

B25E Articulated Dump Truck

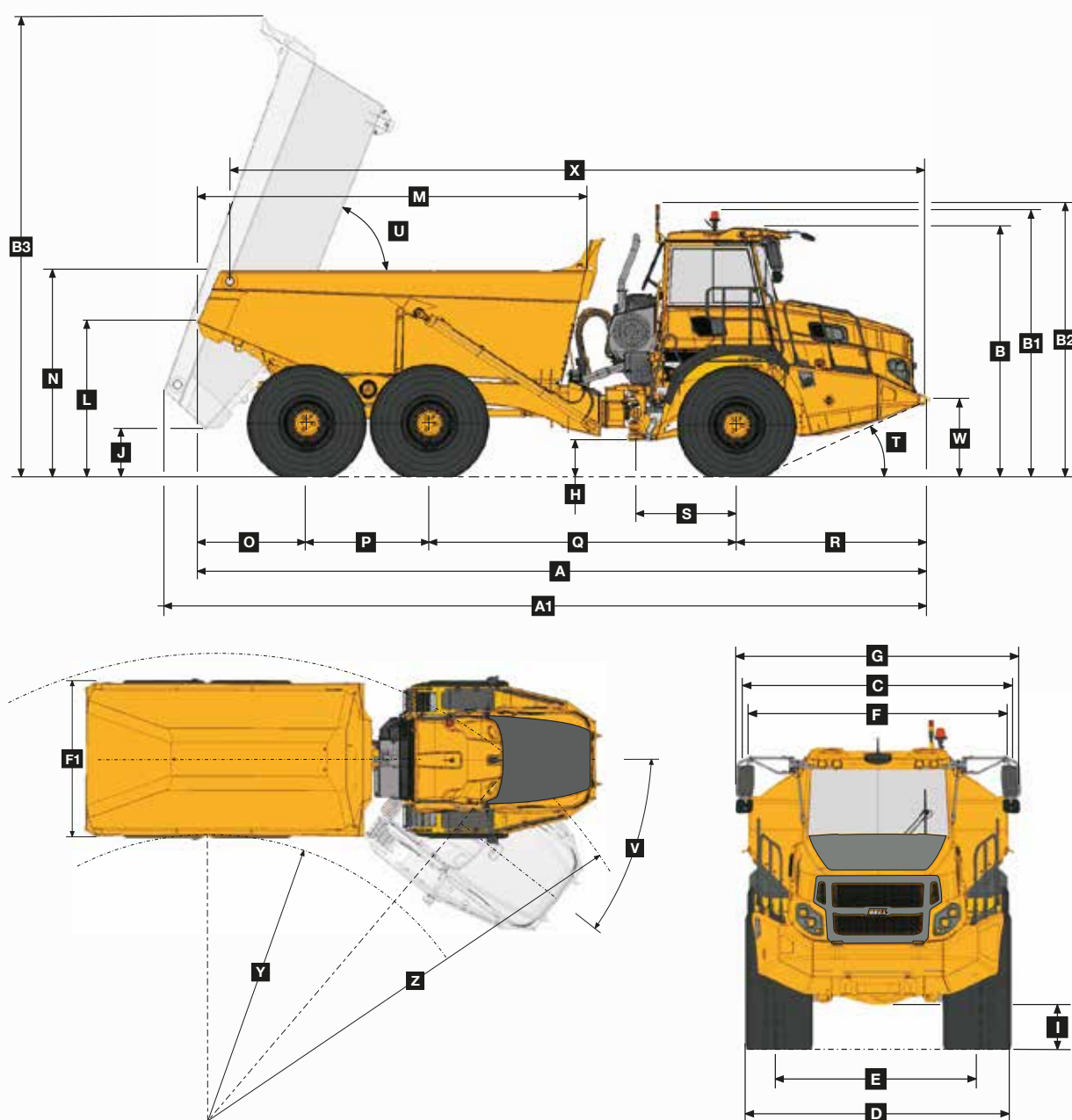
<div>ENGINE</div> <div>Manufacturer Mercedes Benz</div> <div>Model OM936LA</div> <div>Configuration Inline 6, turbocharged and intercooled</div> <div>Net Power 210 kW (281 hp) at 1 800 rpm in accordance with UN ECE R120</div> <div>Gross Torque 1 200 Nm (885 lbft) @ 1 200 -1 600 rpm</div> <div>Displacement 7,7 litres (469 cu.in)</div> <div>Auxiliary Brake Compression brake</div> <div>Fuel Tank Capacity 302 litres (79.78 US gal)</div> <div>AdBlue® Tank Capacity 31 L (8.2 US gal)</div> <div>Certification OM936LA meets EU Stage V / EPA Tier 4 Final emissions regulations.</div>	<div>Torque Control Hydrodynamic with lock-up in all gears</div> <div>TRANSFER CASE<div>Manufacturer Kessler</div><div>Series W1400</div><div>Layout Remote mounted</div><div>Gear Layout Three in-line helical gears</div><div>Output Differential Interaxle 33/67 proportional differential. Automatic inter-axle differential lock.</div></div> <div>AXLES<div>Manufacturer Bell</div><div>Model 15T</div><div>Differential High input limited slip differential with spiral bevel gears</div><div>Final Drive Outboard heavy duty planetary on all axles</div></div> <div>BRAKING SYSTEM<div>Service Brake Dual circuit, full hydraulic actuation dry disc brakes with 8 calipers (4F, 2M, 2R).</div><div>Maximum brake force: 160,5 kN (36 081 lbf)</div><div>Park & Emergency Spring applied, air released driveline mounted disc</div><div>Maximum brake force: 195 kN (43 900 lbf)</div><div>Auxiliary Brake Jacobs Engine Brake®. Automatic, adjustable, integral, hydrodynamic transmission retarder. Output shaft speed dependant.</div><div>Total Retardation Power Continuous: 318 kW (426 hp) Maximum: 588 kW (788 hp)</div></div>	<div>WHEELS Type Radial Earthmover</div> <div>Tyre 23.5 R 25 (750/65 R 25 optional)</div> <div>FRONT SUSPENSION Semi-independent, leading A-frame supported by hydro-pneumatic suspension struts. Optional active dual springrate Comfort Ride suspension available, including height control.