

CS10 GC | CS11 GC | CS12 GC

VIBRATORY SOIL COMPACTORS



Engine Power

U.S. EPA Tier 3, EU Stage IIIA Equivalent

83.0 kW (111 hp)

Compaction Width

2134 mm (84 in)

Operating Weight (with Cab)

CS10 GC

10 451 kg (23,040 lb)

CS11 GC

11 186 kg (24,661 lb)

CS12 GC

12 613 kg (27,807 lb)

See Technical Specifications for detailed engine emissions information.



VIBRATORY SOIL COMPACTORS GC-SERIES

EVERYTHING YOU WANT.
EXACTLY WHAT YOU NEED.

GC-Series Vibratory Soil Compactors deliver dependable, economical production with performance that exceeds expectations. Ready to help you make your business stronger, Cat® GC-Series Vibratory Soil Compactors give you new ways to get the most work done at the lowest cost—so you put more money in your pocket.



GC-SERIES VIBRATORY SOIL COMPACTORS

Cat GC-Series Vibratory Soil Compactors provide the production you need from the 10-12 metric tonne class while still offering the kind of dependability, versatility and serviceability you have come to expect from Caterpillar:

- + CLASS-LEADING VIBRATORY SYSTEM PERFORMANCE
- + EXCEPTIONAL COMFORT, EASE OF USE
- + CAT EXCLUSIVE TECHNOLOGY



SIMPLE TO OPERATE

The GC-Series feature an easy to use interface for the operator with excellent visibility to the ground, and an auto-vibe function providing dependable compaction.

LOW OPERATION COSTS

Experience up to 18% fuel savings with eco-mode* and benefit from extended maintenance intervals. Enjoy the sealed-for-life maintenance-free hitch.

ENHANCED COMPACTION

Improve compaction with increased amplitude and static linear load, upgrade with flexible XT weight kits, and choose from scalable compaction technologies.

* Compared to using high engine idle. Data may vary based on specific model.

OPERATOR COMFORT

COMFORTABLE AND ERGONOMIC

SIMPLE CONTROL

- One button, 2-setting vibration control switch
- Propel and safety controls grouped for easy access on operator's right side
- Auto-vibe function to automatically start and stop vibration based on propel lever position
- Configurable LED digital readout



EXCELLENT VISIBILITY

- Internal and external mirrors for broad view of the jobsite
- Optional rear vision camera provides a wide view behind the machine for better visibility
- Upgraded LED lighting for super night time illumination





EXCELLENT VISIBILITY

Internal and external mirrors provide a broad view of the jobsite. Optional rear vision camera enhances operation and safety.



OPERATE IN COMFORT

Tilting steering column and adjustable seat reduce fatigue while the ISO-mounted operator station and rubber floor mats dampen noise and vibrations, providing comfort during operation.



SMOOTH DRUM

GC-Series vibratory soil compactors are available with smooth drums. Two piece padfoot shell kit options are available to maximize versatility.



ERGONOMIC ENTRY/EXIT

Large station entry provides outstanding accessibility featuring angled steps, convenient right and left handrails, and antiskid entrance surface.



FUEL EFFICIENCY SAVINGS ADD UP



**USING ECO-MODE
LOWERS FUEL CONSUMPTION**

THE ADVANTAGE

USE UP TO
18%

LESS FUEL PER YEAR

NOTE: COMPARED TO OPERATING USING HIGH ENGINE IDLE.
DATA MAY VARY BASED ON SPECIFIC APPLICATION, MODEL,
AND CONFIGURATION.

POWERFUL ENGINE

MEETS EMISSIONS STANDARDS

The Cat C4.4 engine meets U.S. EPA Tier 3 and EU Stage IIIA equivalent emissions standards. This engine is reliable, quiet, and has durable power for vibratory soil compactor applications.

55% THEORETICAL
GRADEABILITY
CS10 GC | CS11 GC

50% THEORETICAL
GRADEABILITY
CS12 GC

SIMPLE DESIGN **EXCEPTIONAL RESULTS**



REACH HIGHER WITH THE GC-SERIES

- + One-button switches between working and travel speed ranges
- + Limited slip differential axle
- + Traction tire options
- + Climbing ability that exceeds expectations

POD-STYLE VIBRATORY SYSTEM

Exclusive Caterpillar pod-style eccentric weights offer an industry best 3 year, 3000 hour maintenance interval and keep you running longer between services.

AMPLITUDE AND STATIC LINEAR LOAD

High amplitudes and increased static linear loads help to ensure the GC-Series can meet your compaction needs.

