



Cat[®] 816

Landfill Compactor

The new Cat[®] 816 Landfill Compactor is designed with heavy-duty main structures that support multiple life cycles, features a Cat C7.1 engine, single-lever steering, pressurized cab, and wheel/tip options that provide extended service life. Available Cat Compact Technologies, such as Compaction Control, further enhance compaction performance and consistency by providing accurate compaction values and 3D mapping.

Easy, Comfortable Operator Environment

- Improved ingress/egress with a totally redesigned cab with flip up armrest.
- Keep your operators informed about machine conditions and operation with VIMS[™] 3G machine monitoring system.
- Safety and visibility enhanced with standard rearview camera.
- Preferred temperature settings maintained with automatic climate control.
- Operator productivity enhanced with new membrane switch panels, keyed ignition, and E-H parking brake switch.
- Improved comfort with low operator sound levels.
- Improved spectator sound levels and optional low sound packages.

Serviceability

- Easier access and in a controlled environment; electronics bay is located inside the cab.
- Focused on safety with ground level or platform access to most major components.
- Ground level: emergency shutdown, battery disconnect, and jump start.
- Quick visual inspection and minimize fluid contamination with sight gauges for coolant, transmission, and hydraulic oil.
- Electronic air inlet restriction indicator.
- Designed for ease of service and inspection.
 - Hydraulic oil cooler, fuel cooler, and condenser grouped together
 - Centralized grease points
- Operators and technicians can resolve any problems before failure using Vital Information Management System (VIMS).

Productivity and Efficiency

- Reliable performance, long life, low emissions.
- High productivity and fuel efficient.
- Two engine options available that meet U.S. EPA Tier 4 Final and EU Stage V emission standards or U.S. EPA Tier 3 and EU Stage IIIA equivalent.
- For the Tier 4 Final and Stage V option, the Cat Clean Emissions Module contains a diesel oxidation catalyst, diesel particulate filter, and Cat Regeneration System, utilizing SCR technology.
- Regeneration is completely automatic and does not interrupt the machine's work cycle.
- Experience maximum responsiveness and control with Steering and Transmission Integrated Control System (STIC[™]).
- Conserve more fuel with the automatic engine and electrical system shutdown.
- Achieve greater momentum on grades and fuel savings by carrying that momentum through the shift points with the all new Advanced Productivity Electronic Control System (APECS) transmission controls.
- Operators experience less fatigue with throttle lock to maintain engine speed.

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Technology That Gets Work Done

- Compact technology combines advanced compaction measurement, in-cab guidance, and reporting capabilities to help you consistently meet compaction targets fast, uniformly, and in fewer passes – saving on fuel and the cost of unnecessary rework.
 - Optional 3D mapping system available
- Link technology (standard) provides access to machine location, hours, fuel consumption, idle time, events, and diagnostic codes through the online VisionLink® interface.

Long Life Paddle and Plus Design Compactor Tips

- Designed specifically to complement Cat machines.
- Improves machine performance through longer wear life and maintaining traction.
- Three wheel and tip configurations are available to meet your particular application:
 - 1) **Paddle Tip** – High performance and less fuel burn with more traction and less weight.
 - 2) **Plus Tip** – Traditional design for increased side slope stability.
 - 3) **Combination Tip** – Both paddle and plus tips provide the best compromise of performance and fuel economy with side slope stability.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWER TRAIN			OPERATOR ENVIRONMENT (CONTINUED)		
Brakes, full hydraulic, enclosed, wet multiple disc service brakes	✓		Implement hydraulic lockout	✓	
Cat clean emission module (Tier 4 Final/Stage V only)	✓		Instrumentation, gauges: DEF fluid level (Tier 4 Final/Stage V only), engine coolant temperature, fuel level, hydraulic oil temperature, speedometer/tachometer, torque converter temperature	✓	
Electro hydraulic parking brake	✓		Instrumentation, warning indicators: action alert system – three categories, brake oil pressure, electrical system – low voltage, engine failure malfunction alert and action lamp, parking brake status	✓	
Engine, Cat C7.1 configured for two emissions options: Tier 4 Final/Stage V or Tier 3/Stage IIIA equivalent	✓		Mirror, internal (panoramic)	✓	
Fuel priming pump (electric)	✓		Mirrors, rearview (externally mounted)	✓	
Fuel-to-air cooler	✓		Radio, AM/FM/Aux/USB/Bluetooth		✓
Ground level engine shutoff	✓		Radio, CB (ready)	✓	
Heater, engine coolant, 120V		✓	Radio ready for entertainment: antenna, speakers, converter (12V, 10-15 amp)	✓	
Heater, engine coolant, 240V		✓	Vital Information Management System (VIMS): graphical information display, external data port, customizable operator profiles, event indicator light on rear grill	✓	
Radiator, unit core	✓		Wet-arm wipers/washers (front and rear): intermittent wipers (front and rear)	✓	
Throttle lock	✓		GUARDS		
Transmission, planetary with 2F/2R speed range control	✓		Guards, axle (front and rear)	✓	
ELECTRICAL			Guard, cab window	✓	
Alarm, back-up	✓		Guards, crankcase and power train, hinged	✓	
Alternator, 150 amp	✓		Guard, driveshaft	✓	
Batteries, maintenance-free	✓		Guard, radiator	✓	
Electrical system, 24V	✓		Striker bars	✓	
Ground level lockable master disconnect switch	✓		FLUIDS		
Light, warning unswitched (LED strobe)	✓		Antifreeze, -50° C (-58° F)		✓
Lighting system (front and rear)	✓		Antifreeze, premixed 50% concentration extended life (-34° C/-29° F)	✓	
Starter, electric	✓		OTHER STANDARD EQUIPMENT		
Starting receptacle for emergency start	✓		Engine, crankcase, 500 hour interval with CJ-4 oil	✓	
OPERATOR ENVIRONMENT			Fuel tank, 500 L (132.1 gal)	✓	
12V power port for mobile phone or laptop connection	✓		Hydraulic, engine, and transmission oil coolers	✓	
AccuGrade™ mapping (ready)	✓		Oil change system, high speed	✓	
Air conditioner with roof-mounted condenser	✓				
Cab, sound-suppressed pressurized	✓				
Camera, rear vision	✓				

