



# Cat<sup>®</sup> CS10 GC

## *Smooth Drum Vibratory Soil Compactor*

*The Cat<sup>®</sup> CS10 GC features a smooth drum and is ideally suited for granular soil applications with the use of an optional padfoot shell kit 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 sealed-for-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
- Scalable solutions can be configured to meet customer needs



# Cat® CS10 GC Smooth Drum Vibratory Soil Compactor

## Standard and Optional Equipment

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

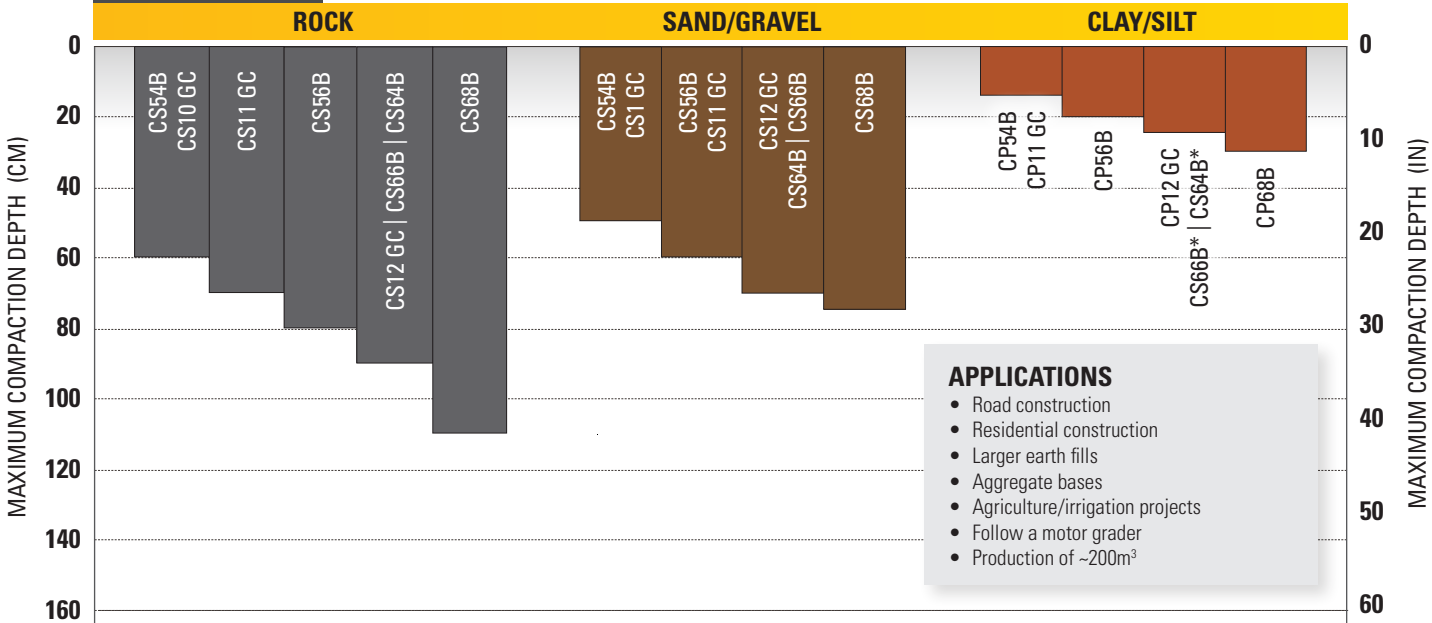
	Standard	Optional		Standard	Optional
<b>OPERATOR ENVIRONMENT</b>			<b>POWERTRAIN</b>		
Sun Canopy with Platform Handrails/ Guardrails, Floor Mat	✓		Cat® C4.4 Diesel Engine, 4-cylinder	✓	
Vinyl Adjustable Seat, Seat Belt	✓		Single Propel Pump	✓	
Adjustable Tilting Steering Column	✓		Dual Fuel Filter, Water Separator, Priming Pump, Water Indicator	✓	
12-volt Power Outlet	✓		Radiator/Hydraulic Oil Cooler, Charge Air Cooler	✓	
Horn, Backup Alarm	✓		Dual Braking System	✓	
Internal Rear View Mirror	✓		Two-Speed Hydrostatic Transmission	✓	
ROPS/FOPS Canopy with Handrails/ Guardrails, Floormat		✓	Transmission Guard		✓
ROPS/FOPS Cab with Climate Control		✓	<b>TECHNOLOGY SOLUTIONS</b>		
Rear View Camera with Color Touchscreen Display (Cab)		✓	Measure - Machine Drive Power and/or CMV		✓
Sun/Debris Shields (Canopy)		✓	Map - SBAS GNSS Mapping		✓
Cab Internal Roll-down Sun Screen (Cab)		✓	Connect - Machine-to-Machine Communication		✓
Sound Reduction Kit		✓	<b>ELECTRICAL</b>		
Sun Visor (Cab)		✓	12-volt Electrical System	✓	
Vinyl Suspension Seat with Arm Rest		✓	120 ampere Alternator	✓	
Deluxe High-Back Air-ride Seat (Cab)		✓	900 Cold-Cranking Amps Battery Capacity	✓	
<b>VIBRATORY SYSTEM</b>			<b>OTHER</b>		
Smooth Drum	✓		Product Link™	✓	
Dual Amplitude, Dual Frequency	✓		Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
Pod-Style Eccentric Weight Housings	✓		S•O•S <sup>SM</sup> Sampling Valves: Engine Oil, Hydraulic Oil, and Coolant	✓	
Auto-Vibe Function	✓		High Ambient Temperature Oil Factory Fill		✓
Rear Adjustable Steel Scraper	✓		Additional External Rear View Mirror		✓
Padfoot Shell Kit (oval or square pads available)		✓	Upgraded LED Light Package		✓
Dual Adjustable Steel Scrapers		✓	Amber Rotating Beacon		✓
Dual Adjustable Polyurethane Scrapers		✓	Lug Tread Tires		✓
			XT Weight Kit		✓