FLEXIBLE WEIGHT KITS

Flexibility is designed in. Optional XT weight kits upgrade the CS10 GC and CS11 GC models to a heavier class, allowing them to work on a wider range of jobsites and lift thicknesses.

GC-SERIES

ENHANCED COMPACTION



CAT® COMPACT TECHNOLOGY

SCALABLE TO MEET YOUR NEEDS



Cat COMPACT is a suite of technologies that help operators compact to specification with greater consistency, uniformity and efficiency than is possible using human intuition alone. Cat COMPACT technology is easy-to-use, versatile and scalable, allowing you to customize your solution to meet your needs, now and in the future.



MACHINE DRIVE POWER (MDP)

Measures energy required to overcome rolling resistance to indicate soil stiffness. MDP works with vibratory system on or off. It measures 30-60 cm deep—about the depth of a typical lift and works on all soil types, granular and cohesive.



COMPACTION METER VALUE (CMV)

Utilizes a drum-mounted accelerometer to provide indications of soil stiffness of multiple aggregate base and sub-base layers, up to 1.2 m deep. It can indicate issues with the road structure or help the operator determine the status of the work. For granular applications only.



GNSS MAPPING

Correlates compaction data with satellite location coordinates (GPS) to provide real-time maps that can help the operator visualize progress of the work. The data can be mined to find hidden efficiencies that can contribute to greater profit, or used to document work for QA/QC purposes. SBAS or RTK available depending on positional accuracy desired.



MACHINE-TO-MACHINE COMMUNICATION

Helps keep rolling patterns in sync by sharing mapped data such as MDP, CMV, coverage area and pass-count maps between the displays of multiple machines.



EASY-ACCESS MAINTENANCE

Conducting daily inspections will help keep your machine running day in and day out. That's why we focused on making those inspections as easy as possible. Daily check points are grouped, with key components within easy reach from the ground. The durable one-piece hood tilts forward quickly and easily for exceptional access to the engine and cooling system. S·O·SSM ports are provided to make oil sampling simple and quick. Of course the most convenient and least costly service of all is that which can be avoided. That's why the GC-Series vibratory soil compactors feature long service intervals and no-maintenance components like the articulation hitch and battery.

EXTENDED MAINTENANCE INTERVALS

Industry-leading maintenance intervals keep you working longer between scheduled services.

- 12,000 hr coolant change
- 3,000 hr hydraulic oil change
- 3,000 hr vibration bearing oil check
- 500 hr engine oil and filter

MAINTENANCE-FREE HITCH

Just like on other Cat vibratory soil compactors you've known over the years, the GC-Series features a maintenance-free hitch that requires no greasing.

CAT LINK TECHNOLOGY

TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

CAT LINK telematics helps take the complexity out of managing your equipment and job sites by gathering data generated from your machines, materials, and people – delivering it to you in customizable formats.

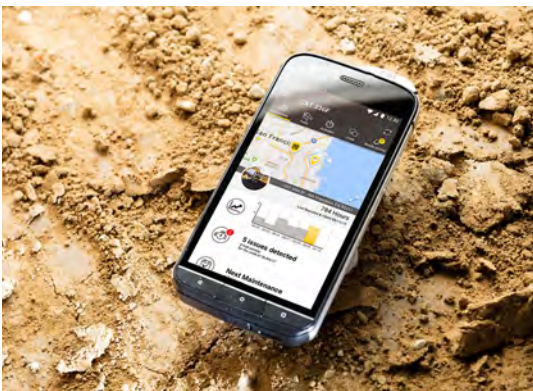


CAT PRODUCT LINK™

The ProductLink™ system tracks location and hours of use of the machine. The system streamlines diagnostic efforts, maintenance scheduling, and costs by providing communication of hours and location information between dealer and customer.

VISIONLINK®

Access product data anytime, anywhere with VisionLink® and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your job site. With different subscription level options, your Cat dealer can help you configure exactly what you need to connect your fleet and manage your business, without paying for extras you don't want. Subscriptions are available for cellular and/or satellite-based reporting.



MACHINE DATA AT YOUR FINGERTIPS

The Cat App delivers machine data to your smartphone or tablet, so you can check in on your equipment from the field, the office or anywhere in between. And when it's paired with other Cat Equipment Management tools, the Cat App makes it even easier to make smart decisions and be in control of your business.

EXPAND PERFORMANCE

WITH OPTIONS TO INCREASE PRODUCTIVITY

Cat drum and operator station options improve performance, safety, and stability designed to fit the weight and horsepower of the GC-Series Vibratory Soil Compactors.

SHELL KIT OPTION

Oval-faced pad design produces superior thick-lift compaction results by penetrating deeper into the lift. The tapered design introduces horizontal compaction force and inhibits material accumulation between pads.

