



834K

Wheel Dozer

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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834K Wheel Dozer Specifications

Engine

Engine Model	Cat® C18	
Rated Speed	1,900 rpm	
Peak Power Speed	1,500 rpm	
Gross Power – SAE J1995:2014	419 kW	562 hp
Net Power – SAE J1349:2011	370 kW	496 hp
Bore	145 mm	5.7 in
Stroke	183 mm	7.2 in
Displacement	18.1 L	1,105 in ³
Peak Torque (1,300 rpm)	2836 N·m	2,092 lbf-ft
Torque Rise	52%	

- Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, clean emissions module and alternator.
- The following engine configurations are available:
 - Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.
 - Equivalent to U.S. EPA Tier 3.
 - Equivalent to U.S. EPA Tier 2.

Operating Specifications

Operating Weight	47 750 kg	105,271 lb
Blade Capacities	7.9-22.2 m ³	10.3-29.0 yd ³

Transmission

Transmission Type	Cat planetary power shift	
Forward 1	6.8 km/h	4.2 mph
Forward 2	11.6 km/h	7.2 mph
Forward 3	20.3 km/h	12.6 mph
Forward 4	35.4 km/h	22.0 mph
Reverse 1	6.8 km/h	4.2 mph
Reverse 2	12.2 km/h	7.6 mph
Reverse 3	21.4 km/h	13.3 mph
Direct Drive Forward 1	Lock-up disabled	
Direct Drive Forward 2	12.4 km/h	7.7 mph
Direct Drive Forward 3	22.1 km/h	13.7 mph
Direct Drive Forward 4	38.5 km/h	23.9 mph
Direct Drive Reverse 1	7.2 km/h	4.5 mph
Direct Drive Reverse 2	13.0 km/h	8.1 mph
Direct Drive Reverse 3	23.0 km/h	14.3 mph

- Travel speeds based on 35/65-R33 tire.

Hydraulic System – Lift/Tilt

Lift/Tilt System – Circuit	Pilot operated LS valve with EH	
Lift/Tilt System	Variable displacement piston	
Maximum Flow at 1,900 rpm	582 L/min	153 gal/min
Relief Valve Setting – Lift/Tilt	32 000 kPa	4,641 psi
Cylinders, Double Acting: Lift, Bore and Stroke	139.75 mm × 1021 mm	5.5 in × 40.2 in
Cylinders, Double Acting: Left and Right Tilt, Bore and Stroke	140 mm × 230 mm	5.5 in × 9.1 in
Pilot System	Variable displacement piston	
Pilot Maximum Flow	52 L/min	13.7 gal/min
Pilot Relief Valve Setting	4000 kPa	580 psi

Hydraulic System – Steering

Steering System – Circuit	Pilot, load sensing	
Steering System – Pump	Piston, variable displacement	
Maximum Flow	250 L/min	65.8 gal/min
Relief Valve Setting – Steering	24 100 kPa	3,495 psi
Total Steering Angle	86°	
Steering Cycle Time (high idle)	3.1 Seconds	
Steering Cycle Time (low idle)	5.7 Seconds	

834K Wheel Dozer Specifications

Service Refill Capacities

Fuel Tank	793 L	209.5 gal
Cooling System	120 L	31.7 gal
Crankcase	60 L	15.9 gal
Diesel Exhaust Fluid Tank*	33 L	8.7 gal
Transmission	120 L	31.7 gal
Differentials and Final Drives – Front	186 L	49.1 gal
Differentials and Final Drives – Rear	186 L	49.1 gal
Hydraulic System Factory Fill	240 L	63.4 gal
Hydraulic System (tank only)	140 L	37.0 gal

*All nonroad Tier 4 Final/Stage V Technology diesel engines are required to use:

- Ultra Low Sulfur Diesel (ULSD) fuels containing 15 ppm (mg/kg) sulfur or less. Biodiesel blends up to B20 are acceptable when blended with 15 ppm (mg/kg) sulfur or less ULSD and when the biodiesel feedstock meets ASTM D7467 specifications.
- Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specifications are required.

