

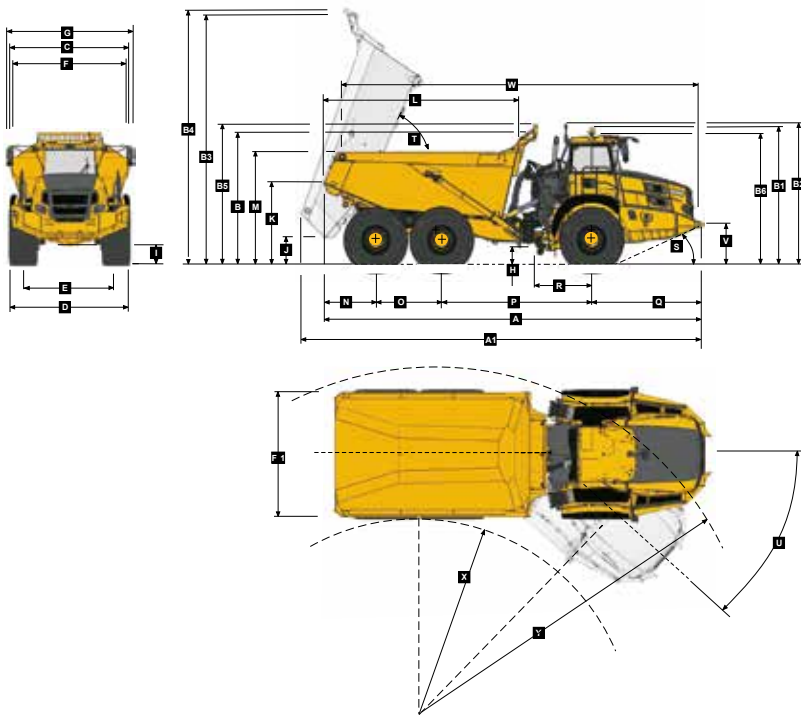
Technical Data - B45E

<p>ENGINE</p> <p>Manufacturer Mercedes Benz (MTU)</p> <p>Model OM471LA (MTU 6R 1300)</p> <p>Configuration Inline 6, turbocharged and intercooled.</p> <p>Gross Power 390 kW (523 hp) @ 1,700 rpm</p> <p>Net Power 369 kW (495 hp) @ 1,700 rpm</p> <p>Gross Torque 2,460 Nm (1,814 lbf) @ 1,300 rpm</p> <p>Displacement 12.8 liters (781 cu.in)</p> <p>Auxiliary Brake Engine Valve Brake</p> <p>Fuel Tank Capacity 352 liters (93 US gal)</p> <p>AdBlue® Tank Capacity 40 liters (11 US gal)</p> <p>Certification OM471LA (MTU 6R 1300) meets EU Stage IV / EPA Tier 4 Final emissions regulations.</p>	<p>Torque Control Hydrodynamic with lock-up in all gears.</p> <p>TRANSFER CASE</p> <p>Manufacturer Kessler</p> <p>Series W2400</p> <p>Layout Remote mounted</p> <p>Gear Layout Three in-line helical gears</p> <p>Output Differential Interaxle 29/71 proportional differential. Automatic inter-axle differential lock.</p> <p>AXLES</p> <p>Manufacturer Bell</p> <p>Model 30T</p> <p>Differential High input controlled traction differential with spiral bevel gears.</p> <p>Final Drive Outboard heavy duty planetary on all axles.</p> <p>BRAKING SYSTEM</p> <p>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.</p> <p>Maximum brake force: 327 kN (73,513 lbf)</p> <p>Park & Emergency Spring applied, air released driveline mounted disc.</p> <p>Maximum brake force: 218 kN (49,008 lbf)</p> <p>Auxiliary Brake Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.</p>	<p>Total Retardation Power Continuous: 442 kW (593 hp) Maximum: 854 kW (1,145 hp)</p> <p>WHEELS</p> <p>Type Radial Earthmover</p> <p>Tire 29.5 R 25 (875/65 R 29 optional)</p> <p>FRONT SUSPENSION Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts. Option: Electronically controlled adaptive suspension with ride height adjustment.</p> <p>REAR SUSPENSION Pivoting walking beams with laminated rubber suspension blocks. Option: Comfort Ride suspension walking beams, with two-stage sandwich block.</p> <p>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.</p> <p>Pump Type Variable displacement load sensing piston.</p> <p>Flow 330 L/min (87 gal/min)</p> <p>Pressure 315 bar (4,569 psi)</p> <p>Filter 5 microns</p> <p>STEERING SYSTEM Double acting cylinders, with ground-driven emergency steering pump.</p> <p>Lock to lock turns 5</p> <p>Steering Angle 42°</p>	<p>DUMPING SYSTEM</p> <p>Two double-acting, single stage, dump cylinders.</p> <p>Raise Time 11 seconds</p> <p>Lowering Time 6 seconds</p> <p>Tipping Angle 70 deg standard, or any lower angle programmable.