# CS10 GC | CS11 GC | CS12 GC CP11 GC | CP12 GC

**VIBRATORY SOIL COMPACTORS** 



#### **Engine Power**

U.S. EPA Tier 4 Final, EU Stage V

Compaction Width

Operating Weight (with Cab)

CS10 GC

CS11 GC

CS12 GC

CP11 GC

CP12 GC

90.0 kW (121.0 hp) 2134 mm (84 in)

10 494 kg (23,136 lb)

11 238 kg (24,775 lb)

12 655 kg (27,900 lb)

11 389 kg (25,109 lb)

12 641 kg (27,869 lb)

See Technical Specifications for detailed engine emissions information



# CAT® GC VIBRATORY SOIL COMPACTORS

GC Vibratory Soil Compactors deliver dependable, economical production with performance that exceeds expectations. Ready to help you make your business stronger, Cat® GC 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 VIBRATORY SOIL COMPACTORS**

Cat GC 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 models feature an easy to use interface for the operator with excellent visibility to the ground, and an autovibe function providing dependable compaction.

# LOW OPERATION COSTS

Experience up to 10% 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.

<sup>\*</sup> 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 job site
- Optional rear vision camera provides a wide view behind the machine for better visibility
- Upgraded LED lighting for super night time illumination









#### **OPERATE IN COMFORT**

**EXCELLENT VISIBILITY** 

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

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





#### **DRUM OPTIONS**

GC vibratory soil compactors are available with smooth or padfoot drums. Two piece padfoot shell kit options are available on smooth drum models to maximize versatility.



#### **ERGONOMIC ENTRY/EXIT**

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



#### FUEL EFFICIENCY SAVINGS ADD UP



USING ECO-MODE LOWERS FUEL CONSUMPTION

THE ADVANTAGE

USE UP TO 10%

**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 C3.6 engine meets U.S. EPA Tier 4 Final and EU Stage V regional emissions standards. This engine is reliable, quiet, and has durable power for vibratory soil compactor applications.

55% THEORETICAL GRADEABILITY

CS10 GC | CP11 GC | CS11 GC

50% THEORETICAL GRADEABILITY

CP12 GC | CS12 GC

# SIMPLE DESIGN EXCEPTIONAL RESULTS



#### REACH HIGHER WITH THE GC

- + 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 vibratory soil compactor 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 job sites and lift thicknesses.



### **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.



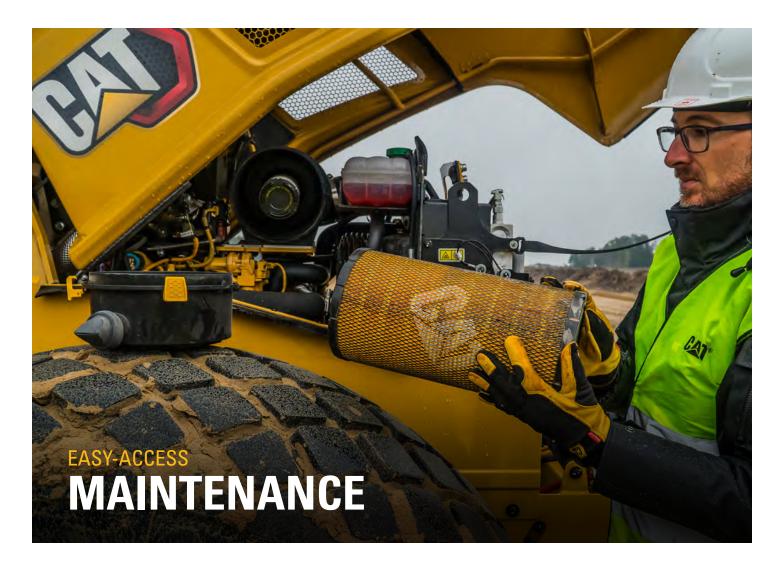
#### **GNSS MAPPING**

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  $\Omega A/\Omega C$  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.



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·S<sup>SM</sup> 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 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 models feature a maintenance-free hitch that requires no greasing.

