

816

LANDFILL COMPACTOR



Engine Power
Operating Weight

205 kW (275 hp)
26 052 kg (57,345 lb)¹

205 kW (275 hp)
25 761 kg (56,793 lb)²

¹ U.S. EPA Tier 4 Final/EU Stage V

² Brazil MAR-1, emitting equivalent to U.S. EPA Tier 3/EU Stage IIIA



Purpose-built for landfill operation, the Cat® 816 helps deliver performance and efficiency that come from proven engineering and advanced new features. Field-proven protection and integrated technologies help provide peak availability and optimized landfill performance.

THE CAT® 816

HELPING YOU CRUSH IT



IMPROVED UPTIME AND OPERATOR COMFORT WITH MAXIMIZED COMPACTION

The Cat 816 Landfill Compactor gives you advanced technology for increased efficiency, a tough and long-lasting machine, low maintenance costs, and reduced operator fatigue.

- + IMPROVED GUARDING AND STRUCTURAL ENGINEERING HELP PROTECT YOUR INVESTMENT
- + NEW DESIGN FEATURES HELP REDUCE TIME SPENT ON MAINTENANCE AND INCREASE MACHINE LIFE
- + FROM STEERING CONTROLS TO CLIMATE CONTROL, THE UPDATED CAB DESIGN HELPS INCREASE PRODUCTIVITY



IMPROVED GUARDING

New features such as new frame guards and service doors help protect the machine from trash intake and other onsite hazards.

LOW MAINTENANCE COSTS

Grouped servicing points, redesigned access, and a long-lived new filtration system help reduce your labor costs and downtime.

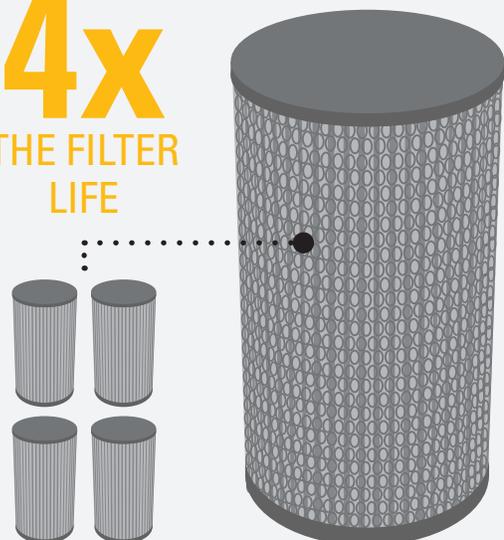
GREAT OPERATOR COMFORT AND PRODUCTIVITY

Cab pressurization, climate control, sound dampening, and isolation mounts help make the entire workday comfortable, while Cat's Steering and Transmission Integrated Control (STIC™) system helps reduce fatigue and cycle time.

BREATHING EASY

THE 816'S RADIAL AIR FILTER DESIGN PROVIDES

4x
THE FILTER
LIFE





BUILT-IN PROTECTION

IMPROVED GUARDING HELPS PROTECT YOUR INVESTMENT



NEW FRAME GUARDS

Front frame guards help prevent trash buildup inside the frame and protect components and hydraulic lines. New frame deflectors divert trash away from the frame and hood enclosure, alleviating potential damage.



STRONG SERVICE DOORS

Robust service doors with a new captive hinge design help prevent unintentional opening and, therefore, protect interior components against contamination.



BELLY GUARDS

Sealed belly guards help provide additional protection to prevent trash intake into frames.



STRIKER BARS

Striker bars and optional cleaner fingers help to keep wheels free of debris, making compaction more efficient.



MAJOR SYSTEM GUARDING

The guarding diverts trash away from key components and service areas on the machine, ensuring less failures due to the severity of the landfill environment.



SCREENED AIR INLET

A screen helps prevent trash from entering the radiator area, maintaining proper airflow and allowing for debris to fall off.

ROBUST STRUCTURES

The 816 features heavy-duty main structures that support multiple lifecycles.

- + BOX-SECTION REAR FRAME HELPS RESIST TORSIONAL SHOCK AND TWISTING
- + HEAVY-DUTY STEERING CYLINDER MOUNTS EFFICIENTLY TRANSMIT STEERING LOADS INTO THE FRAME
- + AXLE MOUNTING IS OPTIMIZED FOR GREAT STRUCTURAL INTEGRITY



HEAVY-DUTY STRUCTURES

BUILT TO LAST

EASY MAINTENANCE

QUICK SERVICE

EASY TO SERVICE

Access to the emergency shutdown switch, battery disconnect switch, and jump start receptacle are ground level accessible. Coolant, transmission oil, and the hydraulic system are all equipped with sight gauges for quick inspection and reduced contamination risk. The hydraulic oil cooler, fuel cooler, and condenser are grouped together, and grease points are centralized.



