

Technical Data - B50E

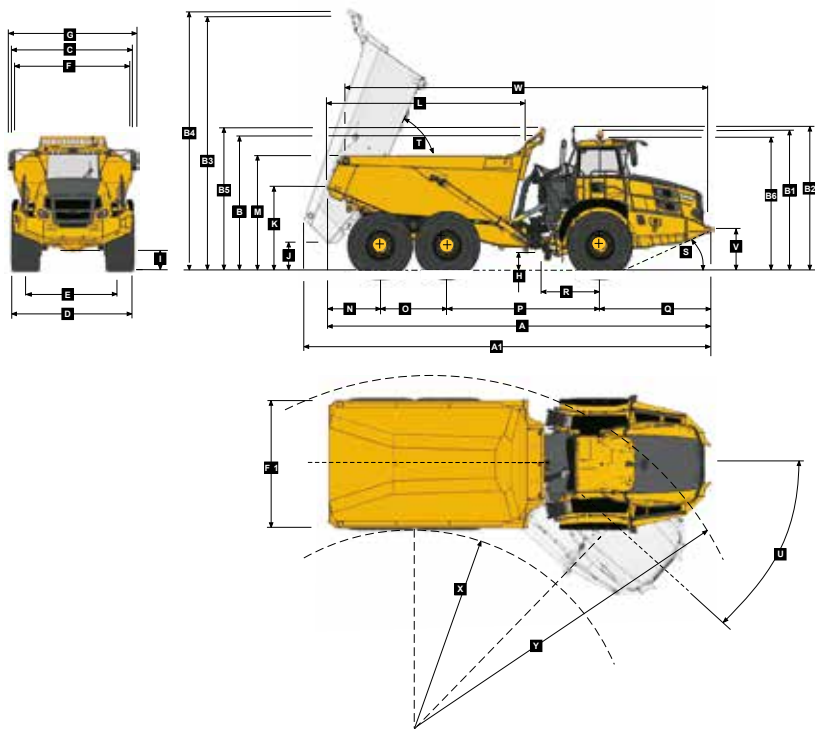
ENGINE		Torque Control		Total Retardation Power		DUMPING SYSTEM	
Manufacturer		Hydrodynamic with lock-up in all gears.		Continuous: 546 kW (732 hp)		Two double-acting, single stage, dump cylinders.	
Mercedes Benz (MTU)				Maximum: 963 kW (1 291 hp)			
Model		TRANSFER CASE		WHEELS		Raise Time	
OM473LA (MTU 6R 1500)		Manufacturer		Type		11,5 seconds	
Configuration		Kessler		Radial Earthmover		Lowering Time	
Inline 6, turbocharged and intercooled.		Series		Tyre		6 seconds	
Gross Power		W2400		875/65 R 29 (29.5 R 25 optional)		Tipping Angle	
430 kW (577 hp) @ 1 700 rpm		Layout		FRONT SUSPENSION		70 deg standard, or any lower angle programmable	
Net Power		Remote mounted		Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts. Suspension is electronically controlled adaptive suspension with ride height adjustment.		PNEUMATIC SYSTEM	
405 kW (543 hp) @ 1 700 rpm		Gear Layout		REAR SUSPENSION		Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.	
Gross Torque		Three in-line helical gears		Pivoting walking beams with laminated rubber suspension blocks.		System Pressure	
2 750 Nm (2 028 lbft) @ 1 300 rpm		Output Differential		Option: Comfort Ride suspension walking beams, with two-stage sandwich block.		810 kPa (117 psi)	
Displacement		Interaxle 29/71 proportional differential. Automatic inter-axle differential lock.		HYDRAULIC SYSTEM		ELECTRICAL SYSTEM	
15,6 litres (952 cu.in)		AXLES		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.		Voltage	
Auxiliary Brake		Manufacturer				24 V	
Engine Valve Brake		Bell				Battery Type	
Fuel Tank Capacity		Model				Two AGM (Absorption Glass Mat) type.	
494 litres (130 US gal)		30T				Battery Capacity	
AdBlue® Tank Capacity		Differential				2 X 75 Ah	
40 litres (11 US gal)		High input controlled traction differential with spiral bevel gears				Alternator Rating	
Certification		Final Drive				28V 80A	
OM473LA (MTU 6R 1500) meets EU Stage IV / EPA Tier 4 Final emissions regulations.		Outboard heavy duty planetary on all axles.				MAX. VEHICLE SPEED	
TRANSMISSION		BRAKING SYSTEM				1st 4 km/h 2,5 mph	
Manufacturer		Service Brake		Pump Type		2nd 9 km/h 6 mph	
Allison		Dual circuit, full hydraulic actuation wet disc brakes on front, middle and rear axles. Wet brake oil is circulated through a filtration and cooling system.		Variable displacement load sensing piston		3rd 17 km/h 11 mph	
Model		Maximum brake force: 488 kN (109 707 lbf)		Flow		4th 23 km/h 14 mph	
4800 ORS		Park & Emergency		330 L/min (87 gal/min)		5th 33 km/h 21 mph	
Configuration		Spring applied, air released driveline mounted disc.		Pressure		6th 44 km/h 27,3 mph	
Fully automatic planetary transmission.		Maximum brake force: 215,5 kN (48 446 lbf)		315 bar (4 569 psi)		7th 51 km/h 32 mph	
Layout		Auxiliary Brake		Filter		R 7 km/h 4 mph	
Engine mounted		Automatic engine valve brake. Automatic retardation through electronic activation of wet brake system.		5 microns		CAB	
Gear Layout				STEERING SYSTEM		ROPS/FOPS certified 74 dBA internal sound level measured according to ISO 6396.	
Constant meshing planetary gears, clutch operated				Double acting cylinders, with ground-driven emergency steering pump.			
Gears				Lock to lock turns			
7 Forward, 1 Reverse				4,9			
Clutch Type				Steering Angle			
Hydraulically operated multi-disc				42°			
Control Type							
Electronic							