Square-faced pad design produces good thin-lift compaction results and provides best surface sealing.

Cat padfoot shell halves are universal and work on 2134 mm (84 inch) drum B-Series and GC-Series machines.

NOTE: Bumper and scraper design is different between the B-Series and GC-Series. Please consult your Caterpillar Dealer for more information.



OPTIONAL XT WEIGHT KIT FOR FIELD INSTALL

Kits add additional weight that upgrades the CS10 GC to over 11 metric tonnes and the CS11 GC to over 12 metric tonnes.

The additional weight also brings higher static linear loads, allowing the machines to work in a wider range of applications and lift thicknesses. These options give flexible machine weights for governmental tenders and rental fleets.



OPERATOR STATION OPTIONS

ISO mounted sun canopy, ROPS/FOPS canopy, and ROPS/FOPS cab satisfy customer demand comfortably. Upgrade your canopy machine with an aftermarket cab kit to increase operator comfort or meet changing requirements.

SUN CANOPY



ROPS/FOPS CANOPY



ROPS/FOPS CAB



STANDARD & OPTIONAL EQUIPMENT

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

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
Sun Canopy with Platform Handrails/ Guardrails, Floor Mat	●	
Vinyl Adjustable Seat, Seat Belt	●	
Adjustable Tilting Steering Column	●	
12-volt Power Outlet	●	
Horn, Backup Alarm	●	
Internal Rear View Mirror	●	
Cab Internal Roll-down Sun Screen (Cab)		○
ROPS/FOPS Cab with Climate Control and External Rear View Mirrors		○
Deluxe High-back Air-ride seat (Cab)		○
Sun/Debris Shields (Canopy)		○
Additional Mirror Options		○
Rear View Camera with Color Touchscreen Display		○
Sound Reduction Kit		○

VIBRATORY SYSTEM	STANDARD	OPTIONAL
Smooth Drum	●	
Dual Amplitude, Dual Frequency	●	
Pod-Style Eccentric Weight Housings	●	
Auto-vibe Function	●	
Rear Adjustable Steel Scraper	●	
Padfoot Shell Kit (oval or square pads)		○
Dual Adjustable Steel Scrapers		○
Dual Adjustable Polyurethane Scrapers		○

POWERTRAIN	STANDARD	OPTIONAL
Cat® C4.4 Diesel Engine, 4 cylinder	●	
Eco-mode	●	
Single Propel Pump	●	
Fuel Filter, Water Separator, Priming Pump, Water Indicator	●	
Radiator/Hydraulic Oil Cooler	●	
Dual Braking System	●	
Two-speed Hydrostatic Transmission	●	
Transmission Guard		○

TECHNOLOGY SOLUTIONS	STANDARD	OPTIONAL
Measure - Machine Drive Power and/or CMV		○
Map - SBAS GNSS Mapping		○
Connect - Cloud and Machine Connectivity		○

ELECTRICAL	STANDARD	OPTIONAL
12 volt Electrical System	●	
120 ampere Alternator	●	
900 Cold-cranking Amps Battery Capacity	●	

OTHER	STANDARD	OPTIONAL
Product Link™	●	
Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	●	
S-O-S SM Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	●	
Upgraded LED Light Package		○
Amber Rotating Beacon		○
Flotation Tread or Lug Tread Tires		○
XT Weight Kit		○

TECHNICAL SPECIFICATIONS

ENGINE			
Engine Model	Cat C4.4		
Emissions	US EPA Tier 3 EU Stage IIIA Equivalent		
Gross Power ISO 14396	83.0 kW	111.3 hp	
Gross Power SAE J1995	83.8 kW	112.4 hp	
Net Power ISO 9249*	79.4 kW	106.5 hp	
Net Power SAE J1349*	78.5 kW	105.3 hp	
Displacement	4.4 L	268.5 in ³	
Stroke	127 mm	4.1 in	
Bore	105 mm	4.1 in	
Max. Travel Speed (Forward or Reverse)	11.0 km/h	6.84 mph	
Theoretical Gradeability, with or without vibration**			
CS10 GC	55%		
CS11 GC	55%		
CS12 GC	50%		

* 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.

** Actual gradeability may vary based on site conditions and machine configuration. Refer to the Operation and Maintenance Manual for more information.