EASY ELECTRONICS ACCESS

The 816's electronics bay is accessible from inside the cab. This configuration is not only easy, but allows access in a climate-controlled environment.



IMPROVED AIRFLOW TECHNOLOGY

The radial air filter provides four times the previous filter life, and a new electronic air inlet restriction indicator alerts the operator to any airflow blockages.



DEBRIS PURGING FAN

An auto-reversing fan purges debris buildup. The fan can also be activated manually.



ENHANCED OPERATOR COMFORT

COMFORT WHERE IT COUNTS



UPDATED CAB

The 816's cab has been redesigned from the ground up for great comfort, easy control, and high productivity.



IMPROVED INTERIOR AIR

The operator's preferred temperature settings are maintained with automatic climate control. The cabin is pressurized to keep contamination and odors out, and incoming air is filtered.



REDUCED VIBRATION

The cab sits on isolation mounts, and the seat is equipped with an air suspension, improving comfort and reducing sound levels.



UPDATED CAB DELIVERS

MAXIMUM COMFORT AND PRODUCTIVITY



PREMIUM PLUS SEAT

The Premium Plus seat helps deliver total comfort throughout the workday. Standard features include leather finish, forced air heating and cooling, two-way thigh adjustment, power lumbar and back bolster adjustment, and dynamic end dampening. The seat also features a flip-up armrest for easy ingress/egress.



CONVENIENT STORAGE

Cab features a convenient floor storage tray/lunch box, keeping the workstation clutter free.



ACCESS VITAL INFORMATION

Keep your operators informed about machine conditions and operation with the Vital Information Management System (VIMS™) 3G machine monitoring system.



EASY CONTROLS

Operator productivity has been enhanced with membrane switch panels, keyed ignition, and electro-hydraulic parking brake control switch.



SINGLE-STICK CONTROL

Easy control and short, fast cycles help reduce operator fatigue and increase efficiency. The STIC system combines steering, gear selection, and more into a single lever. Steering is accomplished with small side-to-side inputs, and gear changes are controlled with the fingers.

PRODUCTIVE TECHNOLOGY

HELPING YOU DO MORE



CAT COMPACT

Cat Compact combines in-cab guidance and reporting capabilities to help you consistently achieve higher compaction densities. Visually see where the machine has been on the working face and how many passes have been completed – saving on fuel and machine wear and tear.



ACCESS VITAL INFORMATION

A 3G touchscreen with user-friendly interface allows operators to monitor real-time machine performance and operating data with the VIMS system.



IMPROVED EQUIPMENT MANAGEMENT

Cat Equipment Management technology provides access to machine location, hours, fuel consumption, idle time, events, and diagnostic codes through the online VisionLink® interface.

DO MORE IN LESS TIME ON LESS FUEL

POWERFUL EFFICIENCY



PROVEN POWER

The Cat 7.1 engine is designed for maximum fuel economy and increased power density, delivering reliable performance, and low emissions. Two engine options are available, meeting U.S. EPA Tier 4 Final/EU Stage V emission standards or emitting equivalent to U.S. EPA Tier 3/EU Stage IIIA.

SMOOTH POWER

Advanced Productivity Electronic Control System (APECS) transmission controls deliver improved shifting performance and a high level of comfort for operators. APECS allows you to achieve great momentum on grades and save fuel by carrying that momentum through the shift points.

FUEL-SAVING CONTROLS

Automatic engine and electrical system shutdown controls save even more fuel by reducing unnecessary idling. Throttle lock helps reduce fuel burn further by maintaining constant speed and also reduces operator fatigue.

MULTI-CONTROL PEDAL

The decelerator pedal acts as a brake, transmission neutralizer, and an engine decelerator to override the engine speed selected by the throttle lock. This allows you to slow down the machine when the throttle lock is engaged and to return to the throttle lock setting without any hand control inputs such as pressing a resume or set button.

PRECISE STEERING

Variable displacement piston pumps help give you precise positioning and easy maneuvering in tight areas, with 42° articulation in each direction. A load-sensing system helps provide confident machine operation and adds to the precision of the steering. More precise steering results in shorter, more efficient cycles.