# Cat® CS10 GC Smooth Drum Vibratory Soil Compactor

## Vibratory Soil Compactor Selection Guide

**10 - 15 T**

Assumes density specification is 95% of Standard Proctor and can vary substantially due to different soil conditions.



- APPLICATIONS**
- Road construction
  - Residential construction
  - Larger earth fills
  - Aggregate bases
  - Agriculture/irrigation projects
  - Follow a motor grader
  - Production of ~200m<sup>3</sup>

**Rock**  
 Smooth drum, high amplitude moving to low amplitude when approaching compaction, 4-8 passes  
 Size: Less than 50 mm (2 in) diameter

**Sand/Gravel**  
 Smooth drum, high amplitude moving to low amplitude when approaching compaction, 4-6 passes

**Clay/Silt**  
 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

# Cat® CS10 GC Smooth Drum Vibratory Soil Compactor

## Technical Specifications

### Engine - Powertrain

Engine Model	Cat® C4.4	
Emissions	Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA	
Engine Power ISO14396:2002	83.0 kW	111.3 hp
Gross Power SAE J1995:2014	83.8 kW	112.4 hp
Net Power ISO 9249:2007*	79.4 kW	106.5 hp
Net Power SAE J1349:2011*	78.5 kW	105.3 hp
Displacement	4.4 L	268.5 in <sup>3</sup>
Stroke	127 mm	5.0 in
Bore	105 mm	4.1 in
Max. Travel Speed (Forward or Reverse)	11 km/h	6.8 mph
Theoretical Gradeability, with or without vibration**	55%	

### Vibratory System Specifications

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	33.0 Hz	1980 vpm
Frequency at Eco-Mode	31.5 Hz	1890 vpm
Centrifugal Force		
Maximum	250 kN	26,200 lb
Minimum	149 kN	33,500 lb
Static Linear Load		
w/ Sun Canopy	27.1 kg/cm	151.8 lbs/in
w/ ROPS/FOPS Canopy	27.4 kg/cm	153.6 lbs/in
w/ ROPS/FOPS Cab	27.6 kg/cm	154.8 lbs/in
French Classification, data/class w/ ROPS/FOPS Cab	39.1	VM2

\* 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.

\*\*\* Standard operating weight considers full fuel tank, 75 kg operator, flotation tires, padfoot drum, and cab with A/C.

