

B45D 6x6

ARTICULATED DUMP TRUCK Mk VI



Gross Power: 350 kw (469 hp)
Gross Torque: 2 300 Nm (1,696 lbft)
Rated Payload: 41 000 kg (90 389lbs)

BELL

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ENGINE	Mercedes Benz OM502LA
Configuration	V-8
Aspiration	Turbocharged and intercooled
Cooling system	Liquid cooled with single pass radiator as well as charge air cooler
Certification Regulated	OM 502 LA.E3A/1 meets Europe (EU) step 3
Gross power	390 kW (523 hp) @ 1 800 rpm SAE J1349
Nett power	382 kW (512 hp) @ 1 800 rpm
Gross Torque	2 200 Nm (1,622 lbf) @ 1 200 rpm SAE J1349
Nett Torque	2 147 Nm (1,584 lbf) @ 1 200 rpm
Non Regulated	OM 502 LA.E2/1-00 meets Europe (EU) step2;
Gross power	380 kW (510 hp) @ 1 800 rpm SAE J1349
Net power	372 kW (499 hp) @ 1 800 rpm
Gross torque	2 200 Nm (1,622 lbf) @ 1 200 rpm SAE J1349
Net torque	2 147 Nm (1,584 lbf) @ 1 200 rpm
Displacement	15,93 litres (730 cu.in)
Fuel tank capacity	640 litres (169 US gal)
Auxilliary Brake	Automatic exhaust brake Engine Valve Brake (EVB)

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	
Tyre size	29,5 R25
Type	Radial Earthmover
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
Rear type	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

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, loadsensing 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 80 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	6,7 km/h (4,1 mph)
2nd	14,1 km/h (8,8 mph)
3rd	20,4 km/h (12,7 mph)
4th	31,2 km/h (19,4 mph)
5th	40,9 km/h (25,4 mph)
6th	46,5 km/h (28,9 mph)
Reverse	6,4 km/h (4,0 mph)



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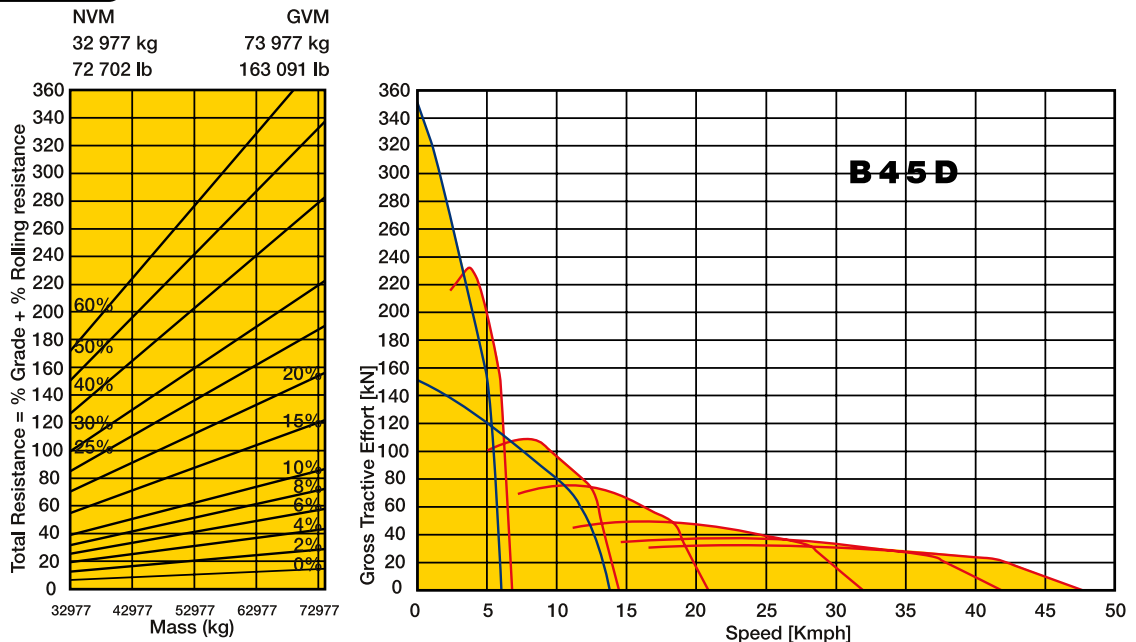
ARTICULATED DUMP TRUCK

