





B25E Articulated Dump Truck



ENGINE

Manufacturer Mercedes Benz

Model OM936LA

Configuration
Inline 6, turbocharged and intercooled

Net Power 210 kW (281 hp) at 1 800 rpm in accordance with UN ECE R120

Gross Torque 1 200 Nm (885 lbft) @ 1 200 -1 600 rpm

Displacement 7,7 litres (469 cu.in)

Auxiliary Brake Compression brake

Fuel Tank Capacity 302 litres (79.78 US gal)

AdBlue® Tank Capacity 31 I (8.2 US gal)

Certification
OM936LA meets EU Stage V
emissions regulations

TRANSMISSION

Manufacturer Allison

Model 3500PR ORS

Configuration

Fully automatic planetary transmission with integral retarder.

Layout Engine mounted

Gear Layout
Constant meshing planetary
gears, clutch operated

6 Forward, 1 Reverse

Clutch Type Hydraulically operated multidisc

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
Jacobs Engine 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 23.5 R 25

FRONT SUSPENSION

Semi-independent, leading A-frame supported by hydropneumatic 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

VEHI	CLE SPEEDS	
1st	7 km/h	4 mph
2nd	15 km/h	9 mph
3rd	23 km/h	14 mph
4th	35 km/h	22 mph
5th	47 km/h	29 mph
6th	50 km/h	31 mph
R	7 km/h	4 mph

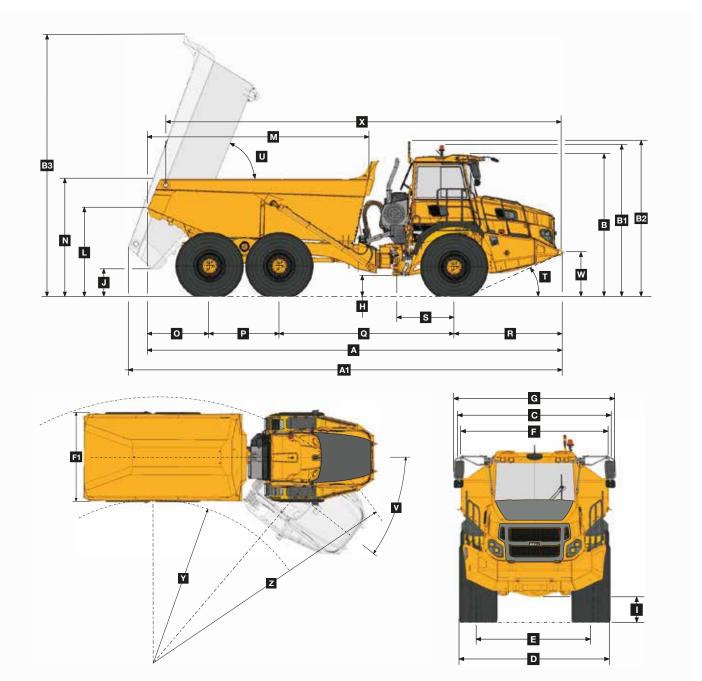
CAB

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

Load Capacity & Ground Pressure

OPERATII	NG WEIGHTS*		GROUND PRESSURE		LOAD CAPACITY		OPTION WEIGHTS		
UNLADEN	kg (lb)	LADEN (N	o sinkage)			BODY	m³ (yd³)		kg (lb)
Front	9 632 (21 235)	23.5 R 25	kPa (Psi)	23.5 R 25	kPa (Psi)	Struck Capacity	11,5 (15)	Bin liner	1 050 (2 314)
Middle	5 568 (12 275)	Front	246 (36)	Front	230 (33)	SAE 2:1 Capacity	15 (19,5)	Tailgate	769 (1 695)
Rear	5 528 (12 187)	Middle	337 (49)	Middle	283 (41)	SAE 1:1 Capacity	18 (23,5)	Extra	
Total	20 728 (45 697)	Rear	337 (49)	Rear	283 (41)	SAE 2:1 Capacity		wheelset	565 (1 246)
LADEN						with Tailgate	15 (19,6)		
Front	12 372 (27 276)								
Middle	16 198 (35 710)					Rated Payload	24 000 kg		
Rear	16 158 (35 622)						(52 911 lbs)		
Total	44 728 (98 608)								

