



# CS10 GC

## Vibratory Soil Compactor

# Technical Specifications

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

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# CS10 GC Vibratory Soil Compactor Specifications

## ENGINE

Engine Model	Cat® C3.6	
Engine Power - ISO 14396:2002	90.0 kW	120.7 hp
Gross Power - SAE J1995:2014	91.7 kW	123 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 <sup>3</sup>
Stroke	120 mm	4.7 in
Bore	98 mm	3.9 in

- Cat C3.6 engine meets U.S. EPA Tier 4 Final / EU Stage V emission standards.
- The power ratings apply at an engine speed of 2,000 rpm when tested under the conditions for the specified standard in effect at the time of manufacture. The stated speed is when tested under the reference conditions for the specified standards.
- Net power advertised is the power available at the engine flywheel when equipped with a fan at maximum speed, air cleaner, clean emissions module, and alternator with engine speed at 2,000 rpm.
- The gross power advertised is with the fan at maximum speed.

## SERVICE REFILL CAPACITIES

Fuel Tank (total capacity)	213 L	56.3 gal
Diesel Exhaust Fluid (DEF) 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

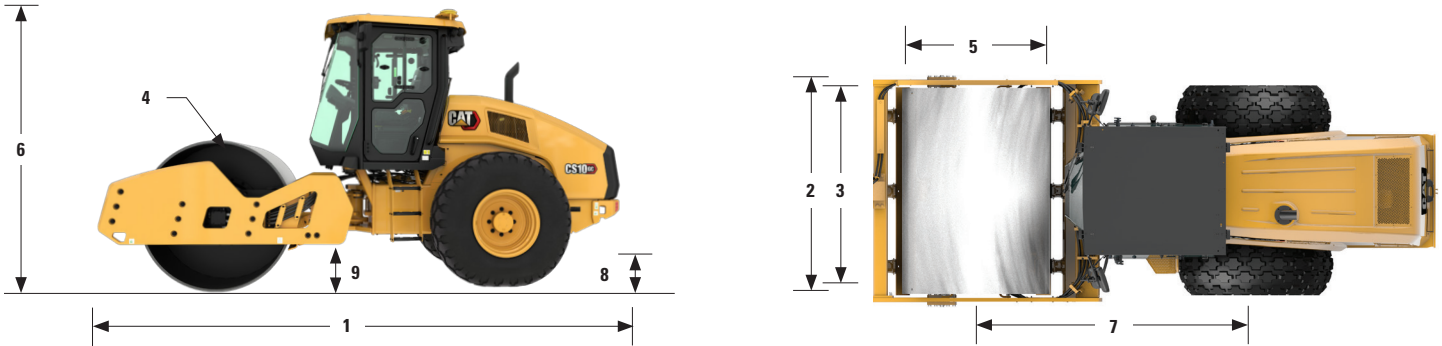
## STANDARDS

Brakes	Brakes meet ISO 3450:2011 standards
Cab/ROPS	ROPS/FOPS meet ISO 3471:2008 and ISO 3449:2005 Level II standards

# CS10 GC Vibratory Soil Compactor Specifications

## DIMENSIONS

All dimensions are approximate



1 Overall Length	5.70 m	18.71 ft
2 Overall Width	2.30 m	7.53 ft
3 Drum Width	2134 mm	84 in
4 Drum Shell Thickness	25 mm	0.98 in
5 Drum Diameter	1535 mm	60.4 in
6 Overall Height		
Smooth Drum	3.0 m	9.8 ft
Optional Shell Kit Equipped	3.0 m	9.8 ft
7 Wheelbase	3.0 m	9.8 ft
8 Ground Clearance	518 mm	20.4 in
9 Curb Clearance	492 mm	19.4 in
Inside Turning Radius	3.86 m	12.7 ft
Hitch Articulation Angle		34°
Hitch Oscillation Angle		15°