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.8 kg of refrigerant which has a CO₂ equivalent of 2.574 metric tonnes.

Axles

Front	Fixed
Rear	Trunnion
Oscillation Angle	±13°

Brakes

Brakes	ISO 3450:2011
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Sound Performance

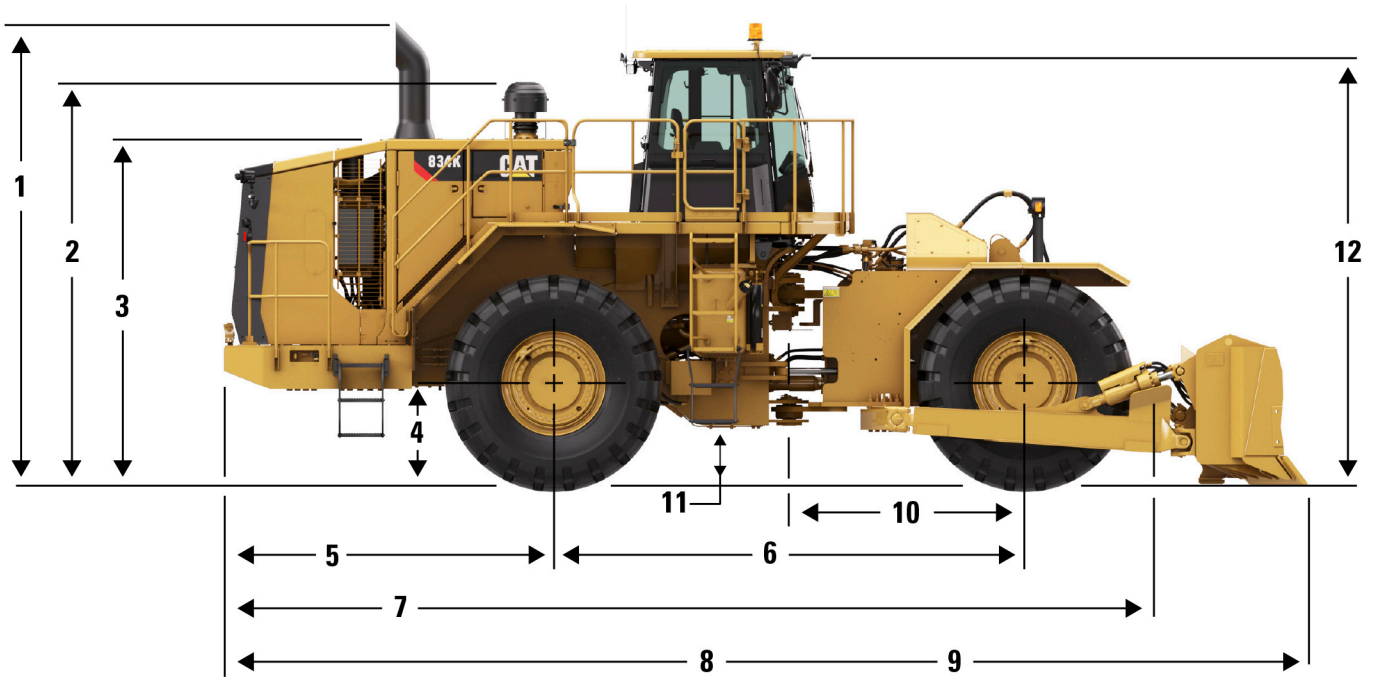
	Standard	Suppression
Interior Sound Level (ISO 6396:2008)	72 dB(A)	71 dB(A)
Exterior Sound Level (ISO 6395:2008)	111 dB(A)	109 dB(A)

- The operator sound pressure level was measured according to the test procedures and conditions specified in ISO 6396:2008. The measurement was conducted at the maximum engine cooling fan speed.
- Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.
- The machine sound power level was measured according to the test procedures and conditions specified in ISO 6395:2008. The measurement was conducted at the maximum engine cooling fan speed.

834K Wheel Dozer Specifications

Dimensions

All dimensions are approximate.



