

B25EN

• PIN 3

6x6

Articulated Dump Truck

Stage V Certified



- Net Power: 210 kW (282 hp)
- Heaped Capacity: 15 m³ (19,5 yd³)
- Rated Payload: 24 000 kg (52 911 lbs)
- Operating Weight: 41 940 kg (92 462 lbs)

BELL

B25EN 6x6 Articulated Dump Truck



ENGINE

Manufacturer
Mercedes Benz

Model
OM936LA (6R 1000 C31)

Configuration
Inline 6, turbocharged and intercooled

Net Power
210 kW (282 hp) @ 1 800 rpm

Gross Torque
1 150 Nm (848 lbft) @ 1 200 - 1 600 rpm

Displacement
7,7 L (469 cu.in)

Auxiliary Brake
Engine valve brake

Fuel Tank Capacity
290 L (76.61 US gal)

AdBlue® Tank Capacity
31 L (8.2 US gal)

Certification
OM936LA meets EU Stage V/EPA Nonroad Tier 4 Final emissions regulations

TRANSMISSION

Manufacturer
Allison

Model
3500PR ORS

Configuration
Fully automatic planetary transmission

Layout
Engine mounted

Gear Layout
Constant meshing planetary gears, clutch operated

Gears
6 Forward, 1 Reverse

Clutch Type
Hydraulically operated multi-disc

Control Type
Electronic

Torque Control
Hydrodynamic with lock-up in all gears

TRANSFER CASE

Manufacturer
Kessler

Series
W1400

Layout
Remote mounted

Gear Layout
Three in-line helical gears

Output Differential
Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.

AXLES

Manufacturer
Bell

Model
15T

Differential
High input limited slip differential with spiral bevel gears

Final Drive
Outboard heavy duty planetary on all axles

BRAKING SYSTEM

Service Brake
Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers (4F, 2M, 2R).

Maximum brake force:
184 kN (41 400 lbf)

Park & Emergency
Spring applied, air released driveline mounted disc

Maximum brake force:
195 kN (43 900 lbf)

Auxiliary Brake
Automatic exhaust valve brake and engine valve brake.

Automatic, adjustable, integral, hydrodynamic transmission retarder.
Output shaft speed dependant.

Total Retardation Power
Continuous: 318 kW (426 hp)
Maximum: 588 kW (788 hp)

WHEELS

Type
Radial Earthmover

Tyre
20.5 R 25

FRONT SUSPENSION

Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts.

REAR SUSPENSION

Pivoting walking beams with laminated rubber suspension blocks.

HYDRAULIC SYSTEM

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

Pump Type
Variable displacement load sensing piston

Flow
165 L/min (44 gal/min)

Pressure
310 Bar (4 500 psi)

Filter
5 microns

STEERING SYSTEM

Double acting cylinders, with ground-driven emergency steering pump.

Lock to lock turns
4,1

Steering Angle
45°

DUMPING SYSTEM

Two double-acting, single stage, dump cylinders

Raise Time
14,5 s

Lowering Time
7,5 s

Tipping Angle
70° standard, or any lower angle programmable

PNEUMATIC SYSTEM

Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.

System Pressure
8,1 Bar (117 psi)

ELECTRICAL SYSTEM

Voltage
24 V

Battery Type
Two AGM (Absorption Glass Mat) type

Battery Capacity
2 X 75 Ah

Alternator Rating
28V 80A

VEHICLE SPEEDS

1st	7 km/h	4 mph
2nd	14 km/h	9 mph
3rd	21 km/h	13 mph
4th	32 km/h	20 mph
5th	42 km/h	26 mph
6th	50 km/h	31 mph
R	7 km/h	4 mph

