

B20D_{6x4}

ARTICULATED
DUMP TRUCK



key features

- | | |
|----------------|-------------------------|
| • Gross power | 170 kW (228 hp) |
| • Gross torque | 810 Nm (597 lbf) |
| • Gross weight | 32 577 kg (71, 819 lbs) |



DSERIES

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ENGINE

Configuration	Mercedes Benz OM906LA
Aspiration	I-6 with exhaust brake and Engine Valve Brake (EVB)
Cooling system	Turbocharged and intercooled
Gross power	Single pass radiator & charge air cooler
Net Power	170 kW (228 hp) @ 2 200 rpm SAE J1349
Gross torque	165 kW (221hp) @ 2 200 rpm
Net torque	810 Nm (597 lbf) @ 1 050 -1 850 rpm
Displacement	SAE J1349
Fuel tank capacity	780 Nm (575 lbf) @ 1 050 -1 850 rpm
	6,37 litres (389 cu.in)
	200 l (58 US gal)

TRANSMISSION

Layout	ZF 6HP592C with integral retarder
Gear layout	Engine mounted box with rear output
Output type	Constant meshing planetary gears
Torque converter layout	Hydraulically operated multidisc
Vehicle speeds	Hydrodynamic, with lock-up in all gears
	1st 2nd 3rd 4th 5th 6th R
	10 16 28 40 56 65 10 km/h
	6 10 17 25 35 40 6 mph

TRANSFER CASE

Output differential	VGR 13 200
	Interaxle 50/50 proportional differential, pneumatically lockable whilst stationary or on the move.

AXLES

Differential type	Bell 14T
Final drive type	Spiral bevel type with Limited Slip
Housing type	Outboard heavy duty planetary
	Steel fabricated

BRAKING SYSTEM

SERVICE BRAKE	Dual circuit, full hydraulic actuation caliper brakes on all wheels
Maximum brake force	164 kN (36,900 lbf)
PARK & EMERGENCY	Spring applied, air released driveline mounted disc.
Maximum brake force	396 kN (89,000 lbf)
AUXILIARY BRAKE	Automatic exhaust brake and Engine Valve Brake (EVB)
Maximum retardation	442 kW (593 hp)

WHEELS

Tyre: Size	20,5R25
Type	Radial Earthmover
Maximum ground pressure (laden)	134 kPa (19 psi)

SUSPENSION SYSTEM

Front: Type	Semi-independent leading arm type linkages 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 system of four rubber-bushed links for ideal vertical movement.

HYDRAULIC SYSTEM

Flow	Full load sensing system. A ground-driven, load sensing emergency steering pump is integrated into the main system
Pressure	184 l/min (48.6 US gal/min)
Filter	25 MPa (3,915 psi)
	10 micron

PNEUMATIC SYSTEM

System pressure	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions
	850 kPa (123 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

Angle	Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump.
Lock to lock turns	+/- 45 degrees
	4,1

BODY

Capacity: Struck	8,5 m ³ (11.1 cu.yd)
Heaped, SAE 2:1	11 m ³ (14.4 cu.yd)
SAE 1:1	13,6 m ³ (17,8 cu.yd)
Rated payload	18 000 kg (35,683 lbs)
Raise time	12 s
Power down time	6 s
Tipping angle	70 degrees

OPERATING WEIGHTS

Empty: Front	7 845 kg (17,295 lbs)
Middle	3 485 kg (7,683 lbs)
Rear	3 242 kg (7,147 lbs)
Total	14 572 kg (32,125 lbs)
Laden: Front	8 390 kg (18,496 lbs)
Middle	12 218 kg (26,936 lbs)
Rear	11 969 kg (26,387 lbs)
Total	32 577 kg (71,819 lbs)

