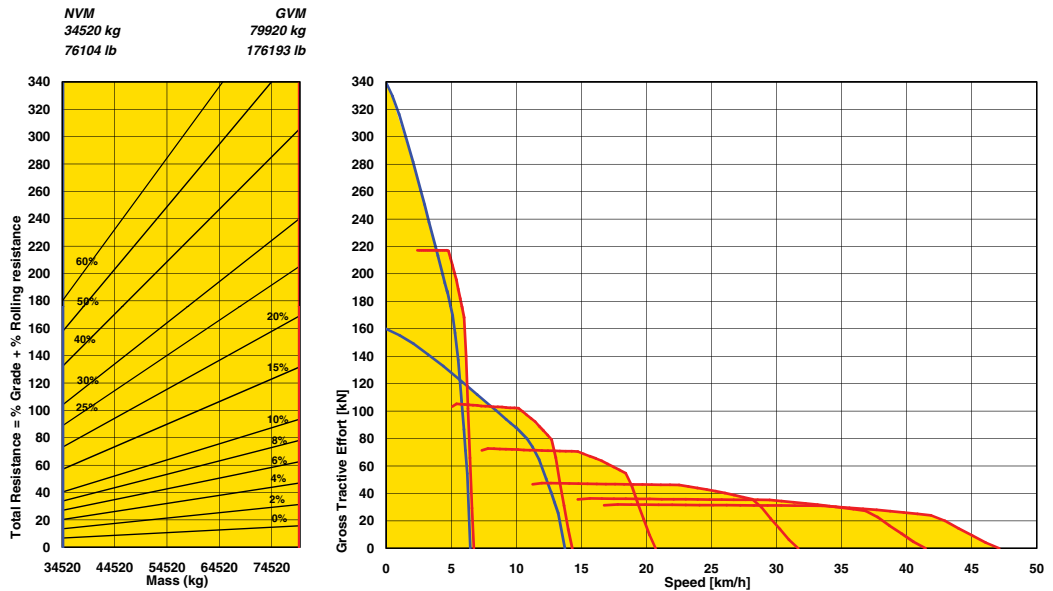


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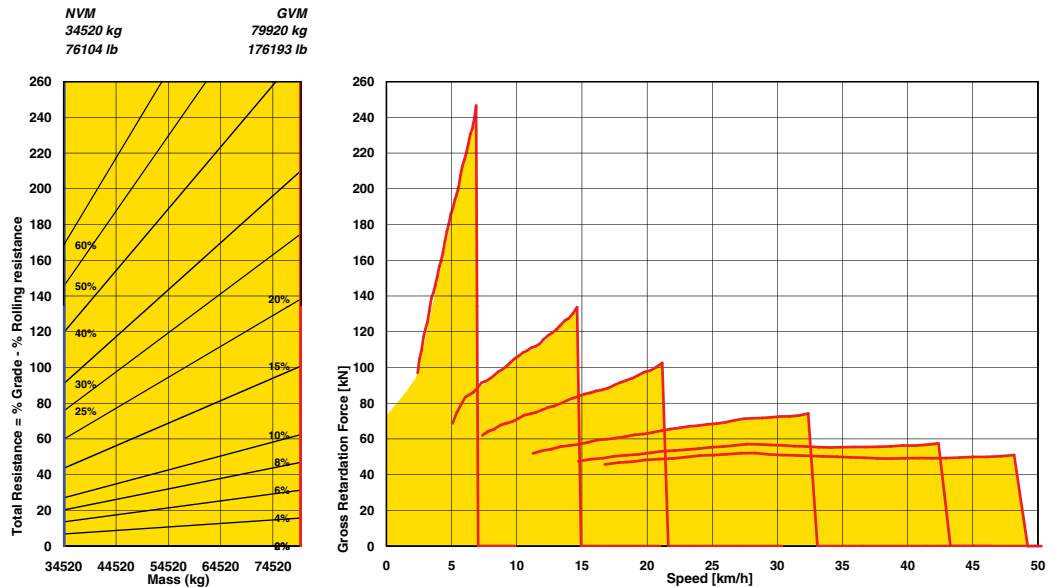
LOAD CAPACITY & GROUND PRESSURE

WEIGHTS			GROUND PRESSURE			LOAD CAPACITY		
UNLADEN	kg	lbs	UNLADEN	kPa	psi	BODY	m³	cu.yd
Front	17,550	38,691	Front	100	14.6	Struck Capacity	22	28.8
Middle	8,500	18,739	Middle	53	7.7	SAE 2:1 Capacity	28	36.6
Rear	8,470	18,673	Rear	49	7.1	SAE 1:1 Capacity	34	44.5
Total	34,520	76,104	Total			SAE 2:1 Capacity with Autogate	29,5	38.6
LADEN			LADEN					
Front	23,440	51,676	Front	283	41			
Middle	28,255	62,292	Middle	335	48.6	Rated Payload	45 400 kg	100,090 lbs
Rear	28,225	62,225	Rear	335	48.6			
Total	79,920	176,193						