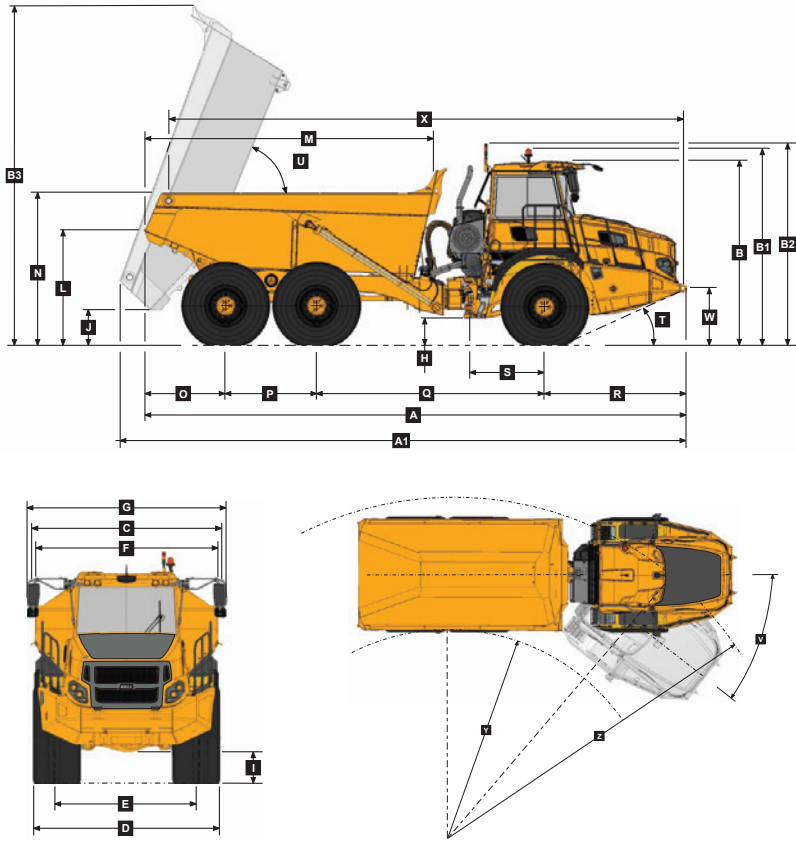
CAB

ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE		LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN (No sinkage or Total Contact Area method)		BODY	m ³ (yd ³)		kg (lb)
Front	9 640 (21 253)			Struck Capacity	12 (15.7)	Tailgate	750 (1 650)
Middle	4 190 (9 237)	20.5 R 25	kPa (Psi)	SAE 2:1 Capacity	15 (19.5)		
Rear	4 110 (9 061)	Front	305 (44)	SAE 1:1 Capacity	18 (23.5)		
Total	17 940 (39 551)	Middle	355 (51)	SAE 2:1 Capacity with Tailgate	15,5 (20.3)		
LADEN		Rear	355 (51)				
Front	12 440 (27 337)						
Middle	14 790 (32 608)			Rated Payload	24 000 kg (52 911 lbs)		
Rear	14 750 (32 518)						
Total	41 940 (92 462)						

Dimensions

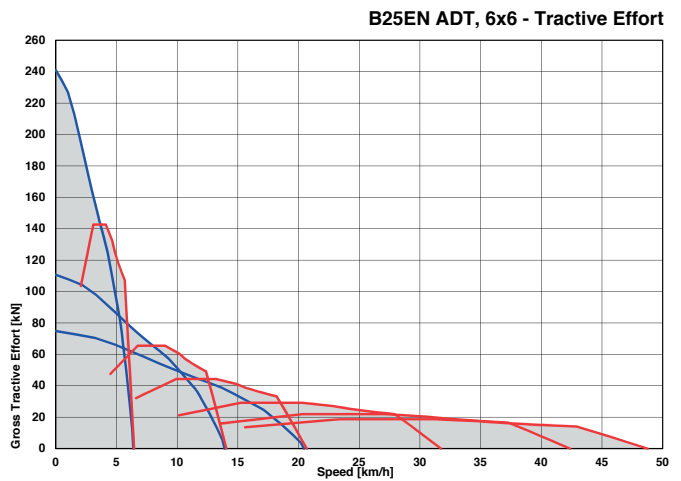
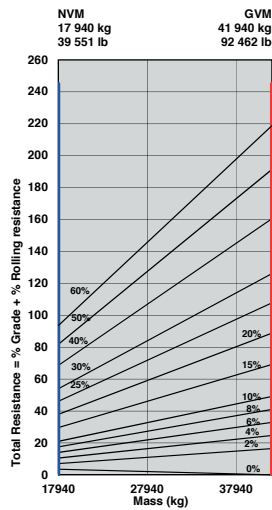