#### **CAT LINK TECHNOLOGY**

#### TAKES THE GUESSWORK OUT OF MANAGING YOUR FOUIPMENT

**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™

Product Link™ collects data automatically from your assets — any type and any brand. Information such as location, hours, fuel usage, productivity, idle time, maintenance alerts, diagnostic codes, and machine health can be viewed online through web and mobile applications.

#### ✓ 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 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 performance and GC machines.

NOTE: Bumper and scraper design is different between performance and GC models. 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 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.

**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
Canopy with Handrails/Guardrails, Floor Mat	•	
Vinyl Adjustable Seat, Seat Belt	•	
Adjustable Tilting Steering Column	•	
12-volt Power Outlet	•	
Horn, Backup Alarm	•	
Internal Rear View Mirror	•	
ROPS/FOPS Cab with Climate Control and External Rear View Mirrors		0
Deluxe High-back Air-ride seat (Cab)		0
Sun/Debris Shields (Canopy)		0
Additional Mirror Options		0
Rear View Camera with Color Touchscreen Display		0
Sound Reduction Kit		0

VIBRATORY SYSTEM	STANDARD	OPTIONAL
Smooth Drum	•	
Dual Amplitude, Dual Frequency	•	
Pod-Style Eccentric Weight Housings	•	
Auto-vibe Function	•	
Rear Adjustable Steel Scraper (smooth drum models only)	•	
Padfoot Drum and Scraper (padfoot drum models only)	•	
Padfoot Shell Kit (oval or square pads) (smooth drum models only)		0
Dual Adjustable Steel Scrapers (smooth drum models only)		0
Dual Adjustable Polyurethane Scrapers (smooth drum models only)		0

POWERTRAIN	STANDARD	OPTIONAL
Cat® C3.6 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		0

TECHNOLOGY SOLUTIONS	STANDARD	OPTIONAL
Measure - Machine Drive Power and/or CMV		0
Map - SBAS GNSS Mapping		0
Connect - Cloud and Machine Connectivity		0

ELECTRICAL	STANDARD	OPTIONAL
12 volt Electrical System	•	
150 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 <sup>SM</sup> Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	•	
Upgraded LED Light Package		0
Amber Rotating Beacon		0
Flotation Tread or Lug Tread Tires		0
XT Weight Kit		0

#### **TECHNICAL SPECIFICATIONS**

ENG	SINE	
Engine Model	Cat C3.6	
Emissions	U.S. EPA Tier 4	Final, EU Stage V
Engine Power ISO 14396:2002	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 <sup>3</sup>
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 with	out vibration**	
CS10 GC	55	%
CS11 GC	55	%
CS12 GC	50	%
CP11 GC	55	%
CP12 GC	50	%

<sup>\*</sup> 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.

MACHI	NE WEIGHTS		
Operating Weight with ROPS/FOPS Canopy			
CS10 GC	10 340 kg	22,796 lb	
CS11 GC	11 084 kg	24,435 lb	
CS12 GC	12 501 kg	27,560 lb	
CP11 GC	11 235 kg	24,769 lb	
CP12 GC	12 487 kg	27,529 lb	
Operating Weight with ROPS/FOPS	S Cab		
CS10 GC	10 494 kg	23,136 lb	
CS11 GC	11 238 kg	24,775 lb	
CS12 GC	12 655 kg	27,900 lb	
CP11 GC	11 389 kg	25,109 lb	
CP12 GC	12 641 kg	27,869 lb	
Weight at Drum with ROPS/FOPS C	Canopy		
CS10 GC	5830 kg	12,853 lb	
CS11 GC	6102 kg	13,453 lb	
CS12 GC	7691 kg	16,955 lb	
CP11 GC	6345 kg	13,988 lb	
CP12 GC	7698 kg	16,971 lb	
Weight at Drum with ROPS/FOPS 0	Cab		
CS10 GC	5873 kg	12,948 lb	
CS11 GC	6146 kg	13,549 lb	
CS12 GC	7734 kg	17,051 lb	
CP11 GC	6388 kg	14,084 lb	
CP12 GC	7741 kg	17,066 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 ROPS/FOPS Can	юру	
CS10 GC	27.3 kg/cm	153.0 lb/in
CS11 GC	28.6 kg/cm	160.1 lb/in
CS12 GC	36.0 kg/cm	201.8 lb/in
Static Linear Load with ROPS/FOPS Cab	1	
CS10 GC	27.5 kg/cm	154.1 lb/in
CS11 GC	28.8 kg/cm	161.3 lb/in
CS12 GC	36.2 kg/cm	202.9 lb/in
French Classification, Data/Class with F	OPS/FOPS Cab	
CS10 GC	38.9	VM2
CS11 GC	40.7	VM3
CS12 GC	51.3	VM3
CP11 GC	40.2	VM3
CP12 GC	48.7	VM3