Load Capacity & Ground Pressure

OPERATING WEIGHTS		GROUND PRESSURE*		LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	LADEN		BODY	m³ (yd³)		kg (lb)
Front	18 484 (40 750)	(No sinkage/Total Contact Area Method)		Struck Capacity	21,5 (28)	Bin liner	1 495 (3 296)
Middle	8 648 (19 066)	875/65 R29	kPa (Psi)	SAE 2:1 Capacity	27,5 (36)	Tailgate	1 117 (2 463)
Rear	8 543 (18 834)	Front	296 (43)	SAE 1:1 Capacity	33 (43)	29.5 R 25	
Total	35 675 (78 650)	Mid & Rear	366 (53)	SAE 2:1 Capacity with Tailgate	29 (38)	(per vehicle) Minus	1 182 (2 606)
LADEN						EXTRA WHEELSET	
Front	24 204 (53 361)	29.5 R 25	kPa (Psi)			29.5 R 25	800 (1 764)
Middle	28 488 (62 805)	Front	326 (47)	Rated Payload	45 400 kg	875/65 R29	1 024 (2 258)
Rear	28 383 (62 574)	Mid & Rear	395 (57)		(100 090 lb)		
Total	81 075 (178 740)						

* 29.5R25 Groundpressures calculated with Michelin XADN+ Tyre. 875/65 R29 Groundpressures calculated with Michelin XAD65-1 Tyre.

