

B20D_{6x6}

ARTICULATED
DUMP TRUCK



key features

- Gross power 170 kW (228 hp)
- Gross torque 810 Nm (597 lbf)
- Gross weight 32 805 kg (72, 320 lbs)



DSERIES

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

TRANSMISSION	ZF 6HP592C with integral retarder
Layout	Engine mounted box with rear output
Gear layout	Constant meshing planetary gears
Clutch type	Hydraulically operated multidisc
Torque converter layout	Hydrodynamic, with lock-up in all gears
Vehicle speeds	1st 2nd 3rd 4th 5th 6th R
	9 15 25 35 50 60 10 km/h
	6 9 15 21 30 36 6 mph

TRANSFER CASE	VGR 13 100
Output differential	Interaxle 67/33 proportional differential, pneumatically lockable whilst stationary or on the move.

AXLES	Bell 14T
Differential type	Spiral bevel type with Limited Slip
Final drive type	Outboard heavy duty planetary
Housing type	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	Full load sensing system. A ground-driven, load sensing emergency steering pump is integrated into the main system
Flow	184 /min (48.6 US gal/min)
Pressure	25 MPa (3,915 psi)
Filter	10 micron

PNEUMATIC SYSTEM	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions
System pressure	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	Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump.
Angle	+ - 45 degrees
Lock to lock turns	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	6,0 s
Tipping angle	70 degrees

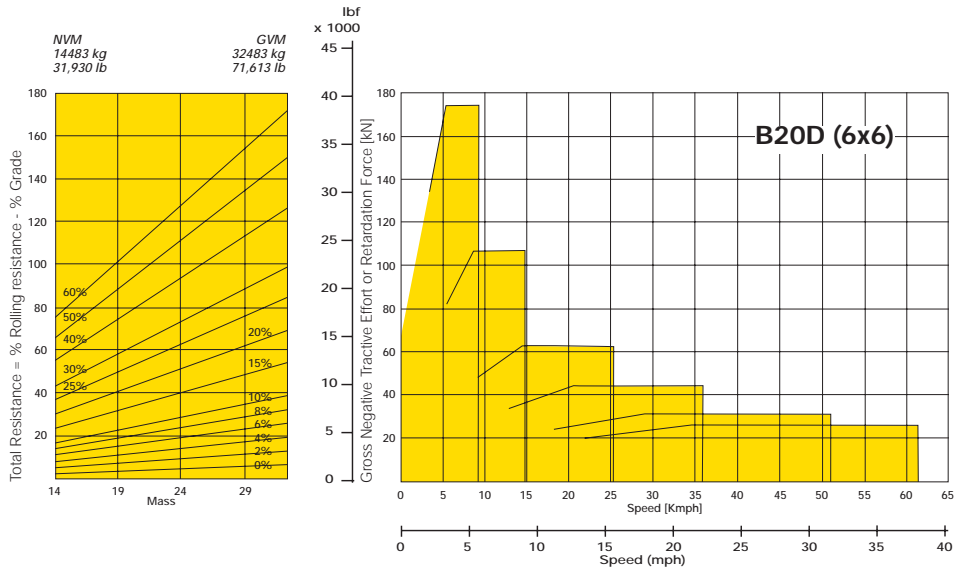
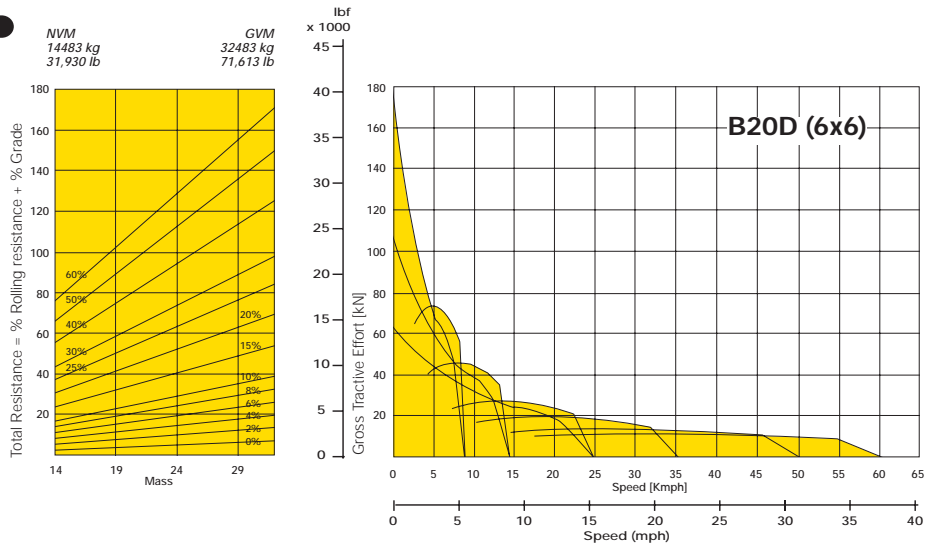
OPERATING WEIGHTS	
Empty: Front	7 845 kg (17,295 lbs)
Middle	3 550 kg (7,826 lbs)
Rear	3 410 kg (7,518 lbs)
Total	14 805 kg (32,639 lbs)
Laden: Front	8 390 kg (18,496 lbs)
Middle	12 277 kg (27,066 lbs)
Rear	12 138 kg (26,758 lbs)
Total	32 805 kg (72,320 lbs)