</div> <div>REAR SUSPENSION Pivoting walking beams with laminated rubber suspension blocks. Optional passive dual-springrate Comfort Ride walking beam available.</div> <div>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.</div> <div>Pump Type Variable displacement load sensing piston</div> <div>Flow 202 L/min (53 gal/min)</div> <div>Pressure 310 Bar (4 500 psi)</div> <div>Filter 5 microns</div> <div>STEERING SYSTEM Double acting cylinders, with ground-driven emergency steering pump.</div> <div>Lock to lock turns 4,1</div> <div>Steering Angle 45°</div>	<div>DUMPING SYSTEM Two double-acting, single stage, dump cylinders</div> <div>Raise Time 12 s</div> <div>Lowering Time 10 s</div> <div>Tipping Angle 70° standard, or any lower angle programmable</div> <div>PNEUMATIC SYSTEM Air drier with heater and integral unloader valve, serving park brake and auxiliary functions.</div> <div>System Pressure 8,1 Bar (117 psi)</div> <div>ELECTRICAL SYSTEM Voltage 24 V</div> <div>Battery Type Two AGM (Absorption Glass Mat) type</div> <div>Battery Capacity 2 X 75 Ah</div> <div>Alternator Rating 28V 80A</div> <div>VEHICLE SPEEDS<table><tr><td>1st</td><td>7 km/h</td><td>4 mph</td></tr><tr><td>2nd</td><td>15 km/h</td><td>9 mph</td></tr><tr><td>3rd</td><td>23 km/h</td><td>14 mph</td></tr><tr><td>4th</td><td>35 km/h</td><td>22 mph</td></tr><tr><td>5th</td><td>47 km/h</td><td>29 mph</td></tr><tr><td>6th</td><td>50 km/h</td><td>31 mph</td></tr><tr><td>R</td><td>7 km/h</td><td>4 mph</td></tr></table></div> <div>CAB ROPS/FOPS certified 74 dBA internal sound pressure measured according to ISO 6396.</div>	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
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R	7 km/h	4 mph																						

