

B60E

ARTICULATED DUMP TRUCK

4x4



**Tier 4f/Stage IV
Certified**

- Gross Power: 430 kW (577 hp)
- Heaped Capacity: 35 m³ (45.8 yd³)
- Rated Payload: 55,000 kg (121,254 lbs)
- Operating Weight: 97,476 kg (214,898 lb)

BELL

Technical Data - B60E

ENGINE

Manufacturer

Mercedes Benz (MTU)

Model

OM473LA (MTU 6R 1500)

Configuration

Inline 6, turbocharged and intercooled.

Gross Power

430 kW (577 hp) @ 1,700 rpm

Net Power

405 kW (543 hp) @ 1,700 rpm

Gross Torque

2,750 Nm (2,028 lbf) @ 1,300 rpm

Displacement

15,6 liters (952 cu.in)

Auxiliary Brake

Engine Valve Brake

Fuel Tank Capacity

395 liters (104 US gal)

AdBlue® Tank Capacity

40 liters (11 US gal)

Certification

OM473LA (MTU 6R 1500) meets EU Stage 4 / EPA Tier 4 Final emissions regulations.

TRANSMISSION

Manufacturer

Allison

Model

4800 ORS

Configuration

Fully automatic planetary transmission

Layout

Engine mounted

Gear Layout

Constant meshing planetary gears, clutch operated

Gears

7 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

Model

W3430

Layout

Remote mounted

Gear Layout

Three in-line helical gears

Output Differential

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

AXLES

Manufacturer

Front - Bell

Rear - Kessler

Model

Front: 30T

Rear: 71T

Differential

Front: High input controlled traction differential with spiral bevel gears

Rear: Center input open 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 rear axles. Wet brake oil is circulated through a filtration and cooling system.

Maximum brake force:

437 kN (98,242 lbf)

Park & Emergency

Spring applied, air released driveline mounted disc.

Maximum brake force:

379 kN (85,203 lbf)

Auxiliary Brake

Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.

Total Retardation Power

Continuous: 574 kW (770 hp)

Maximum: 983 kW (1,318 hp)

WHEELS

Type

Radial Earthmover

Tire

Front: 875/65 R29

Rear: Twin 24.00 R35

FRONT SUSPENSION

Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts. Suspension is electronically controlled adaptive suspension with ride height adjustment.

REAR SUSPENSION

Trailing arm cradle supported by hydro-pneumatic suspension struts, with an additional lateral stabilizer.

HYDRAULIC SYSTEM

Full load sensing system serving the prioritized steering, body tipping, suspension 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

330 L/min (87 gal/min)

Pressure

250 bar (3,626 psi)

Filter

5 microns

STEERING SYSTEM

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

Lock to lock turns

4,9

Steering Angle

42°

DUMPING SYSTEM

Two double-acting, two stage telescopic, dump cylinders.

Raise Time

13,5 seconds

Lowering Time

13,5 seconds

Tipping Angle

55 deg 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

MAX. VEHICLE SPEED

1st	4 km/h	2.5 mph
2nd	8 km/h	5.6 mph
3rd	16 km/h	10.6 mph
4th	21 km/h	13.7 mph
5th	30 km/h	20 mph
6th	41 km/h	27 mph
7th	47 km/h	32 mph
R	6 km/h	4 mph

