

Cat[®] CP12 GC Padfoot Drum Vibratory Soil Compactor

The Cat® CP12 GC features a padfoot drum and is ideally suited for cohesive soil applications.

Superior Compaction Performance

• High weight at the drum and high amplitude deliver superior compaction performance

Comfortable and Ergonomic Operator Station

- Simple controls are within reach
- Outstanding visibility to the front and rear of the machine

Proven and Exclusive Cat Features

• Includes the ultra-reliable pod-style vibratory system and sealedfor-life hitch bearing

Reliable Cat Engine

- The Cat engine provides ample power and consistent performance
- Standard Eco-mode reduces fuel use during normal operation

Simple Maintenance

 Maintenance-free hitch bearings and extended maintenance intervals for vibratory system and hydraulic system provide more uptime and lower maintenance costs

Optional Cat Compaction Control Technology

- Compaction control helps the operator determine when compaction has been completed to specification for greater productivity and uniform compaction quality
- Machine Drive Power (MDP) measurement technologies available
- Scalable solutions can be configured to meet customer needs



Standard and Optional Equipment

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

	Standard	Optional
OPERATOR ENVIRONMENT		
ROPS/FOPS Canopy with Handrails/ Guardrails, Floormat	\checkmark	
Vinyl Adjustable Seat, Seat Belt	\checkmark	
Adjustable Tilting Steering Column	\checkmark	
12-volt Power Outlet	\checkmark	
Horn, Backup Alarm	\checkmark	
Internal Rear View Mirror	\checkmark	
ROPS/FOPS Cab with Climate Control		\checkmark
Deluxe High-back Air-ride Seat (Cab)		\checkmark
Sun/Debris Shields (Canopy)		\checkmark
Cab Internal Roll-down Sun Screen (Cab)		\checkmark
Rear View Camera with Color Touchscreen Display		\checkmark
Sound Reduction Kit		\checkmark
VIBRATORY SYSTEM		
Padfoot Drum	\checkmark	
Dual Amplitude, Dual Frequency	\checkmark	
Pod-Style Eccentric Weight Housings	\checkmark	
Auto-vibe Function	\checkmark	
Dual Adjustable Steel Scrapers		\checkmark

	Standard	Optional
POWERTRAIN		
Cat [®] C3.6 Diesel Engine, 4 cylinder	\checkmark	
Single Propel Pump	\checkmark	
Fuel Filter, Water Separator, Priming Pump, Water Indicator	\checkmark	
Radiator/Hydraulic Oil Cooler	\checkmark	
Dual Braking System	\checkmark	
Two-speed Hydrostatic Transmission	\checkmark	
Transmission Guard		\checkmark
TECHNOLOGY SOLUTIONS		
Measure - Machine Drive Power		\checkmark
Map - SBAS GNSS Mapping		\checkmark
Connect - Cloud and Machine Connectivity		\checkmark
ELECTRICAL		
12 volt Electrical System	\checkmark	
150 ampere Alternator	\checkmark	
900 Cold-cranking Amps Battery Capacity	\checkmark	
OTHER		
Product Link™	\checkmark	
Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	\checkmark	
S·O·S [™] Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	\checkmark	
High Ambient Temperature Oil Factory Fill		\checkmark
Printer Port		\checkmark
Seat Belt Switch		\checkmark
Upgraded LED Light Package		\checkmark
Amber Rotating Beacon		\checkmark

Cat® CP12 GC Padfoot Drum Vibratory Soil Compactor



Smooth drum, high amplitude moving to lo amplitude when approaching compaction, 4-8 passes

Size: Less than 50 mm (2 in) diameter

Smooth drum, high amplitude moving to low amplitude when approaching compaction, 4-6 passes

Padfoot and smooth drum application (for smoothing), 4-10 passes. Compaction in cohesive soils strongly depends on moisture content.