Load Capacity & Ground Pressure

OPERATING WEIGHTS*		GROUND PRESSURE				LOAD CAPACITY		OPTION WEIGHTS	
UNLADEN	kg (lb)	No sinkage/Total Contact Area (as recommended by tyre manufacturer)		Calculation method used by competition		BODY	m³ (yd³)		kg (lb)
Front	9 632 (21 235)					Struck Capacity	11,5 (15)	Bin liner	751 (1 656)
Middle	5 568 (12 275)	23.5 R 25	kPa (Psi)	23.5 R 25	kPa (Psi)	SAE 2:1 Capacity	15 (19,5)	Tailgate	735 (1 621)
Rear	5 528 (12 187)	Front	267 (38,7)	Front	131 (19)	SAE 1:1 Capacity	18 (23,5)	Wheelset 750/65R25	
Total	20 728 (45 697)	Mid/Rear	357 (51,8)	Mid/Rear	155 (22,5)	SAE 2:1 Capacity		(per vehicle) Add	642 (1 415)
LADEN						with Tailgate	15 (19,6)	EXTRA WHEELSET	
Front	12 372 (27 276)	750/65 R 25		750/65 R 25				23.5 R 25	
Middle	16 198 (35 710)	Front	229 (33,2)	Front	106 (15,4)	Rated Payload	24 000 kg	(per vehicle) Add	544 (1 199)
Rear	16 158 (35 622)	Mid/Rear	270 (39,1)	Mid/Rear	128 (18,6)		(52 911 lbs)	750/65R25	
Total	44 728 (98 608)							(per vehicle) Add	656 (1 446)

* including additional equipment (tailgate)