STANDARD EQUIPMENT

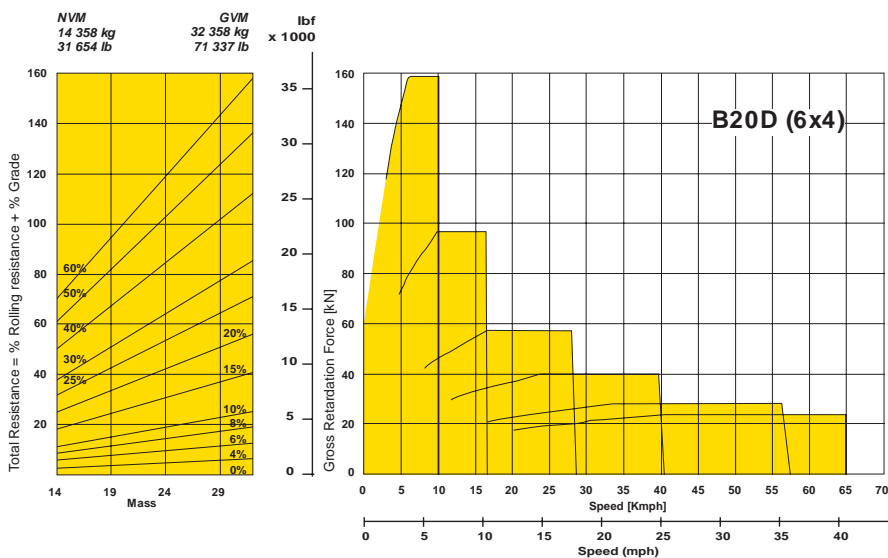
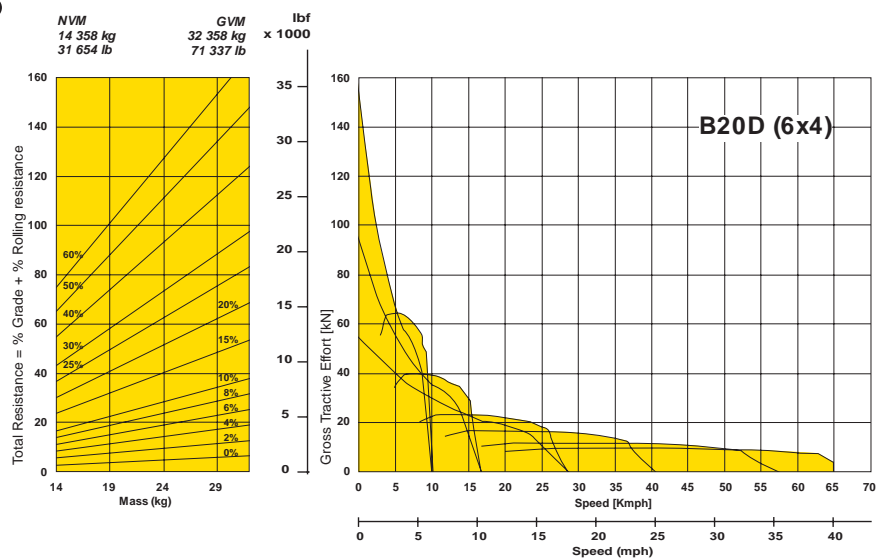
Cab	ROPS/FOPS certification
	Tilt cab for service access
	• Tinted safety glass
	• Rearview mirrors-regular and wide angle
	• Wiper/washer with intermittent control
	• Tilt and telescoping steering wheel
	• Adjustable, air suspension seat with retractable seat belt
	• Fold-away trainer seat with retractable seat belt
	• HVAC climate control system with filtered and ducted air
	• Wheel spanner set
Retarder	Integral transmission retarder
Other	Ground driven emergency steering