### Service Refill Capacities

Fuel Tank, total capacity	248 L	65.6 gal
Cooling System	18.5 L	4.9 gal
Engine Oil w/ 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

### Weights

Operating Weight w/ Sun Canopy	10 160 kg	22,400 lb
w/ XT Weight Kit	11 173 kg	24,633 lb
w/ Oval Padfoot Shell Kit	11 842 kg	26,106 lb
w/ Square Padfoot Shell Kit	12 001 kg	26,457 lb
w/ Padfoot Bumper, no shell	10 325 kg	22,762 lb
Operating Weight w/ ROPS/FOPS Canopy	10 338 kg	22,791 lb
w/ XT Weight Kit	11 351 kg	25,025 lb
w/ Oval Padfoot Shell Kit	12 019 kg	26,498 lb
w/ Square Padfoot Shell Kit	12 178 kg	26,849 lb
w/ Padfoot Bumper, no shell	10 502 kg	23,153 lb
Operating Weight w/ ROPS/FOPS Cab	10 492 kg	23,131 lb
w/ XT Weight Kit	11 505 kg	25,364 lb
w/ Oval Padfoot Shell Kit	12 173 kg	26,838 lb
w/ Square Padfoot Shell Kit	12 333 kg	27,188 lb
w/ Padfoot Bumper, no shell	10 656 kg	23,493 lb
Weight at Drum w/ Sun Canopy	5785 kg	12,754 lb
w/ XT Weight Kit	7125 kg	15,708 lb
w/ Oval Padfoot Shell Kit	7413 kg	16,343 lb
w/ Square Padfoot Shell Kit	7572 kg	16,694 lb
w/ Padfoot Bumper, no shell	5896 kg	12,999 lb
Weight at Drum w/ ROPS/FOPS Canopy	5855 kg	12,907 lb
w/ XT Weight Kit	7194 kg	15,861 lb
w/ Oval Padfoot Shell Kit	7483 kg	16,496 lb
w/ Square Padfoot Shell Kit	7642 kg	16,847 lb
w/ Padfoot Bumper, no shell	5966 kg	13,152 lb
Weight at Drum w/ ROPS/FOPS Cab	5897 kg	13,001 lb
w/ XT Weight Kit	7237 kg	15,955 lb
w/ Oval Padfoot Shell Kit	7525 kg	16,591 lb
w/ Square Padfoot Shell Kit	7684 kg	16,941 lb
w/ Padfoot Bumper, no shell	6008 kg	13,246 lb

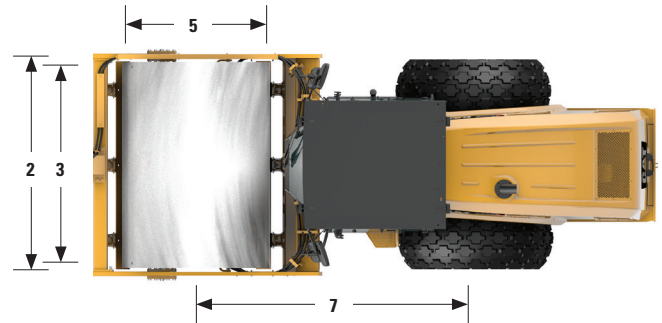
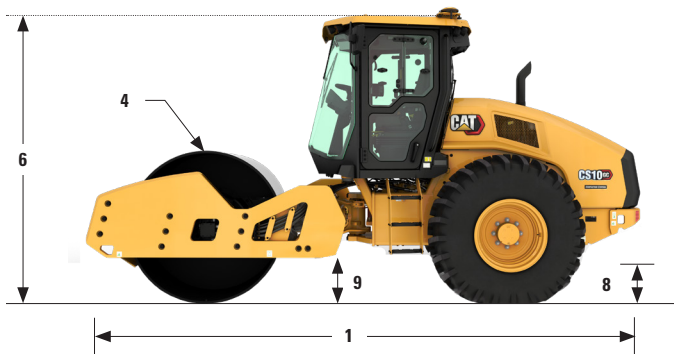
The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.2 kg of refrigerant, which has a CO<sup>2</sup> equivalent of 3.146 metric tonnes.

# Cat® CS10 GC Smooth Drum Vibratory Soil Compactor

## 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	1535 mm	60.4 in
6	Overall Height	3.0 m	9.8 ft
	w/ Padfoot Shell Kit option	3.0 m	9.8 ft
7	Wheelhouse	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°	

Optional Padfoot Shell Kit Specifications			
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		105.7 cm <sup>2</sup>	16.4 in <sup>2</sup>
Number of Chevrons		16	



# Cat® CS10 GC Smooth Drum Vibratory Soil Compactor

---



# Cat® CS10 GC Smooth Drum Vibratory Soil Compactor

---



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

© 2022 Caterpillar  
All rights reserved.

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

QEHQ2427-03 (10-2022)  
Build Number: 01A  
LRC