MkVI

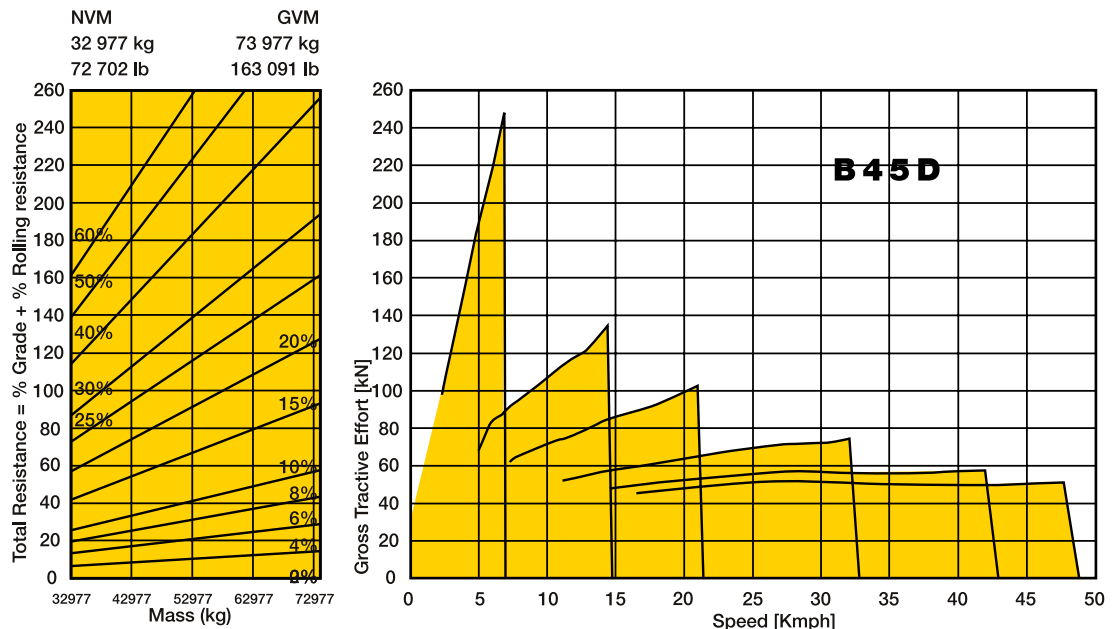
LOAD CAPACITY & GROUND PRESSURE

WEIGHTS			GROUND PRESSURE			LOAD CAPACITY		
UNLADEN	kg	lbs	UNLADEN	kPa	psi	BODY	m³	cu.yd
Front	17,230	37.986	Front	266	39	Struck Capacity	20	26.16
Middle	7,890	17.394	Middle	257	37	SAE 2:1 Capacity	25,5	33.36
Rear	7,860	17.328	Rear	257	37	SAE 1:1 Capacity	31	40.55
Total	32,980	72.708				SAE 2:1 Capacity with Autogate	26,5	34.67
LADEN			LADEN					
Front	21,190	46.716	Front	283	41			
Middle	26,410	58.224	Middle	348	50	Rated Payload	41,000 kg	90.389 lbs
Rear	26,380	58.158	Rear	347	50			
Total	73 980	163 098						

GRADEABILITY/RIMPULL



RETARDATION

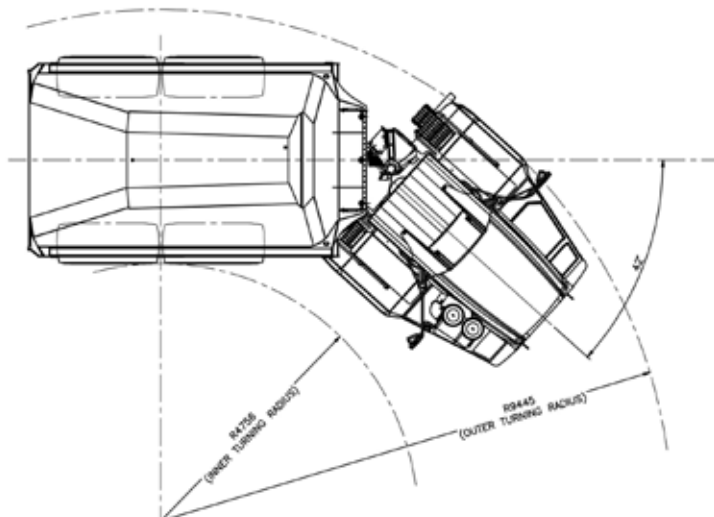
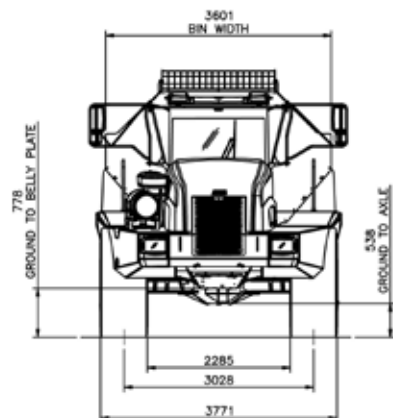


ARTICULATED DUMP TRUCK Mk VI

Technical drawing of a Bell 4250 helicopter showing dimensions in inches. The drawing includes a side profile of the helicopter with its landing gear extended. Key dimensions are labeled: overall length (10814), overall height (7338), and various wheel and landing gear dimensions. The Bell logo is visible on the side of the fuselage.

Dimensions (inches):

- Overall Length: 10814
- Overall Height: 7338
- Height to Top of Rock Guard (in position): 4250
- Height to Top of Rock Guard (in position): 3200
- Height to Top of Rock Guard (in position): 2415
- Height to Top of Rock Guard (in position): 938
- Height to Top of Rock Guard (in position): 6266
- Height to Top of Rock Guard (in position): 5612
- Height to Top of Rock Guard (in position): 395
- Height to Top of Rock Guard (in position): 3895
- Height to Top of Rock Guard (in position): 4089
- Height to Top of Rock Guard (in position): 1517
- Height to Top of Rock Guard (in position): 27
- Height to Top of Rock Guard (in position): 713
- Height to Top of Rock Guard (in position): 620
- Height to Top of Rock Guard (in position): 1600
- Height to Top of Rock Guard (in position): 2915
- Height to Top of Rock Guard (in position): 4470
- Height to Top of Rock Guard (in position): 1950
- Height to Top of Rock Guard (in position): 1479
- Height to Top of Rock Guard (in position): 589
- Height to Top of Rock Guard (in position): 70



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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 B45D

The B45D delivers the following Artic Truck benefits to the 45 ton class

- **Lower capital investment**
- **High productivity**
- **Reduced time costs and maintenance**
- **Superior gradeability**
- **Greater stability**
- **Greater all weather working capacity and valuable versatility over rigid trucks**
- **Advanced safety features**
- **The B45 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.
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**

BELL