## PADFOOT SPECIFICATION

Number of Pads		120
Pad Height, oval pads	89.8 mm	3.5 in
Pad Face Area, oval pads	63.5 cm <sup>2</sup>	9.8 in <sup>2</sup>
Pad Height, square pads	89.8 mm	3.5 in
Pad Face Area, square pads	105.6 cm <sup>2</sup>	16.4 in <sup>2</sup>
Number of Chevrons		16

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## DRIVE

Max. Travel Speed		
High Idle	11 km/h	6.84 mph
Eco-mode	9.4 km/h	5.84 mph
Max. Working Speed		
High Idle	5.6 km/h	3.5 mph
Eco-mode	5.0 km/h	3.1 mph
Rimpull	57 kN	12,814 lbf
Theoretical Gradeability, with or without vibration	55%	

- Maximum travel speeds is measure with smooth drum and diamond tire configured.
- Actual gradeability may vary based on site conditions and machine configuration. Refer to the Operation and Maintenance Manual for more information.

## VIBRATION SYSTEM

Nominal Amplitude - High		
Standard Frequency	2.0 mm	0.079 in
Eco-mode Frequency	30 Hz	1800 vpm
Nominal Amplitude - Low		
Frequency	28.6 Hz	1716 vpm
Eco-mode Frequency	1.0 mm	0.039 in
Frequency	33 Hz	1980 vpm
Eco-mode Frequency	31.5 Hz	1890 vpm
Centrifugal Force		
Maximum	250 kN	56 202 lbf
Minimum	149 kN	33 497 lbf

### w/ Oval Padfoot

Nominal Amplitude - High		
Standard Frequency	1.41 mm	0.06 in
Eco-mode Frequency	30 Hz	1800 vpm
Nominal Amplitude - Low		
Frequency	28.6 Hz	1716 vpm
Eco-mode Frequency	0.67 mm	0.03 in
Frequency	33 Hz	1980 vpm
Eco-mode Frequency	31.5 Hz	1890 vpm

### w/ Square Padfoot

Nominal Amplitude - High		
Standard Frequency	1.37 mm	0.05 in
Eco-mode Frequency	30 Hz	1800 vpm
Nominal Amplitude - Low		
Frequency	28.6 Hz	1716 vpm
Eco-mode Frequency	0.65 mm	0.03 in
Frequency	33 Hz	1980 vpm
Eco-mode Frequency	31.5 Hz	1890 vpm

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OPERATION SPECIFICATION	ROPS/FOPS Canopy		ROPS/FOPS Cab	
<b>Operating Weight - Standard</b>	<b>10 340kg</b>	<b>22,796 lb</b>	<b>10 494 kg</b>	<b>23,136 lb</b>
At Drum	5830 kg	12,853 lb	5873 kg	12,948 lb
Static Linear Load	27.3 kg/cm	153.0 lbs/in	27.5 kg/cm	154.1 lbs/in
French Classification, data/class				
High Amplitude	38.6	VM2	38.9	VM2
Low Amplitude	27.3	VM2	27.5	VM2
<b>w/ XT weight Bumper</b>	<b>11 353 kg</b>	<b>25,030 lb</b>	<b>11 507 kg</b>	<b>25,369 lb</b>
At Drum	7170 kg	15,807 lb	7213 kg	15,902 lb
Static Linear Load	33.6 kg/cm	188.1 lbs/in	33.8 kg/cm	189.3 lbs/in
French Classification, data/class				
High Amplitude	47.5	VM3	47.8	VM3
Low Amplitude	33.6	VM2	33.8	VM2
<b>w/ Oval Shell Kit</b>	<b>12 022 kg</b>	<b>26,503 lb</b>	<b>12 176 kg</b>	<b>26,843 lb</b>
At Drum	7458 kg	16,442 lb	7501 kg	16,538 lb
French Classification, data/class				
High Amplitude	41.5	VM3	41.7	VM3
Low Amplitude	28.6	VM2	28.8	VM2
<b>w/ Square Shell Kit</b>	<b>12 181 kg</b>	<b>26,854 lb</b>	<b>12 335 kg</b>	<b>27,194 lb</b>
At Drum	7617 kg	16,793 lb	7660 kg	16,888 lb
French Classification, data/class				
High Amplitude	41.8	VM3	42.0	VM3
Low Amplitude	28.8	VM2	28.9	VM2
<b>w/ Padfoot Bumper, No Shell</b>	<b>10 505 kg</b>	<b>23,158 lb</b>	<b>10 659 kg</b>	<b>23,498 lb</b>
At Drum	5 941 kg	13,098 lb	5 984 kg	13,193 lb
Static Linear Load	27.8 kg/cm	155.9 lbs/in	28.0 kg/cm	157.0 lbs/in
French Classification, data/class				
High Amplitude	39.4	VM2	39.7	VM2
Low Amplitude	27.8	VM2	28.0	VM2