GRADEABILITY/RIMPULL

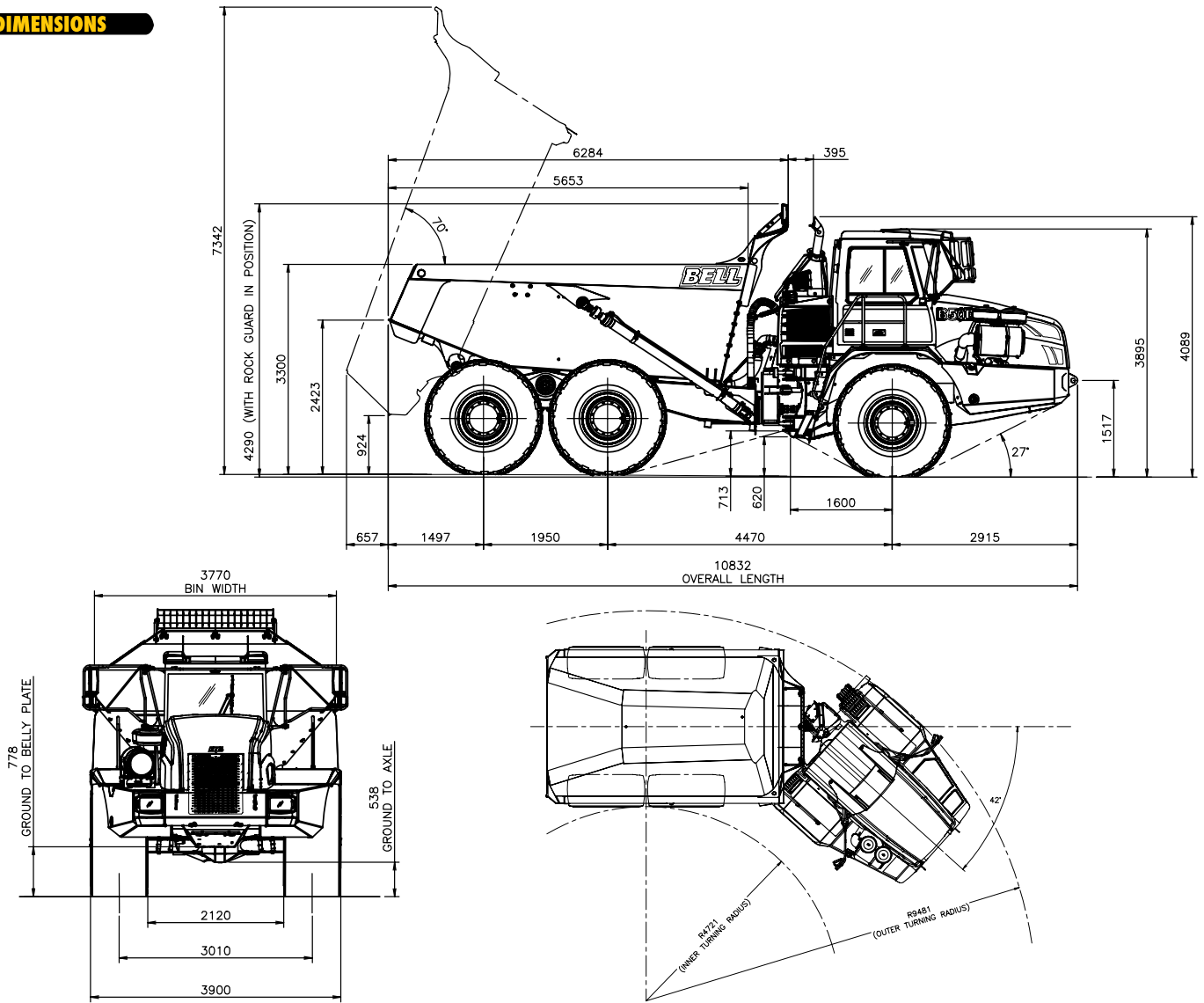


RETARDATION



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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 76 dB(A) to ISO 6396
- Radio/CD/Tape
- Memory Module
- Air horn
- External windshield visor
- Forward working lights

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

Gauges

- Speedo calibration for alternative tyre sizes
- Metric /Imperial unit selection
- Warning lights with audible buzzer

Vehicle

- Engine coolant temperature
 - Engine oil pressure
 - Transmission oil temperature
 - Fuel
 - Tachometer
 - Battery voltage
 - Hourmeter
 - Odometer
 - System air pressure
- Groeneveld auto greasing system
 - Ground driven emergency steering
 - Bin safety prop
 - Articulation lock
 - Integral transmission output retarder with 6 settings

Other

- (Factory or field installed)
- Retractable sun visor
 - Exhaust body heating
 - Autogate
 - Body liners
 - Fleetmatic Satellite Monitoring System
 - Driver ID and immobiliser
 - Artic reverse light
 - Fuel heater
 - Headlight protection grills
 - Rear window wiper
 - Antenna mounting bracket
 - Provision for reverse camera
 - Wiggins quick fuelling system
 - Full handrail kit
 - Tyre pressure monitoring

*standard specification for machines may vary according to region



Features of the B50D

The B50D delivers the following Artic Truck benefits to the 50 ton class

- **Lower capital investment**
- **Better fuel economy**
- **Reduced time costs and maintenance**
- **Superior gradeability**
- **More flotation**
- **Greater all weather working capacity**
- **And valuable versatility over rigid trucks**
- **The B50 is equally at home in mining applications or construction type earthmoving**
- **Comfort Ride option with adaptive front suspension and dual stage rear suspension**

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All dimensions are shown in millimetres, unless otherwise stated between brackets.
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**Strong Reliable Machines
Strong Reliable Support**

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