Dimensions



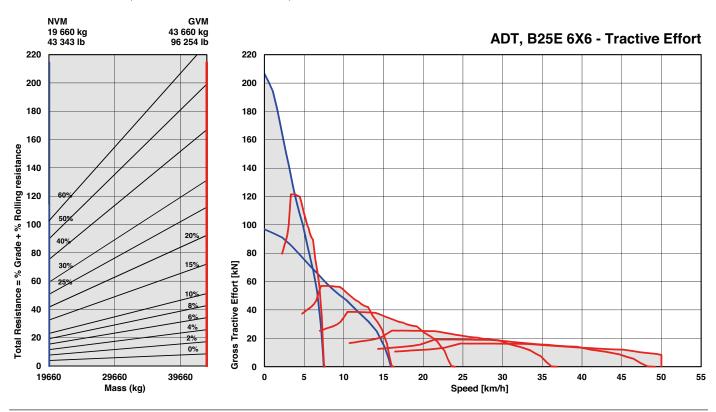
Machine Dimensions

Α	Length - Transport Position	9 953 mm	(32 ft. 7 in.)
A1	Length - Bin Fully Tipped	10 395 mm	(34 ft. 1 in.)
В	Height - Transport Position	3 426 mm	(11 ft. 2 in.)
В1	Height - Rotating Beacon	3 661 mm	(12 ft.)
B2	Height - Load Light	3 747 mm	(12 ft. 3 in.)
В3	Bin Height - Fully Tipped	6 307 mm	(20 ft. 8 in.)
C	Width over Mudguards	2 985 mm	(9 ft. 9 in.)
D	Width over Tyres - 23.5R25	2 940 mm	(9 ft. 7 in.)
D1	Width over Tyres - 750/65 R25	2 998 mm	(9 ft. 10 in.)
Ε	Tyre Track Width - 23.5R25	2 356 mm	(7 ft. 8 in.)
E1	Tyre Track Width - 750/65 R25	2 260 mm	(7 ft. 4 in.)
F	Width over Bin	2 968 mm	(9 ft. 8 in.)
F1	Width over Tailgate	2 998 mm	(9 ft. 10 in.)
G	Width over Mirrors - Operating Position	3 260 mm	(10 ft. 8 in.)
Н	Ground Clearance - Artic	537 mm	(21.14 in.)
1	Ground Clearance - Front Axle	488 mm	(19.21 in.)
J	Ground Clearance - Bin Fully Tipped	670 mm	(26.38 in.)
K	Ground Clearance - Under Run Bar	N/A	

L	Bin Lip Height - Transport Position	2 176 mm (7 ft. 1 in.)
M	Bin Length	5 294 mm (17 ft. 4 in.)
N	Load over Height	2 864 mm (9 ft. 4 in.)
0	Rear Axle Centre to Bin Rear	1 500 mm (4 ft. 11 in.)
Р	Mid Axle Centre to Rear Axle Centre	1 670 mm (5 ft. 5 in.)
Q	Mid Axle Centre to Front Axle Centre	4 181 mm (13 ft. 8 in.)
R	Front Axle Centre to Machine Front	2 602 mm (8 ft. 6 in.)
S	Front Axle Centre to Artic Centre	1 362 mm (4 ft. 5 in.)
T	Approach Angle	25 °
U	Maximum Bin Tip Angle	70 °
V	Maximum Articulation Angle	45 °
W	Front Tie Down Height	1 075 mm (3 ft. 6 in.)
Χ	Machine Lifting Centres	9 443 mm (30 ft. 11 in.)
Υ	Inner Turning Circle Radius - 23.5R25	4 110 mm (13 ft. 5 in.)
Y1	Inner Turning Circle Radius - 750/65 R25	4 081 mm (13 ft. 4 in.)
Z	Outer Turning Circle Radius - 23.5R25	8 000 mm (26 ft. 2 in.)
Z1	Outer Turning Circle Radius - 750/65 R25	8 029 mm (26 ft. 4 in.)