Dimensions

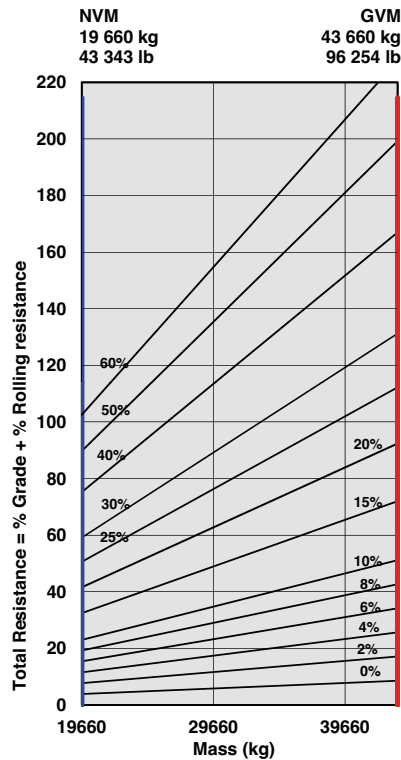


Machine Dimensions

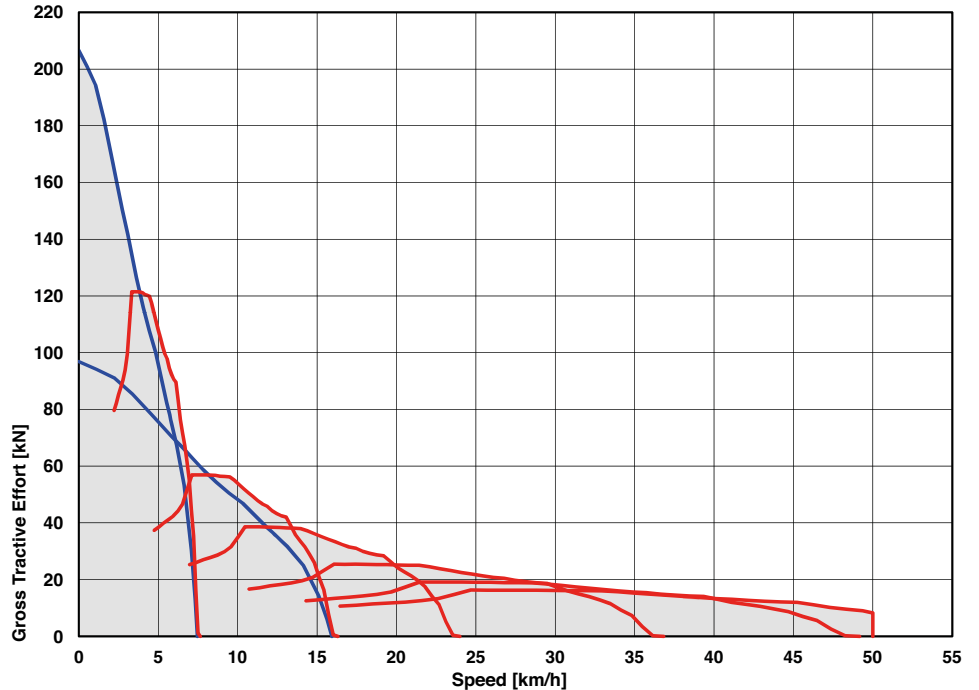
A	Length - Transport Position	9 953 mm (32 ft. 7 in.)	L	Bin Lip Height - Transport Position	2 176 mm (7 ft. 1 in.)
A1	Length - Bin Fully Tipped	10 395 mm (34 ft. 1 in.)	M	Bin Length	5 294 mm (17 ft. 4 in.)
B	Height - Transport Position	3 426 mm (11 ft. 2 in.)	N	Load over Height	2 864 mm (9 ft. 4 in.)
B1	Height - Rotating Beacon	3 661 mm (12 ft.)	O	Rear Axle Centre to Bin Rear	1 500 mm (4 ft. 11 in.)
B2	Height - Load Light	3 747 mm (12 ft. 3 in.)	P	Mid Axle Centre to Rear Axle Centre	1 670 mm (5 ft. 5 in.)
B3	Bin Height - Fully Tipped	6 307 mm (20 ft. 8 in.)	Q	Mid Axle Centre to Front Axle Centre	4 181 mm (13 ft. 8 in.)
C	Width over Mudguards	2 985 mm (9 ft. 9 in.)	R	Front Axle Centre to Machine Front	2 602 mm (8 ft. 6 in.)
D	Width over Tyres - 23.5R25	2 940 mm (9 ft. 7 in.)	S	Front Axle Centre to Artic Centre	1 362 mm (4 ft. 5 in.)
D1	Width over Tyres - 750/65 R25	2 998 mm (9 ft. 10 in.)	T	Approach Angle	25 °
E	Tyre Track Width - 23.5R25	2 356 mm (7 ft. 8 in.)	U	Maximum Bin Tip Angle	70 °
E1	Tyre Track Width - 750/65 R25	2 260 mm (7 ft. 4 in.)	V	Maximum Articulation Angle	45 °
F	Width over Bin	2 968 mm (9 ft. 8 in.)	W	Front Tie Down Height	1 075 mm (3 ft. 6 in.)
F1	Width over Tailgate	2 998 mm (9 ft. 10 in.)	X	Machine Lifting Centres	9 443 mm (30 ft. 11 in.)
G	Width over Mirrors - Operating Position	3 260 mm (10 ft. 8 in.)	Y	Inner Turning Circle Radius - 23.5R25	4 110 mm (13 ft. 5 in.)
H	Ground Clearance - Artic	537 mm (21.14 in.)	Y1	Inner Turning Circle Radius - 750/65 R25	4 081 mm (13 ft. 4 in.)
I	Ground Clearance - Front Axle	488 mm (19.21 in.)	Z	Outer Turning Circle Radius - 23.5R25	8 000 mm (26 ft. 2 in.)
J	Ground Clearance - Bin Fully Tipped	670 mm (26.38 in.)	Z1	Outer Turning Circle Radius - 750/65 R25	8 029 mm (26 ft. 4 in.)
K	Ground Clearance - Under Run Bar	N/A			

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.

