### **Technical Data - B25E**

#### **FNGINE**

Manufacturer Mercedes Benz

Model OM936LA

**Configuration**Inline 6, turbocharged and intercooled.

**Gross Power** 210 kW (281 hp) @ 2 200 rpm

**Net Power** 201 kW (269 hp) @ 2 200 rpm

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

**Displacement** 7,7 litres (469 cu.in)

Auxiliary Brake Engine Valve Brake

Fuel Tank Capacity 302 litres (79.78 US gal)

AdBlue® Tank Capacity 31 I (8.2 US gal)

Certification

OM936LA meets EU Stage IV / EPA Tier 4 Final 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

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 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** 23.5 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 28 MPa (4 061 psi)

Filter 5 microns

#### **STEERING SYSTEM**

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

Lock to lock turns 4.1

Steering Angle

#### **DUMPING SYSTEM**

Two double-acting, single stage, dump cylinders.

Raise Time

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

VEHIC	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

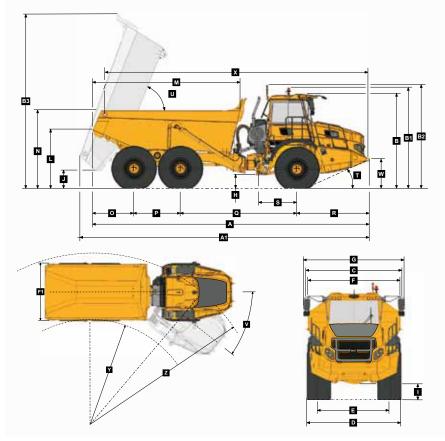
#### **CAB**

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

## Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE			LOAD CAPACITY		OPTION WEIGHTS		
UNLADEN	kg (lb)	LADEN (N	lo sinkage)	LADEN (15	% sinkage)	BODY	m³ (yd³)		kg (lb)
Front	10 085 (22 230)	23.5 R 25	kPa (Psi)	23.5 R 25	kPa (Psi)	Struck Capacity	12 (15,7)	Bin liner	1 050 (2 314)
Middle	4 805 (10 600)	Front	246 (36)	Front	230 (33)	SAE 2:1 Capacity	15 (19,5)	Tailgate	769 (1 695)
Rear	4 770 (10 520)	Middle	337 (49)	Middle	283 (41)	SAE 1:1 Capacity	18 (23,5)	Extra wheelset	565 (1 246)
Total	19 660 (43 350)	Rear	337 (49)	Rear	283 (41)	SAE 2:1 Capacity			
LADEN						with Tailgate	15,5 (20,3)		
Front	12 825 (28 274)								
Middle	15 435 (34 028)					Rated Payload	24 000 kg		
Rear	15 400 (33 951)						(52 911 lbs)		
Total	43 660 (96 253)								

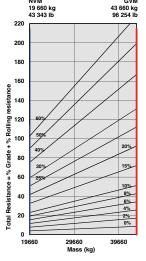
### **Dimensions**

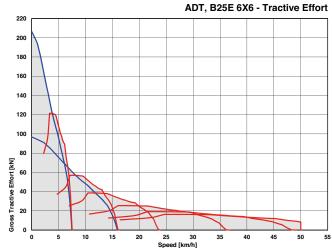


Ma	chine Dimensions	
Α	Length - Transport Position	9953 mm (32 ft. 7 in.)
<b>A</b> 1	Length - Bin Fully Tipped	10311 mm (33 ft. 9 in.)
В	Height - Transport Position	3426 mm (11 ft. 2 in.)
В1	Height - Rotating Beacon	3661 mm (12 ft.)
B2	Height - Load Light	3747 mm (12 ft. 3 in.)
ВЗ	Bin Height - Fully Tipped	6255 mm (20 ft. 6 in.)
С	Width over Mudguards	2985 mm (9 ft. 9 in.)
D	Width over Tyres - 23.5R25	2940 mm (9 ft. 7 in.)
Е	Tyre Track Width - 23.5R25	2356 mm (7 ft. 8 in.)
F	Width over Bin	2700 mm (8 ft. 10 in.)
F1	Width over Tailgate	2998 mm (9 ft. 10 in.)
G	Width over Mirrors - Operating Position	3260 mm (10 ft. 8 in.)
Н	Ground Clearance - Artic	537 mm (21.14 in.)
I	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	2176 mm (7 ft. 1 in.)
М	Bin Length	5272 mm (17 ft. 3 in.)
N	Load over Height	2763 mm (9 ft.)
0	Rear Axle Centre to Bin Rear	1500 mm (4 ft. 11 in.)
Р	Mid Axle Centre to Rear Axle Centre	1670 mm (5 ft. 5 in.)
Q	Mid Axle Centre to Front Axle Centre	4181 mm (13 ft. 8 in.)
R	Front Axle Centre to Machine Front	2602 mm (8 ft. 6 in.)
s	Front Axle Centre to Artic Centre	1362 mm (4 ft. 5 in.)
Т	Approach Angle	25 °
U	Maximum Bin Tip Angle	70 °
٧	Maximum Articulation Angle	45 °
w	Front Tie Down Height	1075 mm (3 ft. 6 in.)
Х	Machine Lifting Centres	9477 mm (31 ft. 1 in.)
Υ	Inner Turning Circle Radius - 23.5R25	4110 mm (13 ft. 5 in.)
Z	Outer Turning Circle Radius - 23.5R25	8000 mm (26 ft. 2 in.)

# | Grade Ability/Rimpull

- 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.
- 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.