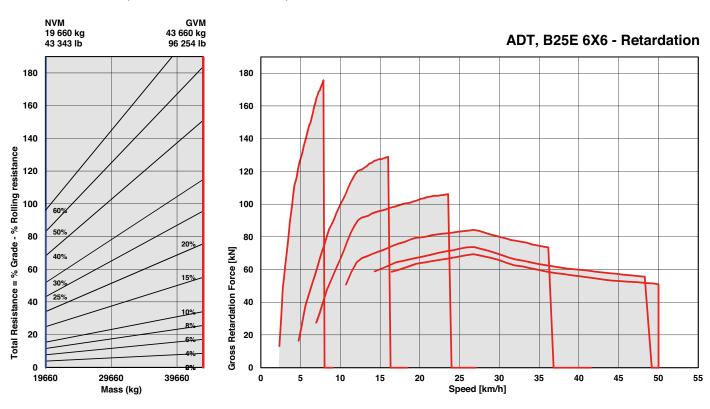
Gradeability/Rimpull

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



B30E Articulated Dump Truck



ENGINE

Manufacturer Mercedes Benz

Model OM936LA

Configuration
Inline 6, turbocharged and intercooled

Maximum Net Power 260 kW (348 hp) at 1 800 rpm in accordance with UN ECE R120

Gross Torque 1 450 Nm (1 069 lbft) @ 1 200 - 1 600 rpm

Displacement 7,7 litres (469 cu.in)

Auxiliary Brake
Compression brake

Fuel Tank Capacity 302 litres (79.78 US gal)

AdBlue® Tank Capacity 31 I (8.2 US gal)

Certification
OM936LA meets EU Stage V
emissions regulations

TRANSMISSION

Manufacturer Allison

Model 3400P 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 multidisc

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

18T

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 wet disc brakes on
front and middle axles. Wet
brake oil is circulated through a
filtration and cooling system.

Maximum brake force: 178 kN (40 000 lbf)

Park & Emergency Spring applied, air released driveline mounted disc

Maximum brake force: 214 kN (48 200 lbf)

Auxiliary Brake
Jacobs Engine Brake®.
Automatic retardation through
electronic activation of wet
brake system.

Total Retardation Power 335kW (449 hp) Continuous 494kW (662 hp) Maximum

WHEELS

Type Radial Earthmover

Tyre 23.5 R 25 (750/65 R 25 optional)

FRONT SUSPENSION

Semi-independent, leading A-frame supported by hydropneumatic 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 810 kPa (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

LE SPEEDS	
7 km/h	4 mph
15 km/h	9 mph
23 km/h	14 mph
35 km/h	22 mph
47 km/h	29 mph
50 km/h	31 mph
7 km/h	4 mph
	15 km/h 23 km/h 35 km/h 47 km/h 50 km/h

CAB

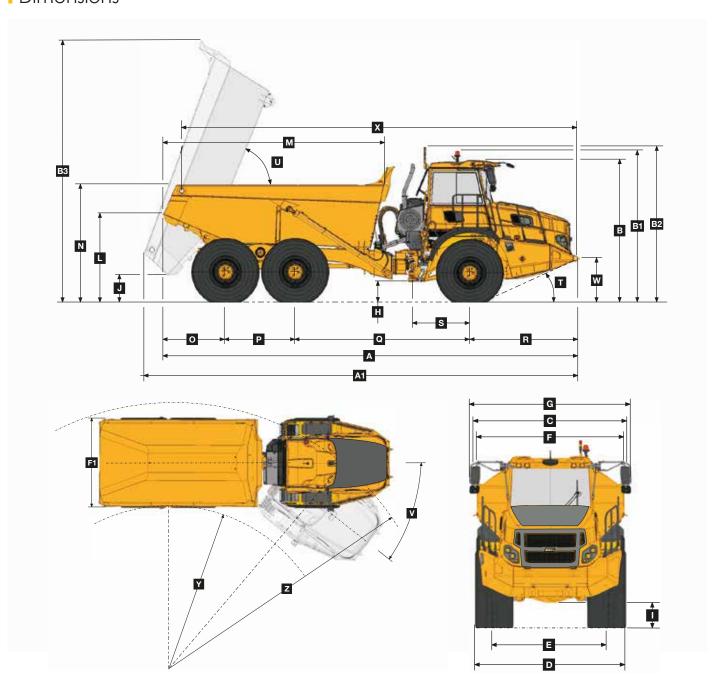
ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.