CAB

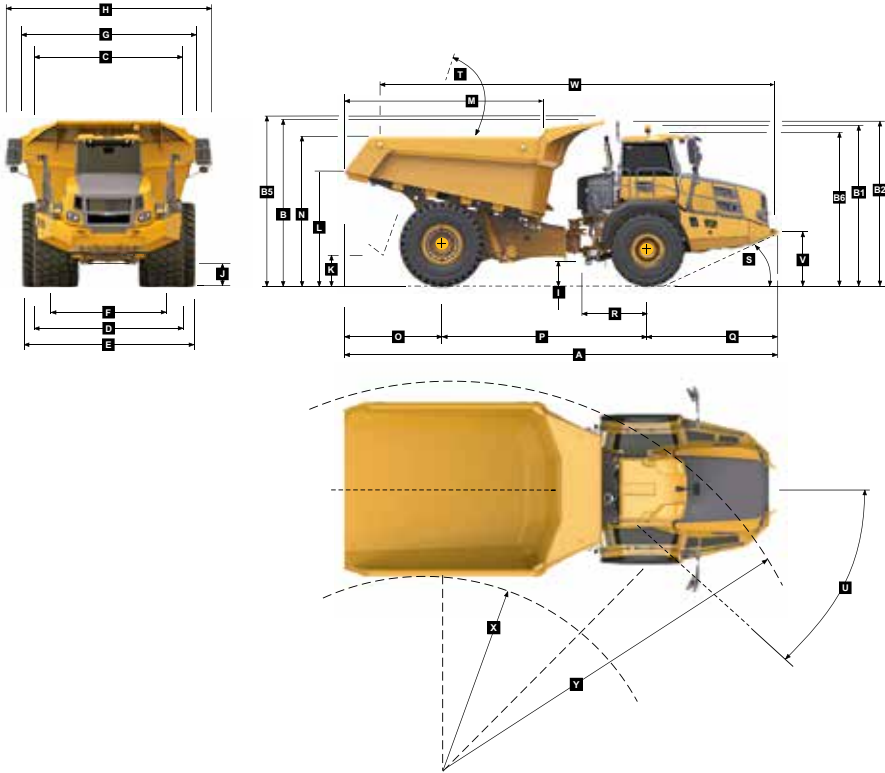
ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE*		LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN		BODY	m ³ (yd ³)		kg (lb)
Front	20,211 (44,558)	(No sinkage/Total Contact Area Method)		Struck Capacity	27 (35.3)	Bin liner	1,116 (2,460)
Rear	22,265 (49,086)	875/65 R29	kPa (Psi)	SAE 2:1 Capacity	35 (45.8)		
Total	42,476 (93,644)	Front	333 (48)	SAE 1:1 Capacity	42 (54.9)		
LADEN		24.00 R35	kPa (Psi)	Rated Payload	55,000 kg	EXTRA WHEELSET	
Front	26,811 (59,108)	Rear	469 (68)		(121,254 lb)	875/65 R29	1,024 (2,258)
Rear	70,665 (155,768)					24.00 R34	1,240 (2,734)
Total	97,476 (214,898)						

* Front ground pressure calculated with Michelin XAD65-1 tire. Rear ground pressure calculated with Michelin XDT B tire.

Dimensions

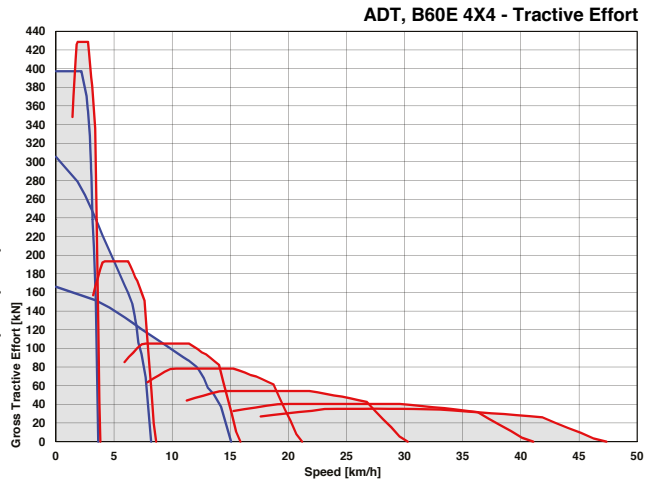
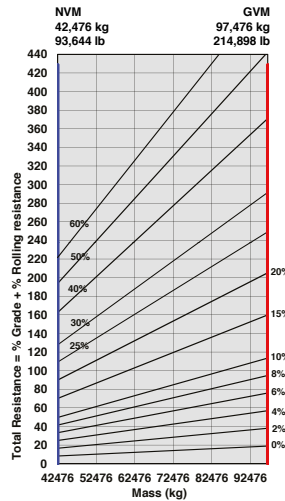