Machine Dimensions

A	Length-Transport Position	9 954 mm	(32 ft 8 in)
A1	Length-Bin Fully Tipped	10 354 mm	(33 ft 12 in)
B	Height-Cab	3 373 mm	(11 ft 1 in)
B1	Height-Rotating Beacon	3 670 mm	(12 ft)
B2	Height-Load Light	3 695 mm	(12 ft 1 in)
B3	Bin Height-Fully Tipped	6 198 mm	(20 ft 4 in)
C	Width over Mudguards	2 600 mm	(8 ft 6 in)
D	Width over Tyres-20.5R25	2 554 mm	(8 ft 5 in)
E	Tyre Track Width-20.5R25	2 022 mm	(6 ft 8 in)
F	Width over Bin	2 600 mm	(8 ft 6 in)
G	Width over Mirrors-Operating Position	3 260 mm	(10 ft 8 in)
H	Ground Clearance-Artic	480 mm	(18.90 in)
I	Ground Clearance-Front Axle	435 mm	(17.13 in)
J	Ground Clearance-Bin Fully Tipped	615 mm	(24.21 in)
K	Ground Clearance-Under Run Bar	N/A	
L	Bin Lip Height-Transport Position	2 116 mm	(6 ft 11 in)
M	Bin Length	5 282 mm	(17 ft 4 in)
N	Load over Height	2 747 mm	(9 ft)
O	Rear Axle Centre to Bin Rear	1 501 mm	(4 ft 11 in)
P	Mid Axle Centre to Rear Axle Centre	1 670 mm	(5 ft 6 in)
Q	Mid Axle Centre to Front Axle Centre	4 183 mm	(13 ft 9 in)
R	Front Axle Centre to Machine Front	2 600 mm	(8 ft 6 in)
S	Front Axle Centre to Artic Centre	1 364 mm	(4 ft 6 in)
T	Approach Angle	24°	
U	Maximum Bin Tip Angle	70°	
V	Maximum Articulation Angle	45°	
W	Front Tie Down Height	1 024 mm	(3 ft 4 in)
X	Machine Lifting Centres	9 474 mm	(31 ft 1 in)
Y	Inner Turning Circle Radius-20.5R25	4 306 mm	(14 ft 2 in)
Z	Outer Turning Circle Radius-20.5R25	7 809 mm	(25 ft 7 in)

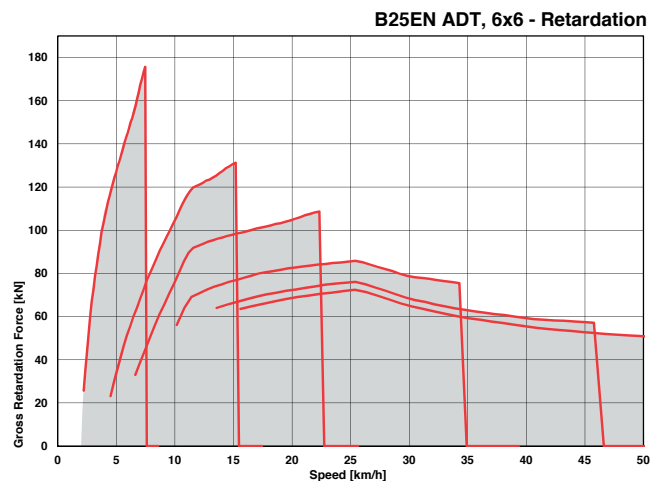
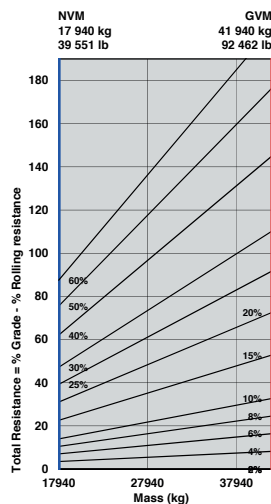
Grade Ability/Rimpull

1. Determine tractive force by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.



Retardation

1. Determine retardation force by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects the curve.
3. Read down from this point to determine maximum speed.