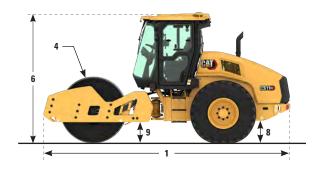
SERVICE REFILL CAPACITIES			
Fuel Tank (total capacity)	213 L	56.3 gal	
Diesel Exhaust Fuel (refill capacity)	19 L	5.0 gal	
Cooling System	18.5 L	4.9 gal	
Engine Oil with Filter	11.6 L	3.1 gal	
Eccentric Weight Housings (combined)	26 L	6.9 gal	
Axle and Final Drives	10 L	2.6 gal	
Hydraulic Tank (service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

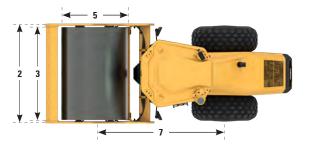
#### **TECHNICAL SPECIFICATIONS**

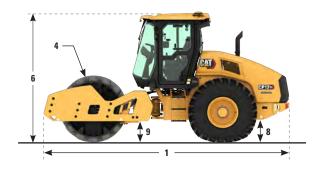
	SMOOTH D	RUM DIMENSIONS	
1	Overall Length	5.7 m	18.7 ft
2	Overall Width	2.3 m	7.53 ft
3	Drum Width	2134 mm	84 in
4	Drum Shell Thickness	25 mm	0.98 in
5	Drum Diameter	1535 mm	60.4 in
6	Overall Height	3.0 m	9.8 ft
	with Padfoot Shell Kit option	3.0 m	9.9 ft
7	Wheelbase	3.0 m	9.8 ft
8	Ground Clearance	518 mm	20.4 in
9	Curb Clearance	492 mm	19.4 in
	Inside Turning Radius	3.9 m	12.7 ft
	Hitch Articulation Angle	34°	
	Hitch Oscillation Angle	15°	

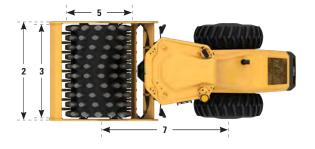
	PADFOOT DIMENSIONS			
1	Overall Length	5.70 m	18.71 ft	
2	Overall Width	2.30 m	7.53 ft	
3	Drum Width	2134 mm	84 in	
4	Drum Shell Thickness	25 mm	1.0 in	
5	Drum Diameter (over pads)	1549 mm	60.9 in	
6	Overall Height	3.0 m	9.8 ft	
7	Wheelbase	3.0 m	9.8 ft	
8	Ground Clearance	516 mm	20.3 in	
9	Curb Clearance	496 mm	19.5 in	
	Inside Turning Radius	3.86 m	12.7 ft	
	Hitch Articulation Angle	34	l°	
	Hitch Oscillation Angle	15	5°	

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 <sup>2</sup>	9.8 in <sup>2</sup>
Pad Height (optional square pads)	90 mm	3.5 in
Pad Face Area (optional square pads)	105.6 cm <sup>2</sup>	16.4 in <sup>2</sup>
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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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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QEDQ2824-02 (03-2023) Build Number: 01A Europe, Japan, Korea, N Am