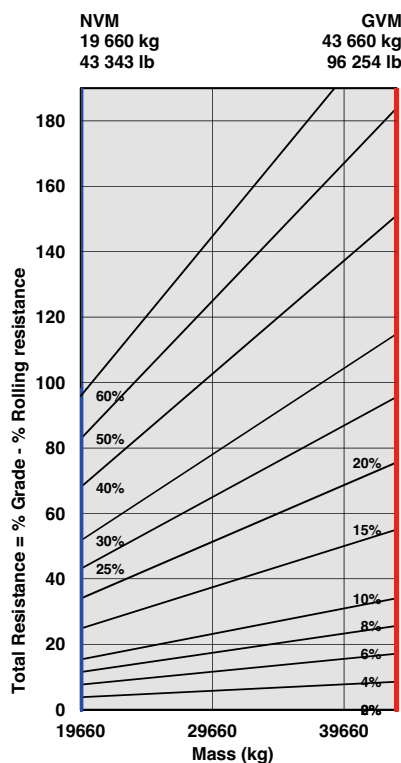


ADT, B25E 6X6 - Tractive Effort

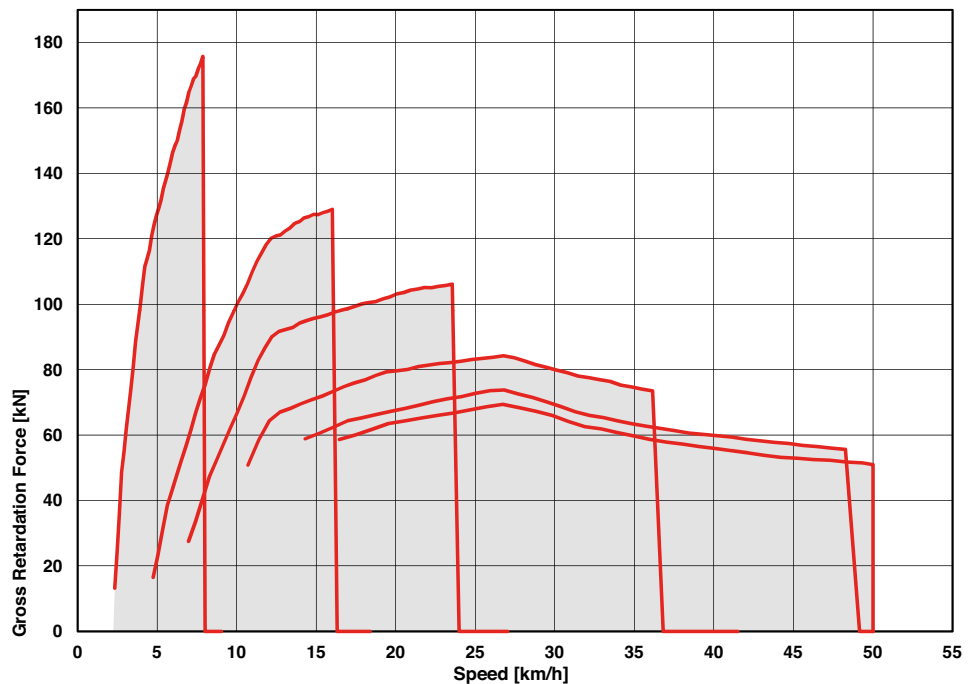


Retardation

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.



ADT, B25E 6X6 - Retardation




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 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
●	●	Halogen work lights
▲	▲	Rotating beacon: seat belt installation
▲	▲	Remote engine and machine isolation
●	●	Remote battery jump start
●	●	Retractable 3 point seat belt
●	●	Heated seat
●	●	Foldaway trainer seat with retractable seat belt


B25E	B30E	
		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


All dimensions are shown in millimetres, 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. Blu@dvantage™ is a trademark of Bell Equipment Co. (PTY) Ltd AdBlue® is a registered trademark of VDA.


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
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