- All operating weights and Static Linear Load shown are based on standard configurations with full level fluids, 75 kg operator, smooth/shell kit drum w/ diamond tires, padded drum w/bar tread tires and cab w/ heat & A/C.

# CS10 GC Vibratory Soil Compactor Specifications

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>OPERATOR ENVIRONMENT</b>			<b>POWERTRAIN</b>		
ROPS/FOPS Canopy with Handrails/ Guardrails, Floormat	✓		Cat® C3.6 Diesel Engine, 4 cylinder	✓	
Vinyl Adjustable Seat, Seat Belt	✓		Single Propel Pump	✓	
Adjustable Tilting Steering Column	✓		Fuel Filter, Water Separator, Priming Pump, Water Indicator	✓	
12-volt Power Outlet	✓		Radiator/Hydraulic Oil Cooler	✓	
Horn, Backup Alarm	✓		Dual Braking System	✓	
Internal Rear View Mirror	✓		Two-speed Hydrostatic Transmission	✓	
ROPS/FOPS Cab with Climate Control		✓	Transmission Guard		✓
Deluxe High-back Air-ride Seat (Cab)		✓	<b>TECHNOLOGY SOLUTIONS</b>		
Sun/Debris Shields (Canopy)		✓	Measure - Machine Drive Power and/or CMV		✓
Cab Internal Roll-down Sun Screen (Cab)		✓	Map - SBAS GNSS Mapping		✓
Rear View Camera with Color Touchscreen Display		✓	Connect - Cloud and Machine Connectivity		✓
Sound Reduction Kit		✓	<b>ELECTRICAL</b>		
<b>VIBRATORY SYSTEM</b>			12 volt Electrical System	✓	
Smooth Drum	✓		150 ampere Alternator	✓	
Dual Amplitude, Dual Frequency	✓		900 Cold-cranking Amps Battery Capacity	✓	
Pod-Style Eccentric Weight Housings	✓		<b>OTHER</b>		
Auto-vibe Function	✓		Product Link™	✓	
Rear Adjustable Steel Scraper	✓		Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
Padfoot Shell Kit (oval or square pads available)		✓	S-O-S <sup>SM</sup> Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	✓	
Dual Adjustable Steel Scrapers		✓	High Ambient Temperature Oil Factory Fill		✓
Dual Adjustable Polyurethane Scrapers		✓	Printer Port		✓
			Seat Belt Switch		✓
			Upgraded LED Light Package		✓
			Amber Rotating Beacon		✓
			XT Weight Kit		

# CS10 GC Vibratory Soil Compactor Specifications

## 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](http://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.

## 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 (4.9 lb) of refrigerant, which has a CO<sub>2</sub> 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:

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Operator Sound Pressure Level (ISO 6396:2008) – 76 dB(A)

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Exterior Sound Power Level (ISO 6395:2008) – 109 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA 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

# CS10 GC Vibratory Soil Compactor Specifications

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://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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