1	Height to Top of Exhaust Stack	4835 mm	15.9 ft
2	Height to Top of Air Cleaner	3895 mm	12.8 ft
3	Height to Top of Hood	3334 mm	10.9 ft
4	Ground Clearance to Bumper	933 mm	3.1 ft
5	Centerline of Rear Axle to Edge of Bumper	3187 mm	10.5 ft
6	Wheelbase	4550 mm	14.9 ft
7	Length to Front Tire	8715 mm	28.4 ft
8	Length of Straight Blade on Ground	9927 mm	32.6 ft
9	Length of Universal Blade on Ground	10 470 mm	34.4 ft
10	Centerline of Front Axle to Hitch	2275 mm	7.5 ft
11	Ground Clearance	531 mm	1.7 ft
12	Height to Top of Cab	4184 mm	13.7 ft

834K Wheel Dozer Specifications

Blade Specifications

Blade Type	Capacity	Overall Width	Height	Digging Depth	Ground Clearance	Maximum Tilt	Weight	Total Operating Weight
Straight	7.9 m ³	5074 mm	1537 mm	557 mm	1324 mm	1270 mm	3296 kg	47 206 kg
	10.3 yd ³	199.8 in	60.5 in	21.0 in	52.1 in	50.0 in	7,267 lb	104,069 lb
Universal	11.1 m ³	5151 mm	1537 mm	527 mm	1338 mm	1270 mm	4654 kg	48 564 kg
	14.5 yd ³	202.8 in	60.5 in	20.7 in	52.7 in	50.0 in	10,262 lb	107,064 lb
Coal	22.2 m ³	5677 mm	2032 mm	465 mm	1178 mm	1482 mm	4390 kg	48 295 kg
	29.0 yd ³	223.5 in	80.0 in	18.3 in	46.4 in	58.3 in	9,670 lb	106,472 lb
Semi-Universal	13.44 m ³	4709 mm	1898 mm	545 mm	1112 mm	887 mm	3632 kg	47 537 kg
	17.58 yd ³	185.4 in	74.7 in	21.4 in	43.8 in	34.9 in	8,007 lb	104,809 lb

834K Wheel Dozer Standard and Optional Equipment

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
ELECTRICAL			OPERATOR ENVIRONMENT (CONTINUED)		
Alarm, back-up	✓		Seat belt, retractable, 76 mm (3 in) wide	✓	
Alternator, 100 amp	✓		Sound suppression		✓
Batteries, maintenance free	✓		STIC™ control system with steering lock	✓	
Deutsch terminal connectors	✓		Tilt and lift control system lock	✓	
Electrical system, 24V	✓		Transmission gear indicator	✓	
Lighting system, halogen (front and rear), access stairway	✓		Wet-arm wipers/washers (front and rear): intermittent front wiper	✓	
Starter, electric (heavy-duty)	✓		VIMS™ 3G monitoring system	✓	
Starting receptacle for emergency starts	✓		Visor group – cab pull-down shade		✓
OPERATOR ENVIRONMENT			Window pull-down visor		✓
Action alert system, three category	✓		POWER TRAIN		
Air conditioner	✓		Antifreeze, -50° C (-58° F)		✓
Cab precleaner		✓	Antifreeze, premixed 50% concentration of extended life coolant with freeze protection to -34° C (-29° F)	✓	
Cab, sound-suppressed and pressurized	✓		Automatic retarding control (with engine compression brake)		✓
Cat Detect (rear object detection)		✓	Axle oil cooler		✓
Cigar lighter (12V, 15 amp) and ashtray	✓		Brakes, full hydraulic, enclosed, wet-disc	✓	
Coat hook	✓		Brakes, multiple disc service	✓	
Electro-hydraulic tilt, tip controls	✓		Case drain filters	✓	
Heater and defroster	✓		Crankcase guards		✓
Horn, electric	✓		Demand fan	✓	
Instrumentation, gauges: engine coolant temperature, fuel level, hydraulic oil temperature, speedometer/tachometer, transmission oil temperature	✓		Engine block heater 120V or 240V		✓
Instrumentation, warning indicators: axle/brake oil temperature (front/rear), brake oil pressure, electrical system – low voltage, engine intake/combustion air temperature, engine oil pressure, engine overspeed, fuel pressure, hydraulic oil filter status, parking brake status, transmission filter status, Cat Vision (rear vision camera)	✓		Engine, Cat C18 MEUI™, ATAAC, ADEM™ IV controller	✓	
Internal four-post rollover protective structure (ROPS/FOPS), radio ready (entertainment) includes antenna, speakers and converter (12V, 15 amp), 12V power port, tinted glass	✓		Engine compression brake		✓
LED warning strobe		✓	Engine oil change system, high speed, Wiggins		✓
Light, cab, dome	✓		Fuel priming pump (electric)	✓	
Lock-up clutch disable switch	✓		Jacket water heater		✓
Lunchbox and beverage holders	✓		Parking brake	✓	
Mirrors, rearview (externally mounted)	✓		Precleaner, engine air intake	✓	
Radio, AM/FM/CD/MP3		✓	Radiator, Next Generation Modular	✓	
Radio, CB ready		✓	Radiator (NGMR)	✓	
Radio, Satellite Sirius with Bluetooth®		✓	Second starter		✓
Rimpull select switch	✓		Separated cooling system	✓	
Seat, Comfort Series (cloth), air suspension	✓		Starting aid, (ether) automatic	✓	
			Throttle lock	✓	
			Torque converter, impeller clutch with lock-up control system and rimpull control system (switch and dial in cab)	✓	
			Transmission, planetary autoshift (4F/3R)	✓	