* Smooth drum model equipped with padfoot shell kit

Technical Specifications

Engine - Powertrain		
Engine Model	Cat C3.6	
Emissions	U.S. EPA Tier 4 Final EU Stage V	
Engine Power IS014396:2002	90.0 kW	121.0 hp
Gross Power SAE J1995:2014	91.7 kW	122.9 hp
Net Power ISO 9249:2007*	83.7 kW	112.2 hp
Net Power SAE J1349:2011*	82.9 kW	111.2 hp
Displacement	3.6 L	219.7 in ³
Stroke	120 mm	4.7 in
Bore	98 mm	3.9 in
Max. Travel Speed (Forward or Reverse)	11 km/h	6.8 mph
Theoretical Gradeability, with or without vibration**	50%	

Service Refill Capacities		
Fuel Tank, total capacity	213 L	56.3 gal
Diesel Exhaust Fuel refill capacity	19 L	5.0 gal
Cooling System	18.5 L	4.9 gal
Engine Oil w/ Filter	11.6 L	3.1 gal
Eccentric Weight Housings (combined)	26 L	6.9 gal
Axle and Final Drives	10 L	2.6 gal
Hydraulic Tank (service refill)	23 L	6.1 gal

Vibratory System Specifications		
Nominal Amplitude - High	1.8 mm	0.071 in
Frequency at High Idle	30.0 Hz	1800 vpm
Frequency at Eco-Mode	28.6 Hz	1716 vpm
Nomincal Amplitude - Low	0.89 mm	0.035 in
Frequency at High Idle	33 Hz	1980 vpm
Frequency at Eco-Mode	31.5 Hz	1890 vpm
Centrifugal Force		
Maximum	249 kN	55,932 lb
Minimum	148 kN	33,249 lb
French Classification, data/class w/ ROPS/FOPS Cab	48.7	VM3

Weights***		
Operating Weight w/ ROPS/FOPS Canopy		
w/ Oval Padfoot Drum	12 487 kg	27,529 lb
w/ Square Padfoot Drum	12 519 kg	27,599 lb
Operating Weight w/ ROPS/FOPS Cab		
w/ Oval Padfoot Drum	12 641 kg	27,869 lb
w/ Square Padfoot Drum	12 673 kg	27,939 lb
Weight at Drum w/ ROPS/FOPS Canopy		
w/ Oval Padfoot Drum	7698 kg	16,971 lb
w/ Square Padfoot Drum	7730 kg	17,041 lb
Weight at Drum w/ ROPS/FOPS Cab		
w/ Oval Padfoot Drum	7741 kg	17,066 lb
w/ Square Padfoot Drum	7773 kg	17,137 lb

- * Net power advertised is the power available at the engine flywheel when equipped with a fan at maximum speed, air cleaner, and alternator.
- ** Actual gradeability may vary based on site conditions and machine configuration. Refer to the Operation and Maintenance Manual for more information.
- *** Standard operating weight considers full fuel tank, 75 kg operator, flotation tires, smooth drum, and cab with A/C.

Technical Specifications

Dimensions			
1	Overall Length	5.7 m	18.7 ft
2	Overall Width	2.3 m	7.5 ft
3	Drum Width	2134 mm	84 in
4	Drum Shell Thickness	25 mm	1 in
5	Drum Diameter	1549 mm	60.9 ft
6	Maximum Overall Height	3.0 m	9.8 ft
7	Wheelbase	3.0 m	9.8 ft
8	Ground Clearance	516 mm	20.3 in
9	Curb Clearance	496 mm	19.5 in
	Inside Turning Radius	3.9 m	12.7 ft
	Hitch Articulation Angle	34°	
	Hitch Oscillation Angle	15°	

Padfoot Specifications		
Number of Pads	140	
Pad Height, oval pads	127 mm	5 in
Pad Face Area, oval pads	74.4 cm ²	11.5 in ²
Pad Height, optional square pads	100 mm	3.9 in
Pad Face Area, optional square pads	123 cm ²	19.1 in ²
Number of Chevrons	14	





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 www.caterpillar.com/en/company/sustainability.html.

ENGINE

- The Cat C3.6 is available in configurations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards.
- Cat 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

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 20 % biodiesel.

AIR CONDITIONING SYSTEM

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.2 kg (4.91 lb) of refrigerant, which has a CO_2 equivalent of 3.146 metric tonnes (3.468 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

With cooling fan speed at maximum value:

Exterior Sound Pressure Level (SAE J88:2013) – 107 dB(A)

Operator Sound Pressure Level (ISO 6396:2008) - 85 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 0CT98, meets 0SHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- 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.
 - Standard eco-mode limits engine RPM, lowering overall fuel consumption by up to 10% compared to high idle
 - Optional compaction control reduces unnecessary passes, contributing to lower overall fuel consumption
 - Extended maintenance intervals reduce fluid and filter consumption
 - Auto engine idle shutdown reduces unproductive hours and fuel burned

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

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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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