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Technical Specifications

Engine

Engine Model	Cat C7.1	
Emissions	Tier 4 Final/Stage V	
Rated Speed	2,200 rpm	
Net Power (SAE J1349:2011)	186 kW	249 hp
Net Power (ISO 9249:2007)	186 kW	249 hp
Gross Power (SAE J1995:2014)	212 kW	284 hp
Engine Power (ISO 14396:2002)	205 kW	275 hp
Peak Torque @ 1,400 rpm	1223 N·m	902 lbf-ft
Torque Rise	52%	
• Net power available at flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,200 rpm.		

Emissions	China Nonroad Stage III, equivalent to Tier 3/Stage IIIA	
Rated Speed	2,200 rpm	
Net Power (SAE J1349:2011)	186 kW	249 hp
Net Power (ISO 9249:2007)	186 kW	249 hp
Gross Power (SAE J1995:2014)	213 kW	286 hp
Engine Power (ISO 14396:2002)	205 kW	275 hp
Peak Torque @ 1,400 rpm	1016 N·m	749 lbf-ft
Torque Rise	26%	

Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in ³
High Idle Speed	2,270 rpm	
Low Idle Speed	800 rpm	
Maximum Altitude without Derating	3000 m	9,842.5 ft
• Net power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator with engine speed at 2,200 rpm.		

Operating Specifications

Operating Weight (Tier 4 Final/Stage V)	26 052 kg	57,345 lb
Operating Weight (Tier 3/Stage IIIA equivalent)	25 761 kg	56,793 lb

Transmission

Transmission Type	Cat Planetary Power Shift			
	Forward*		Reverse*	
First	6.7 km/h	4.1 mph	7.7 km/h	4.8 mph
Second	12.0 km/h	7.5 mph	13.7 km/h	8.5 mph

*Maximum unloaded speed

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.4 kg of refrigerant which has a CO₂ equivalent of 2.002 metric tonnes.



Hydraulic System - Steering

Steering System - Circuit	Pilot, Load Sensing	
Steering System - Pump	Variable Displacement Piston	
Max Flow @ 2,200 rpm	147 L/min	38.8 gal/min
Relief Valve Setting - Steering	27 600 kPa	4,003 psi
Total Steering Angle	84°	
Steering Cycle Time (high idle)	3.0 sec	
Steering Cycle Time (low idle)	8.2 sec	

Axles

Front	Planetary – Fixed
Rear	Planetary – Oscillating
Oscillation Angle	±6°

Sound Performance

	Standard	Suppression
Operator Sound Level (ISO 6396:2008)	70 dBA	
Tier 4 Final/Stage V		
Machine Sound Level (ISO 6395:2008)	111 dBA	109 dBA
China Nonroad Stage III, equivalent to Tier 3/Stage IIIA		
Machine Sound Level (ISO 6395:2008)	112 dBA	110 dBA

- 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.
- The operator sound pressure level uncertainty is ± 2 dB(A)
- 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.

Wheels

Combination Tips		
Weight (Group)	6148 kg	13,554 lb
Plus Tips		
Weight (Group)	6342 kg	13,982 lb
Paddle Tips		
Weight (Group)	5954 kg	13,126 lb
Chopper Tips		
Weight (Group)	5733 kg	12,639 lb
Outside Diameter	1717 mm	67.6 in
Drum Diameter	1400 mm	55.1 in
Drum Width	1016 mm	40.0 in
Feet per Row	5	
Feet per Wheel	20	
Replaceable	Weld On	
Width Over Drums	3338 mm	131.4 in
Tip Height	159 mm	6.25 in

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