MACHINE WEIGHT			
Operating Weight with Sun Canopy			
CS10 GC	10 111 kg	22,291 lb	
CS11 GC	10 849 kg	23,918 lb	
CS12 GC	12 275 kg	27,061 lb	
Operating Weight with ROPS/FOPS Canopy			
CS10 GC	10 288 kg	22,681 lb	
CS11 GC	11 026 kg	24,308 lb	
CS12 GC	12 453 kg	27,454 lb	
Operating Weight with ROPS/FOPS Cab			
CS10 GC	10 451 kg	23,040 lb	
CS11 GC	11 186 kg	24,661 lb	
CS12 GC	12 613 kg	27,807 lb	
Weight at Drum with Sun Canopy			
CS10 GC	5734 kg	12,641 lb	
CS11 GC	6000 kg	13,228 lb	
CS12 GC	7594 kg	16,742 lb	
Weight at Drum with ROPS/FOPS Canopy			
CS10 GC	5803 kg	12,793 lb	
CS11 GC	6069 kg	13,380 lb	
CS12 GC	7663 kg	16,894 lb	
Weight at Drum with ROPS/FOPS Cab			
CS10 GC	5850 kg	12,897 lb	
CS11 GC	6114 kg	13,479 lb	
CS12 GC	7708 kg	16,993 lb	

VIBRATORY SYSTEM			
Nominal Amplitude - High	2.0 mm	0.079 in	
Frequency at High Idle	30.0 Hz	1800 vpm	
Frequency at Eco-Mode	28.6 Hz	1716 vpm	
Nominal Amplitude - Low	1.0 mm	0.039 in	
Frequency at High Idle	33 Hz	1980 vpm	
Frequency at Eco-Mode	31.5 Hz	1890 vpm	
Centrifugal Force			
Maximum	250 kN	56,200 lb	
Minimum	149 kN	33,500 lb	
Static Linear Load with Sun Canopy			
CS10 GC	26.9 kg/cm	150.6 lb/in	
CS11 GC	28.1 kg/cm	157.4 lb/in	
CS12 GC	35.6 kg/cm	199.3 lb/in	
Static Linear Load with ROPS/FOPS Canopy			
CS10 GC	27.2 kg/cm	152.9 lb/in	
CS11 GC	28.4 kg/cm	159.0 lb/in	
CS12 GC	35.9 kg/cm	201.0 lb/in	
Static Linear Load with ROPS/FOPS Cab			
CS10 GC	27.4 kg/cm	153.4 lb/in	
CS11 GC	28.7 kg/cm	160.7 lb/in	
CS12 GC	36.1 kg/cm	202.1 lb/in	
French Classification, Data/Class with ROPS/FOPS Cab			
CS10 GC	38.8	VM2	
CS11 GC	40.5	VM3	
CS12 GC	51.1	VM3	

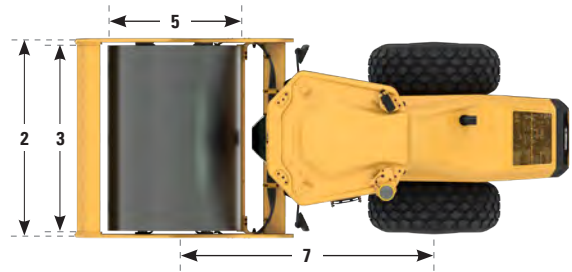
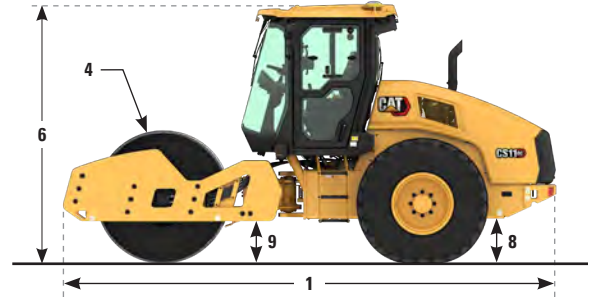
SERVICE REFILL CAPACITIES			
Fuel Tank (total capacity)	248 L	65.6 gal	
Cooling System	18.5 L	4.9 gal	
Engine Oil with Filter	9.5 L	2.5 gal	
Eccentric Weight Housings (combined)	26 L	6.9 gal	
Axle and Final Drives	10 L	2.6 gal	
Hydraulic Tank (service refill)	23 L	6.1 gal	

SMOOTH DRUM DIMENSIONS

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	3.0 m 9.8 ft
with Padfoot Shell Kit option	3.03 m 9.93 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°

OPTIONAL PADFOOT SHELL KIT SPECIFICATIONS

Number of Pads	120
Pad Height (oval pads)	90 mm 3.5 in
Pad Face Area (oval pads)	63.5 cm ² 9.8 in ²
Pad Height (optional square pads)	90 mm 3.5 in
Pad Face Area (optional square pads)	105.6 cm ² 16.4 in ²
Number of Chevrons	16



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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