Machine Dimensions

A	Length - Transport Position	11114 mm (36 ft. 6 in.)
B	Height - Transport Position w/o Rock Guard	4209 mm (13 ft.10 in.)
B	Height - Transport Position with Rock Guard	4212 mm (13 ft.10 in.)
B1	Height - Rotating Beacon	4050 mm (13 ft. 3 in.)
B2	Height - Load Light	4333 mm (14 ft. 2 in.)
B5	Height - Rock Guard Operating Position	4675 mm (15 ft. 4 in.)
B6	Height - Cab	3813 mm (12 ft. 6 in.)
C	Width over Mudguards	3790 mm (12 ft. 5 in.)
D	Width over Tires - Front - 875/65 R29	3832 mm (12 ft. 7 in.)
E	Width over Tires - Rear - 24.00R35	4444 mm (14 ft. 7 in.)
F	Tire Track Width - Front	2949 mm (9 ft. 8 in.)
F	Tire Track Width - Rear	2992 mm (9 ft. 10 in.)
G	Width over Bin	4487 mm (14 ft. 9 in.)
H	Width over Mirrors - Operating Position	5242 mm (17 ft. 2 in.)
I	Ground Clearance - Artic	561 mm (22. 09 in.)
J	Ground Clearance - Front Axle	554 mm (21. 81 in.)
K	Ground Clearance - Bin Fully Tipped	851 mm (33. 5 in.)
L	Bin Lip Height - Transport Position	2952 mm (9 ft. 8 in.)
M	Bin Length	5036 mm (16 ft. 6 in.)
N	Load over Height	3824 mm (12 ft. 7 in.)
O	Rear Axle Center to Bin Rear	2477 mm (8 ft. 2 in.)
P	Rear Axle Center to Front Axle Center	5285 mm (17 ft. 4 in.)
Q	Front Axle Center to Machine Front	3352 mm (10 ft. 12 in.)
R	Front Axle Center to Artic Center	1558 mm (5 ft. 1 in.)
S	Approach Angle	22 °
T	Maximum Bin Tip Angle	55 °
U	Maximum Articulation Angle	42 °
V	Front Tie Down Height	1263 mm (4 ft. 2 in.)
W	Machine Lifting Centers	10116 mm (33 ft. 2 in.)
X	Inner Turning Circle Radius	4247 mm (13 ft.11 in.)
Y	Outer Turning Circle Radius	9524 mm (31 ft. 3 in.)

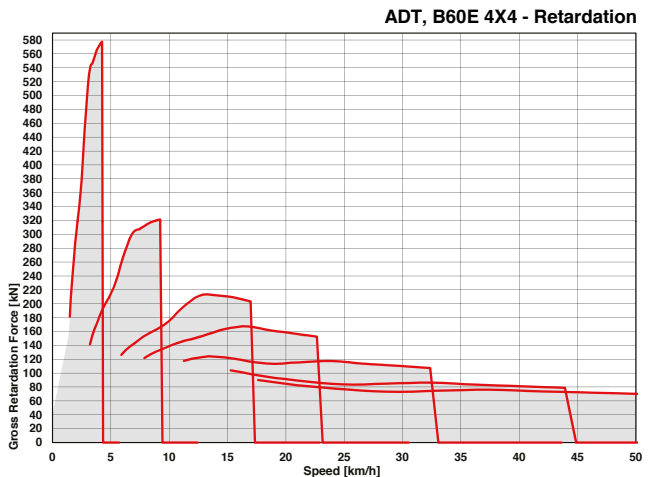
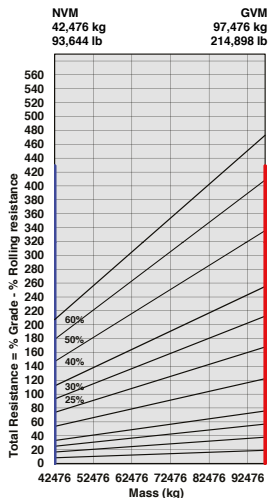
Grade Ability / Rimpull

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.



Features and Options

● STANDARD ▲ OPTION

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
- Wet-sleeve cylinder liners

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
- LED Drive Lights
- Air Horn
- Reverse alarm
- ▲ White noise reverse alarm
- Rotating Beacon
- Pitch Roll Sensor
- LED reverse lights
- ▲ Halogen 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
- LED Work Lights
- ▲ Rotating beacon: seat belt installation
- ▲ Remote engine and machine isolation
- Remote battery jump start
- Retractable 3 point seat belt
- Heated seat

CAB

- Foldaway trainer seat with retractable seat belt
- 12-volt power outlet
- Cab utility bin (removable)
- Cup holder
- Cooled/heated lunch box
- Deluxe 10" color 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:
 - Retarding aggressiveness / Transfer case differential lock / Transmission gear hold /
 - Dump-body tip limit / Automatic dump-body tip settings / Air Conditioner / Heater controls /
 - Preselected Speed Control.

DUMP BODY

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

OTHER

- Automation Traction Control (ATC)
- Wet disc brakes
- Automatic greasing
- Onboard Weighing
- Load lights: stacks
- Comfort Ride Suspension (Front)
- Reverse Camera
- Hand Rails
- Cab Peak
- ▲ High Pressure Hydraulic filter
- ▲ Fuel Heater
- Remote transmission filter
- Engine and transmission remote drain-gravity
- ▲ Engine and transmission remote drain-scavange
- ▲ Window smash button
- High visibility mirrors
- Fleetm@tic® Classic Package for 5 years

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

All dimensions are shown in millimeters, 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.

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Strong Reliable Support**

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