834K Wheel Dozer Standard and Optional Equipment

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional
OTHER		
Control, remote mounted pressure taps	✓	
Doors, service access (locking)	✓	
Engine, crankcase 500 hour interval with CH-4 oil	✓	
Grouped electronic clutch pressure	✓	
Fast fill fuel system (Shaw-Aero)		✓
Front and rear roading fenders		✓
Hitch, drawbar with pin	✓	
Hood, metallic with lockable service doors	✓	
Hydraulic oil cooler	✓	

	Standard	Optional
OTHER (CONTINUED)		
Lights, halogen and HID		✓
Muffler (under hood)	✓	
Oil sampling valves	✓	
Stairway, left side (rear access)	✓	
Steering, load sensing	✓	
Tires – select from mandatory attachments section, base machine price includes a tire allowance	✓	
Vandalism protection caplocks	✓	
Venturi stack	✓	

834K Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit <https://www.caterpillar.com/en/company/sustainability>.

Engine

- The Cat® C18 engine is available in configurations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards or equivalent to U.S. EPA Tier 3 and U.S. EPA Tier 2.
- Cat U.S. EPA Tier 4 Final and EU Stage V diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels
- Cat engines equivalent to U.S. EPA Tier 3 and U.S. EPA Tier 2, are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)**
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

**Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.*

***For use of blends higher than 20% biodiesel, consult your Cat dealer.*

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.8 kg (3.9 lb) of refrigerant which has a CO2 equivalent of 2.574 metric tonnes (2.837 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

Sound Performance

	Standard	Suppression
Operator Sound Level (ISO 6396:2008)	72 dB(A)	71 dB(A)
Machine Sound Level (ISO 6395:2008)	111 dB(A)	109 dB(A)

- The machine sound power level was measured according to the test ISO 6395:2008. The measurement was conducted at the maximum engine cooling fan speed.
- The operator sound pressure level was measured according to the test procedures and conditions specified in ISO 6396:2008. The measurement was conducted at the maximum engine cooling fan speed.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Engine Idle Management System and Auto Engine Idle Shutdown reduces idle RPM and maximizes fuel efficiency
 - Autoshift mode to automatically upshift or downshift based on machine speed, optimizing performance and conserving fuel
 - Load sensing hydraulic steering system enables precise machine control for easier loading
 - Extended maintenance intervals reduce fluid and filter consumption
 - Cat torque converter with lock-up clutch improves travel speeds, optimizes fuel efficiency, and eliminates torque converter losses, while lowering system heat



For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com.

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Global

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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