ENGINE

- Engine valve brake
- Dual element air cleaner with dust ejector valve
- Precleaner with automatic dust scavenging
- Water separator
- Serpentine drive belt with automatic tensioner
- Provision for fast fill

COOLING

- Crankshaft mounted electronically controlled viscous fan drive
- Fan guard

PNEUMATIC SYSTEM

- Engine-mounted compressor
- Air drier with heater
- Integral unloader valve

ELECTRICAL SYSTEM

- Battery disconnect
- Drive Lights
- Air Horn
- Reverse alarm
- ▲ White Noise reverse alarm
- Rotating Beacon
- Pitch Roll Sensor
- LED reverse lights
- ▲ LED Artic reverse lights
- ▲ Halogen Artic reverse lights

STEERING SYSTEM

- Bi-directional ground-driven secondary steering pump

CAB

- ROPS/FOPS certification
- Tilt cab
- Gas strut-supported door
- I-Tip programmable dump-body tip settings
- HVAC Climate control system
- AM/FM radio/CD player
- Rear window guard
- Wiper/washer with intermittent control
- Tilt and telescoping steering wheel
- Centre-mount air-suspension seat
- Halogen work Lights
- ▲ LED work lights
- ▲ Rotating beacon: seat belt installation
- ▲ Remote engine and machine isolation
- Remote battery jump start
- Retractable 3 point seat belt
- Heated seat
- Foldaway trainer seat with retractable seat belt
- 12-volt power outlet

CAB

- Cab utility bin (removable)
- Cup holder
- Cooled/heated lunch box
- Electric adjustable and heated mirrors
- Deluxe 10" colour LCD:
Speedometer / Fuel gauge /
Transmission oil temperature gauge /
Engine coolant temperature gauge /
LED function/warning indicators and audible alarm /
Transmission gear selection /
Tachometer / Battery voltage / Hour meter /
Odometer / Fuel consumption / Tip counter /
Trip timer / Trip distance / Metric/English units /
Service codes/diagnostics.
- Backlit sealed switch module functions with:
Wiper control / Lights / Heated mirrors /
Retarding aggressiveness / Transfer case differential lock /
Transmission gear hold /
Dump-body tip limit / Automatic dump-body tip settings /
Airconditioner/Heater controls /
Preselected Speed Control.

DUMP BODY

- Dump body mechanical locks (x2).
Partially up and fully up
- ▲ Body liner
- ▲ Tailgate
- ▲ Body heater
- ▲ Less dump body and cylinders

OTHER

- Automation Traction Control (ATC)
- Dry disc brakes
- 20.5 R 25 Radial Earthmover tyres
- Remote grease banks
- Automatic greasing
- Onboard Weighing
- ▲ Load lights: stacks
- Reverse Camera
- Cab Peak
- ▲ High Pressure Hydraulic filter
- ▲ Fuel Heater
- Belly cover
- Cross member cover
- ▲ Remote transmission filters
- Fleetm@tic® Classic Package for 2 years
- ▲ Window smash button
- Electronic bonnet opening

The compilation of standard and optional equipment may vary by market region. Please check with your local distributor.

All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change technical data and design without prior notice. Photographs featured in this brochure may include optional equipment.

BELL INTERNATIONAL: Tel: +27 (0)35-907 9431

E-mail: marketing@bellequipment.com

Web: www.bellequipment.com



Tel: +61 (0)8-9355-2442



Tel: +33 (0)5-55-89-23-56



Tel: +49 (0)6631 / 91-13-0



Tel: +7-495-287-80-02



Tel: +27 (0)11-928-9700



Tel: +1 (704) 655 2802



Tel: +44 (0)1283-712862

**Strong Reliable Machines
Strong Reliable Support**

BELL