STANDARD EQUIPMENT	ROPS/FOPS certification
Cab	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

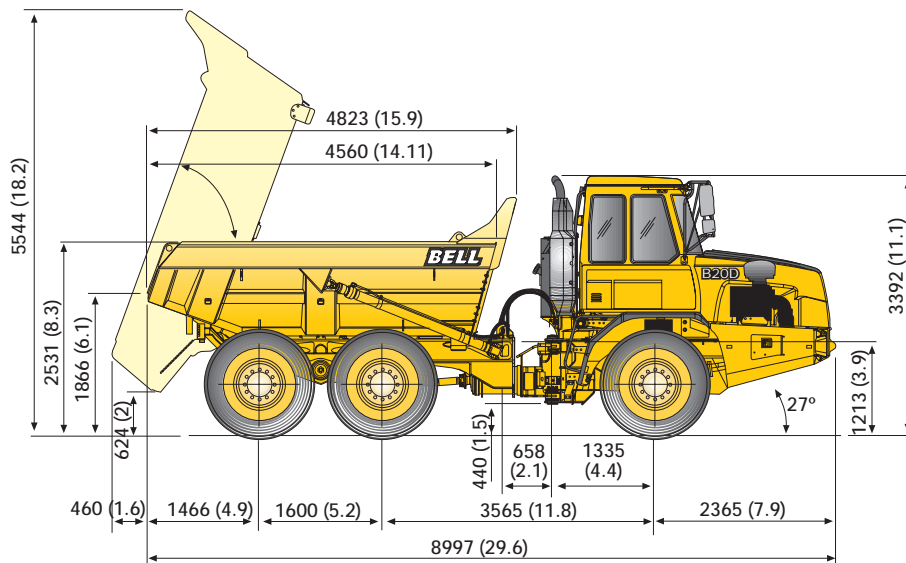
OPTIONAL EQUIPMENT	Flashing beacon
	Work lights
	Artic reverse light
	Electrical horn

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DRAWBAR PULL GRAPH

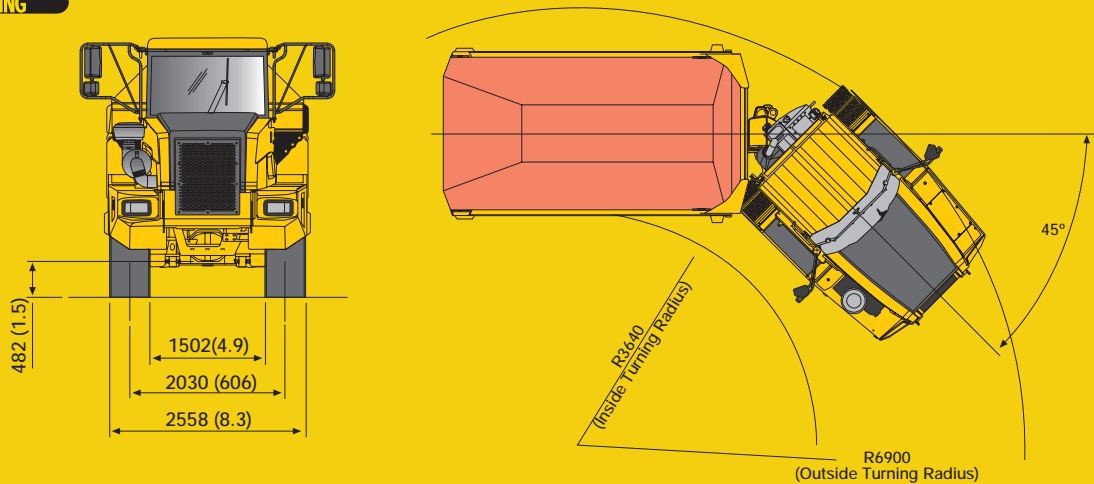


LINE DRAWING



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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
- Improved 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 road limits and width requirements in most countries.

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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**