OPTIONAL EQUIPMENT

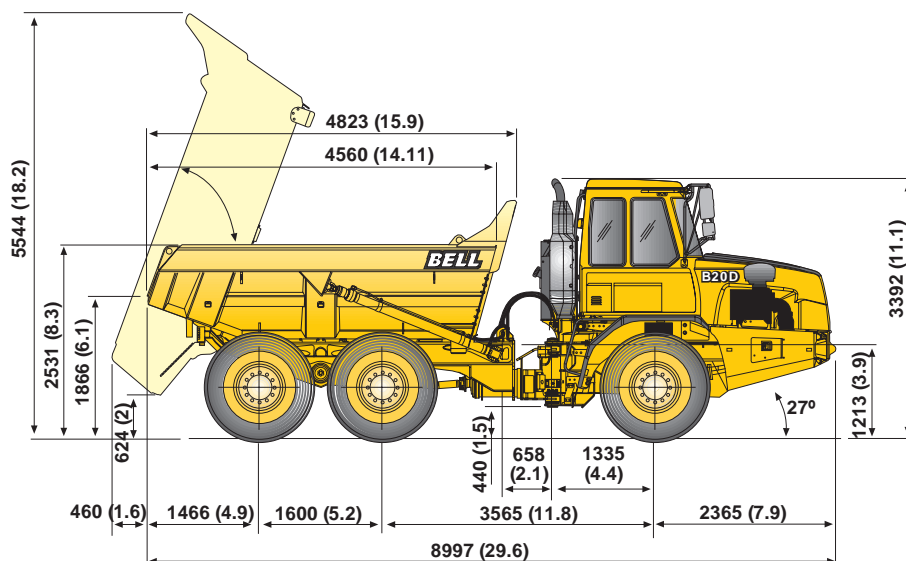
	Flashing beacon
	Work lights
	Artic reverse light
	Electrical horn

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DRAWBAR PULL GRAPH

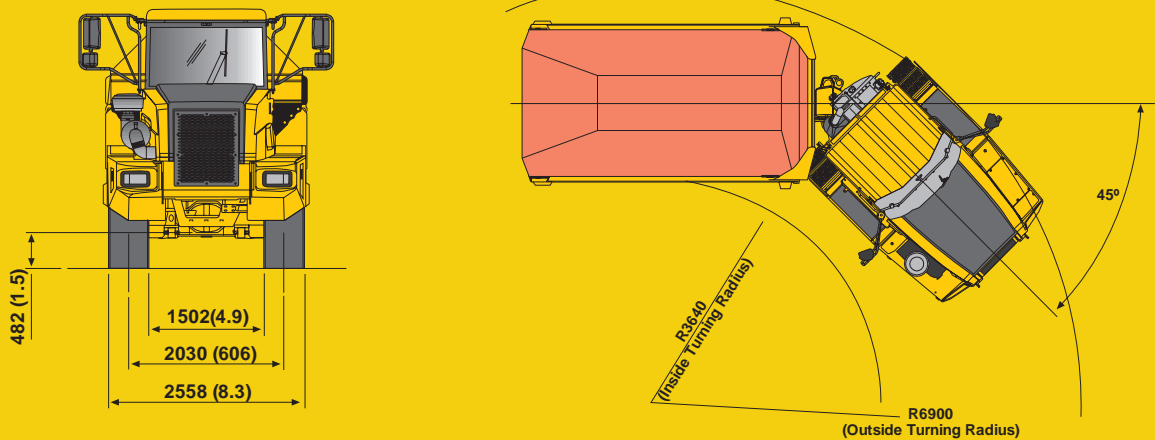


LINE DRAWING



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LINE DRAWING



What makes the B20D a great performer...

- Supreme driver comfort from a nitrogen over oil strut service independent suspension system
- High performance engine with increased power and torque
- Improved cab - setting new standards in comfort, sound levels and simplicity in operation
- Extra half tonne payload
- Quicker tip cycles
- Tighter turning circle
- Fewer scheduled service requirements
- Electronic component protection
- Improved service access
- Powerful hydraulic transmission retarder drastically cuts brake use extending pad life up to a factor of five
- Conforms to on road axle load limits and width requirements in most countries.

BELL SOUTH AFRICA : Tel: +27 (0)11-928 9700 • Fax: +27 (0)11-928 9702
 BELL INTERNATIONAL : Tel: +27 (0)35-907 9431 • Fax: +27 (0)35-797 4336
 E-mail: sales@bellequipment.com • www.bellequipment.com

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**