ELECTRO-HYDRAULIC CONTROLS

Increase productivity with the 816's responsive implements feature. Easy-to-use soft-detent controls help make operation comfortable.



FEATURES THAT HELP YOU
STAY IN CONTROL



MORE OPTIONS TO FIT YOUR OPERATION

WHEELS AND TIPS

TIP DESIGN

Designed specifically to complement Cat machines, choose Paddle or Plus design tips for better performance and traction.

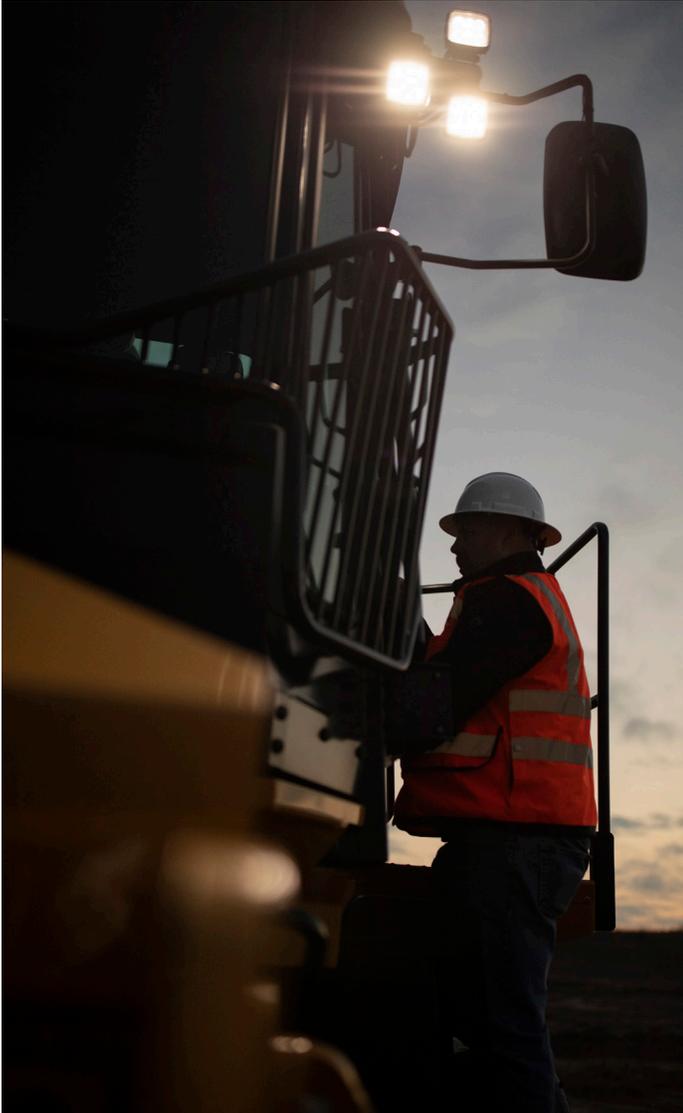
OPTIONS TO FIT YOUR WORK

Choose the tip design that fits your operational needs:

- + SELECT PADDLE TIPS FOR TRACTION AND FUEL ECONOMY
- + SELECT PLUS TIPS FOR INCREASED SIDE-SLOPE STABILITY
- + SELECT A COMBINATION OF BOTH TO OPTIMIZE PERFORMANCE AND FUEL ECONOMY WITH SIDE-SLOPE STABILITY



PROTECTING YOUR TEAM SAFE DESIGN



INCREASED VISIBILITY

Backing is safe for operators and everyone on site with a standard rearview camera. Standard cab-mounted LED warning strobes help increase visibility of the machine, further reducing risk.

REDUCED SOUND

Low interior sound levels help increase operator comfort, and spectator sound levels have been reduced. Optional low sound packages reduce the noise level even further.

SAFE ACCESS

Emergency shutdown switch is at ground level. Platform and ladders are designed to ensure three points of contact at all times during entry and exit.

TECHNICAL SPECIFICATIONS

U.S. EPA

See cat.com for complete specifications.

ENGINE – U.S. EPA TIER 4 FINAL/EU STAGE V			
Engine Model	Cat® C7.1		
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%		
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	
<ul style="list-style-type: none"> • Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, aftertreatment, and alternator. 			