Dimensions

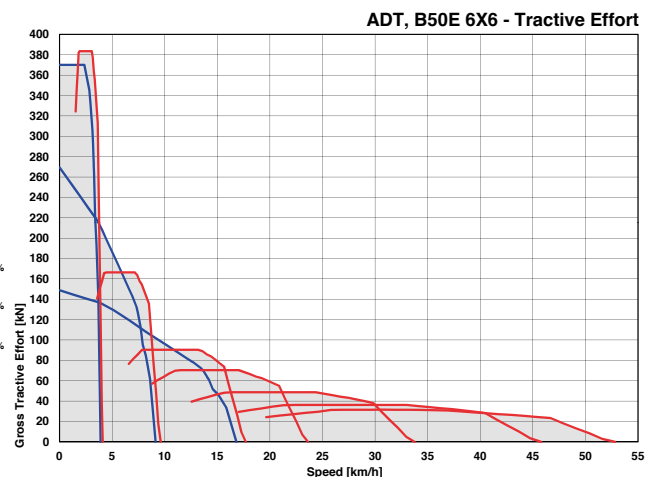
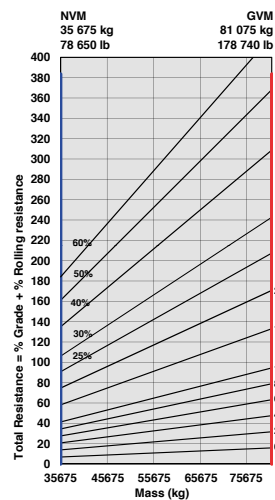


Machine Dimensions

A	Length - Transport Position with Tailgate	11272 mm (37 ft.)
A	Length - Transport Position w/o Tailgate	11272 mm (37 ft.)
A1	Length - Bin Fully Tipped	11916 mm (39 ft. 1 in.)
B	Height - Transport Position w/o Rock Guard	3822 mm (12 ft. 6 in.)
B	Height - Transport Position with Rock Guard	3870 mm (12 ft. 8 in.)
B1	Height - Rotating Beacon	4050 mm (13 ft. 3 in.)
B2	Height - Load Light	4141 mm (13 ft. 7 in.)
B3	Bin Height - Fully Tipped w/o Rock Guard	7325 mm (24 ft.)
B4	Bin Height - Fully Tipped with Rock Guard	7430 mm (24 ft. 5 in.)
B5	Height - Rock Guard Operating Position	4148 mm (13 ft. 7 in.)
B6	Height - Cab	3813 mm (12 ft. 6 in.)
C	Width over Mudguards	3790 mm (12 ft. 5 in.)
D	Width over Tyres - 875/65 R29	3832 mm (12 ft. 7 in.)
D	Width over Tyres - 29.5R25	3714 mm (12 ft. 2 in.)
E	Tyre Track Width - 875/65 R29	2949 mm (9 ft. 8 in.)
E	Tyre Track Width - 29.5R25	2952 mm (9 ft. 8 in.)
F	Width over Bin	3735 mm (12 ft. 3 in.)
F1	Width over Tailgate	4057 mm (13 ft. 4 in.)
G	Width over Mirrors - Operating Position	4027 mm (13 ft. 3 in.)
H	Ground Clearance - Artic	558 mm (21.97 in.)
I	Ground Clearance - Front Axle	555 mm (21.85 in.)
J	Ground Clearance - Bin Fully Tipped	907 mm (35.71 in.)
K	Bin Lip Height - Transport Position	2542 mm (8 ft. 4 in.)
L	Bin Length	5714 mm (18 ft. 9 in.)
M	Load over Height	3390 mm (11 ft. 1 in.)
N	Rear Axle Centre to Bin Rear	1533 mm (5 ft.)
O	Mid Axle Centre to Rear Axle Centre	1950 mm (6 ft. 5 in.)
P	Mid Axle Centre to Front Axle Centre	4438 mm (14 ft. 7 in.)
Q	Front Axle Centre to Machine Front	3351 mm (11 ft.)
R	Front Axle Centre to Artic Centre	1558 mm (5 ft. 1 in.)
S	Approach Angle	23 °
T	Maximum Bin Tip Angle	70 °
U	Maximum Articulation Angle	42 °
V	Front Tie Down Height	1269 mm (4 ft. 2 in.)
W	Machine Lifting Centres	10632 mm (34 ft. 11 in.)
X	Inner Turning Circle Radius - 875/65R29	4694 mm (15 ft. 5 in.)
X	Inner Turning Circle Radius - 29.5R25	4753 mm (15 ft. 7 in.)
Y	Outer Turning Circle Radius - 875/65R29	9408 mm (30 ft. 10 in.)
Y	Outer Turning Circle Radius - 29.5R25	9349 mm (30 ft. 8 in.)

Grade Ability/Rimpull

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