</p> <p>PNEUMATIC SYSTEM Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.</p> <p>System Pressure 810 kPa (117 psi)</p> <p>ELECTRICAL SYSTEM</p> <p>Voltage 24 V</p> <p>Battery Type Two AGM (Absorption Glass Mat) type.</p> <p>Battery Capacity 2 X 75 Ah</p> <p>Alternator Rating 28V 80A</p> <p>MAX. VEHICLE SPEED</p> <table border="1"> <tr> <td>1st</td> <td>4 km/h</td> <td>2.5 mph</td> </tr> <tr> <td>2nd</td> <td>9 km/h</td> <td>6 mph</td> </tr> <tr> <td>3rd</td> <td>17 km/h</td> <td>11 mph</td> </tr> <tr> <td>4th</td> <td>23 km/h</td> <td>14 mph</td> </tr> <tr> <td>5th</td> <td>33 km/h</td> <td>21 mph</td> </tr> <tr> <td>6th</td> <td>44 km/h</td> <td>27.3 mph</td> </tr> <tr> <td>7th</td> <td>51 km/h</td> <td>32 mph</td> </tr> <tr> <td>R</td> <td>7 km/h</td> <td>4 mph</td> </tr> </table> <p>CAB ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.</p>	1st	4 km/h	2.5 mph	2nd	9 km/h	6 mph	3rd	17 km/h	11 mph	4th	23 km/h	14 mph	5th	33 km/h	21 mph	6th	44 km/h	27.3 mph	7th	51 km/h	32 mph	R	7 km/h	4 mph
1st	4 km/h	2.5 mph																									
2nd	9 km/h	6 mph																									
3rd	17 km/h	11 mph																									
4th	23 km/h	14 mph																									
5th	33 km/h	21 mph																									
6th	44 km/h	27.3 mph																									
7th	51 km/h	32 mph																									
R	7 km/h	4 mph																									
<p>TRANSMISSION</p> <p>Manufacturer Allison</p> <p>Model 4700 ORS</p> <p>Configuration Fully automatic planetary transmission.</p> <p>Layout Engine mounted</p> <p>Gear Layout Constant meshing planetary gears, clutch operated.</p> <p>Gears 7 Forward, 1 Reverse</p> <p>Clutch Type Hydraulically operated multi-disc</p> <p>Control Type Electronic</p>																											

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE*		LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN		BODY	m ³ (yd ³)	kg (lb)	
Front	16,984 (37,443)	(No sinkage/Total Contact Area Method)		Struck Capacity	19.5 (25.5)	Bin liner	1,404 (3,095)
Middle	7,778 (17,148)	29.5 R 25	kPa (Psi)	SAE 2:1 Capacity	25 (33)	Tailgate	1,013 (2,233)
Rear	7,564 (16,676)	Front	321 (47)	SAE 1:1 Capacity	29.5 (38)	875/65 R29	
Total	32,326 (71,267)	Mid & Rear	370 (54)	SAE 2:1 Capacity with Tailgate	26 (34)	(per vehicle) Add	1,182 (2,606)
LADEN						EXTRA WHEELSET	
Front	22,109 (48,742)	875/65 R29	kPa (Psi)	Rated Payload	41,000 kg	29.5 R 25	800 (1,764)
Middle	25,715 (56,692)	Front	294 (43)		(90,390 lb)	875/65 R29	1,024 (2,258)
Rear	25,502 (56,222)	Mid & Rear	331 (48)				
Total	73,326 (161,656)						

