



Unit Rig™ MT4400D AC

ELECTRIC DRIVE TRUCK

Preliminary Specifications

Engine

Engine Model	Cat® 3516C HD	
Gross Power – SAE J1995	1864 kW	2,500 hp
Bore	170 mm	6.7 in
Stroke	210 mm	8.3 in
Displacement	78.1 L	4,766 in ³

- Power ratings apply at 1,800 rpm when tested under the specified condition for the specified standard.
- Ratings based on SAE J1995 standard air conditions of 25° C (77° F) and 99 kPa (29.61 Hg) dry barometer. Power based on fuel having API gravity of 35 at 16° C (60° F) and an LHV of 42 780 kJ/kg (18,390 Btu/lb) when engine used at 30° C (86° F).
- No engine derating required up to 2438 m (8,000 ft) altitude.
- U.S. Environmental Protection Agency Tier 1 emission standards equivalent.

Weights – Approximate

Gross Machine Operating Weight (GMW)	392 357 kg	865,000 lb
Empty Vehicle Weight	174 179 kg	384,000 lb

- GMW depends on tire selection.
- Consult your tire manufacturer for maximum GMW and loaded top speed.
- Empty vehicle weight with 100% fuel, and standard machine configuration.
- Tire size 46/90 R57, optional 50/80 R57, 40.00R57.

Operating Specifications

Nominal Payload Capacity	218 tonnes	240 tons
Top Speed – Loaded	64 km/h	40 mph
Steer Angle	30 degrees	
Turning Circle Diameter	30.4 m	99 ft 8 in

- Refer to the Cat Mining Truck 10/10/20 Overload Policy (AEXQ0250-02) for maximum gross machine weight limitations.

Final Drives

Total Reduction Ratio	35:1
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AC Drive System

Alternator	Brushless, direct mounted, dual bearing
Controls	IGBT Inverter Technology, air cooled, pressurized cabinet with filtration
Wheel Motor	Rear axle mounted Cat AC induction
Cooling System	Variable speed hydraulic cooling system

Suspension

Effective Cylinder Stroke – Front	304 mm	12 in
Effective Cylinder Stroke – Rear	184 mm	7.85 in
Rear Axle Oscillation	±5.7°	

Body Hoists

Pump Flow – High Idle	900 L/min	238 gal/min
Relief Valve Setting – Raise	16 547 kPa	2,400 psi
Body Raise Time – High Idle	22 Seconds	
Body Power Down – High Idle	15 Seconds	

- Twin two-stage, double acting hydraulic cylinders.
- Filtration: High-pressure units with 6 micron (nominal) filtration and environmentally disposable elements. Hydraulic tank outlet contains a strainer with 100 mesh screening.
- Oil fill 3 micron filter.

Braking System

Front Brakes – Dry disc – 3 calipers/wheel		
Disc diameter	1168 mm	46 in
Rear Oil Cooled Brakes		
Outside Diameter	940 mm	37 in
Brake Surface – Rear	155 383 cm ²	24,084 in ²
Standards	J-ISO 3450 JAN88, ISO 3450:2011	
Electric Retarding		
Radial Grid Design		
Brushless AC Motor		
Dynamic Retarding Power	3281 kW	4,400 hp



MT4400D AC Electric Drive Truck

Weight Distributions – Approximate

Front Axle – Empty	50%
Rear Axle – Empty	50%
Front Axle – Loaded	33%
Rear Axle – Loaded	67%