Load Capacity & Ground Pressure

OPERATI	NG WEIGHTS*	GROUND PRE		PRESSURE		LOAD CAP	PACITY	OPTION	WEIGHTS
UNLADEN	kg (lb)	LADEN-No	sinkage	LADEN-159	% sinkage	BODY	m³ (yd³)		kg (lb)
Front	10 953 (24 147)	23.5 R 25	kPa (Psi)	23.5 R 25	kPa (Psi)	Struck Capacity	13,5 (17,6)	Bin liner	1 182 (2 606)
Middle	6 194 (13 655)	Front	282 (41)	Front	246 (36)	SAE 2:1 Capacity	17 (22)	Tailgate	825 (1 818)
Rear	5 738 (12 650)	Middle	380 (55)	Middle	317 (46)	SAE 1:1 Capacity	21 (27,5)	Extra wheelset	
Total	22 885 (50 453)	Rear	380 (55)	Rear	317 (46)	SAE 2:1 Capacity		(23.5 R 25)	565 (1 246)
LADEN						with Tailgate	18 (23,5)	Extra wheelset	
Front	14 323 (31 577)	750/65 R 25	kPa (Psi)	750/65 R 25	kPa (Psi)			(750/65 R 25)	738 (1 627)
Middle	18 509 (40 805)	Front	235 (34)	Front	213 (31)	Rated Payload	28 000 kg		
Rear	18 053 (39 800)	Middle	310 (45)	Middle	274 (40)		(61 729 lbs)		
Total	50 885 (112 182)	Rear	310 (45)	Rear	274 (40)				

^{*} including additional equipment (tailgate)

Dimensions



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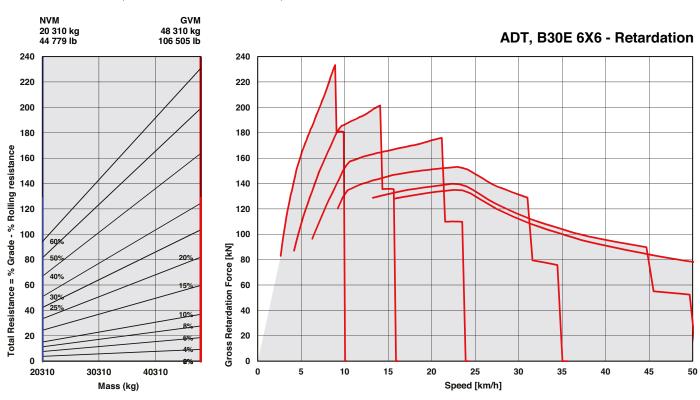
Gradeability/Rimpull

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- 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 required by finding intersection of vehicle mass line.
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- 3. Read down from this point to determine maximum speed.





B25E B30E **ENGINE** • Jacobs Engine 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 light Halogen Artic reverse light **STEERING SYSTEM** Bi-directional ground-driven secondary steering 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 LED work lights Halogen work lights Rotating beacon: seat belt installation Remote engine and machine isolation Remote battery jump start • • • • Retractable 3 point seat belt Heated seat

/	/
1.4	1/41
155	/&/
$\langle \hat{\varphi}^{v} \rangle$	85/

CAB (continued)

- 12-volt power outlet
- 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

- Automatic Traction Control (ATC)
 - Wet disc brakes B30E
 - Dry disc brakes B25E
- 23.5R25 Radial Earthmover tyres
- 750/65R25 Radial Earthmover tyres
- Remote grease banks
- Automatic greasing
- Onboard Weighing
- Load lights: stack
- Comfort ride suspension (Front)
- Comfort ride suspension (Rear)
- Reverse camera
- Hand rails
- Cab peak
- High pressure hydraulic filter
- Fuel heater
- • Belly cover
- • Cross member cover
- Remote transmission filters
- Electronic Bonnet opening

Tel: 1300 448 224

Foldaway trainer seat with retractable seat belt

Dealer e-mail: hitachifleet@hcma.com.au • Web: www.hitachicm.com.au

All dimensions are shown in millimeters, unless otherwise stated between brackets.

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