Dimensions

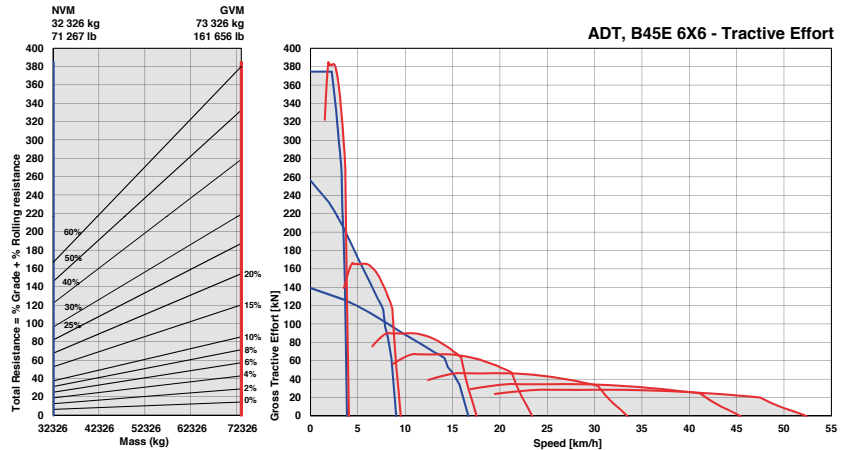


Machine Dimensions

A	Length - Transport Position with Tailgate	11,184 mm (36 ft. 8 in.)
A	Length - Transport Position w/o Tailgate	11,184 mm (36 ft. 8 in.)
A1	Length - Bin Fully Tipped	11,778 mm (38 ft. 8 in.)
B	Height - Transport Position w/o Rock Guard	3,802 mm (12 ft. 6 in.)
B	Height - Transport Position with Rock Guard	3,844 mm (12 ft. 7 in.)
B1	Height - Rotating Beacon	4,038 mm (13 ft. 3 in.)
B2	Height - Load Light	4,127 mm (13 ft. 6 in.)
B3	Bin Height - Fully Tipped w/o Rock Guard	7,340 mm (24 ft. 1 in.)
B4	Bin Height - Fully Tipped with Rock Guard	7,448 mm (24 ft. 5 in.)
B5	Height - Rock Guard Operating Position	4,123 mm (13 ft. 6 in.)
B6	Height - Cab	3,802 mm (12 ft. 6 in.)
C	Width over Mudguards	3,495 mm (11 ft. 6 in.)
D	Width over Tires	3,656 mm (12 ft.)
D	Width over Tires - 29.5R25	3,487 mm (11 ft. 5 in.)
E	Tire Track Width - 875/65 R29	2,773 mm (9 ft. 1 in.)
E	Tire Track Width - 29.5R25	2,725 mm (8 ft. 11 in.)
F	Width over Bin	3,448 mm (11 ft. 4 in.)
F1	Width over Tailgate	3,738 mm (12 ft. 3 in.)
G	Width over Mirrors - Operating Position	3,614 mm (11 ft. 10 in.)
H	Ground Clearance - Artic	545 mm (21.5 in.)
I	Ground Clearance - Front Axle	543 mm (21.3 in.)
J	Ground Clearance - Bin Fully Tipped	880 mm (34.7 in.)
K	Bin Lip Height - Transport Position	2,521 mm (8 ft. 3 in.)
L	Bin Length	5,753 mm (18 ft. 10 in.)
M	Load over Height	3,316 mm (10 ft. 11 in.)
N	Rear Axle Center to Bin Rear	1,540 mm (5 ft.)
O	Mid Axle Center to Rear Axle Center	1,950 mm (6 ft. 5 in.)
P	Mid Axle Center to Front Axle Center	4,438 mm (14 ft. 7 in.)
Q	Front Axle Center to Machine Front	3,256 mm (10 ft. 8 in.)
R	Front Axle Center to Artic Center	1,558 mm (5 ft. 1 in.)
S	Approach Angle	24°
T	Maximum Bin Tip Angle	70°
U	Maximum Articulation Angle	42°
V	Front Tie Down Height	1,262 mm (4 ft. 2 in.)
W	Machine Lifting Centers	10,569 mm (34 ft. 8 in.)
X	Inner Turning Circle Radius - 875/65R29	4,782 mm (15 ft. 8 in.)
X	Inner Turning Circle Radius - 29.5R25	4,866 mm (16 ft.)
Y	Outer Turning Circle Radius - 875/65R29	9,320 mm (30 ft. 7 in.)
Y	Outer Turning Circle Radius - 29.5R25	9,235 mm (30 ft. 4 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.
- From this intersection, move straight right across charts until line intersects rimpull curve.
- Read down from this point to determine maximum speed attained at that tractive resistance.



Retardation

- 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.
- Read down from this point to determine maximum speed.