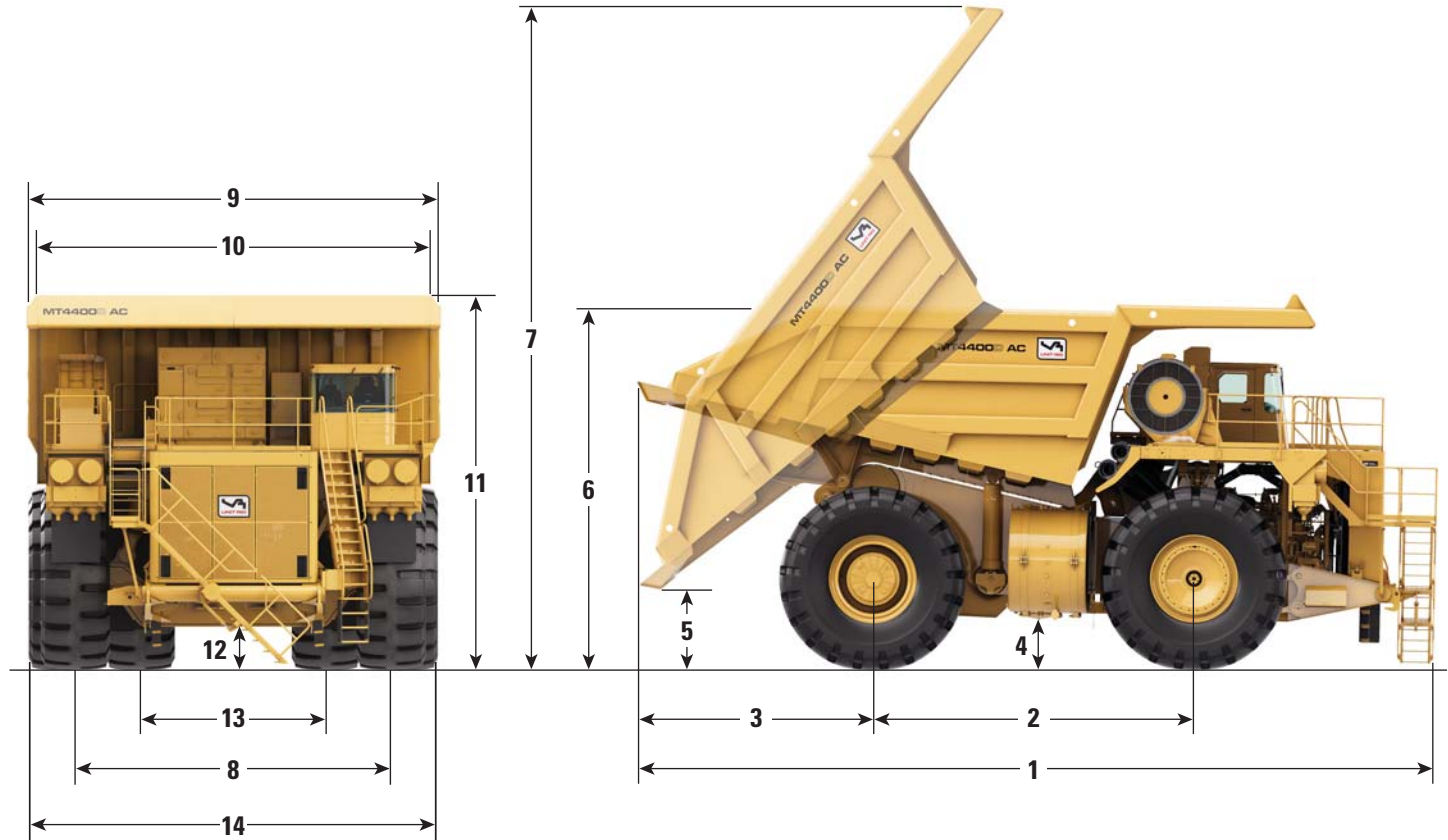
Body Capacity – 100% Fill Factor

Struck (SAE)	100 m ³	131 yd ³
Heaped (SAE 2:1)	144 m ³	188 yd ³

- Contact your local Cat dealer for body recommendation.

Service Refill Capacities

Fuel Tank	3028 L	800 gal
Fuel Tank (optional)	4922 L	1,300 gal
Cooling System	686 L	181 gal
Crankcase	288 L	76 gal
Final Drives, each	260 L	68 gal
Hydraulic Tank	662 L	175 gal
Hydraulic System (includes tank)	908 L	240 gal



Dimensions (All dimensions are approximate.)

1 Overall Length	14 783 mm	48 ft 6 in	8 Centerline Front Tire Width	6274 mm	20 ft 7 in
2 Wheelbase	6401 mm	21 ft 0 in	9 Overall Width	7950 mm	26 ft 1 in
3 Rear Axle to Tail	4318 mm	14 ft 2 in	10 Inside Body Width	7163 mm	23 ft 6 in
4 Ground Clearance	737 mm	2 ft 5 in	11 Front Canopy Height	7341 mm	24 ft 1 in
5 Dump Clearance	1524 mm	5 ft 0 in	12 Rear Axle Clearance	914 mm	3 ft 0 in
6 Loading Height – Empty	6223 mm	20 ft 5 in	13 Centerline Rear Dual Tire Width	4963 mm	16 ft 3 in
7 Overall Height – Body Raised	14 326 mm	47 ft 0 in	14 Overall Tire Width	7605 mm	24 ft 11 in

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AEHQ6837-01 (12-12)
Replaces AEHQ6837

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