ENGINE – U.S. EPA TIER 3/EU STAGE IIIA EQUIVALENT			
Engine Model	Cat C7.1		
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%		
<ul style="list-style-type: none"> • Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, muffler, and alternator. 			

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

TRANSMISSION					
Transmission Type		Cat Planetary Power Shift			
Forward 1	6.7 km/h	4.1 mph	Reverse 1	7.7 km/h	4.8 mph
Forward 2	12.0 km/h	7.5 mph	Reverse 2	13.7 km/h	8.5 mph
*Maximum unloaded speed					

AIR CONDITIONING SYSTEM	
<ul style="list-style-type: none"> • The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas. • If equipped with 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	
Tier 4 Final/Stage V	
Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Machine Sound Power Level (ISO 6395:2008)	111 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)*
Machine Sound Power Level (ISO 6395:2008)	109 dB(A)*
Tier 3/Stage IIIA Equivalent	
Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)
Machine Sound Power Level (ISO 6395:2008)	112 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)*
Machine Sound Power Level (ISO 6395:2008)	110 dB(A)*
* Sound suppression equipped	
<ul style="list-style-type: none"> • The machine sound power level was measured according to ISO 6395:2008. The measurement was conducted at maximum engine cooling fan speed. • The operator sound pressure level was measured according to ISO 6396:2008. The measurement was conducted at 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. 	

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
Tips per Row	5	
Tips per Wheel	20	
Replaceable	Weld On	
Width Over Drums	3338 mm	131.4 in
Tip Height	159 mm	6.25 in

STANDARD & OPTIONAL EQUIPMENT

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

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
12V power port for mobile phone or laptop connection	•	
Cat Compact RTK Mapping (available through SITECH only)		•
Cat Compact SBAS Mapping (available through SITECH only)		•
Air conditioner with roof-mounted condenser	•	
Cab, sound-suppressed pressurized	•	
Camera, rear vision	•	
Implement hydraulic lockout	•	
Instrumentation, gauges: Diesel exhaust fluid (DEF) fluid level (U.S. EPA Tier 4 Final/EU Stage V only), engine coolant temperature, fuel level, hydraulic oil temperature, speedometer/tachometer, torque converter temperature	•	
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	•	
Mirror, internal (panoramic)	•	
Mirrors, heated rearview (externally mounted)	•	
Radio, AM/FM/Aux/USB/Bluetooth®		•
Radio, CB (ready)	•	
Radio ready for entertainment: antenna, speakers, converter (12V, 10-15 amp)	•	
Vital Information Management System (VIMS™): graphical information display, external data port, customizable operator profiles, event indicator light on rear grill	•	
Wet-arm wipers/washers (front and rear): intermittent wipers (front and rear)	•	
POWERTRAIN	STANDARD	OPTIONAL
Brakes, full hydraulic, enclosed, wet multiple disc service brakes	•	
Cat Clean Emission Module (Tier 4 Final/Stage V only)	•	
Electro-hydraulic parking brake	•	
Engine, Cat C7.1 configured for two emissions options: Tier 4 Final/Stage V or emitting equivalent to Tier 3/Stage IIIA	•	
Fuel priming pump (electric)	•	
Fuel-to-air cooler	•	
Ground level engine shutoff	•	
Heater, engine coolant, 120V		•
Heater, engine coolant, 240V		•
Radiator, unit core	•	
Throttle lock	•	
Transmission, planetary with 2F/2R speed range control	•	

ELECTRICAL	STANDARD	OPTIONAL
Alarm, back-up	•	
Alternator, 150 amp	•	
Batteries, maintenance-free	•	
Electrical system, 24V	•	
Ground level lockable battery disconnect switch	•	
Light, warning unswitched (LED strobe)	•	
Lighting system (front and rear)	•	
Starter, electric	•	
Auxiliary start receptacle	•	
GUARDS	STANDARD	OPTIONAL
Guards, axle (front and rear)	•	
Guard, cab window	•	
Guards, crankcase and powertrain, hinged	•	
Guard, driveshaft	•	
Guard, radiator	•	
FLUIDS	STANDARD	OPTIONAL
Antifreeze, -50° C (-58° F)		•
Antifreeze, premixed 50% concentration extended life (-34° C/-29° F)	•	
OTHER STANDARD EQUIPMENT	STANDARD	OPTIONAL
Engine, crankcase, 500 hour interval with CJ-4 oil	•	
Fuel tank, 500 L (132.1 gal)	•	
Hydraulic, engine, and transmission oil coolers	•	
Oil change system, high speed	•	



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