



# Cat<sup>®</sup> CS12 GC

## Smooth Drum Vibratory Soil Compactor

*The Cat<sup>®</sup> CS12 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® CS12 GC Smooth Drum Vibratory Soil Compactor

## Technical Specifications

### Engine - Power Train

Engine Model	Cat® C4.4	
Global 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 <sup>3</sup>
Stroke	127 mm	5.0 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**	50%	

### 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	56,200 lb
Minimum	149 kN	33,500 lb
Static Linear Load		
w/ Sun Canopy	35.8 kg/cm	200.6 lbs/in
w/ ROPS/FOPS canopy	36.2 kg/cm	202.5 lbs/in
w/ ROPS/FOPS cab	36.4 kg/cm	203.6 lbs/in
French classification, data/class w/ ROPS/FOPS cab	51.4	VM3

\* 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

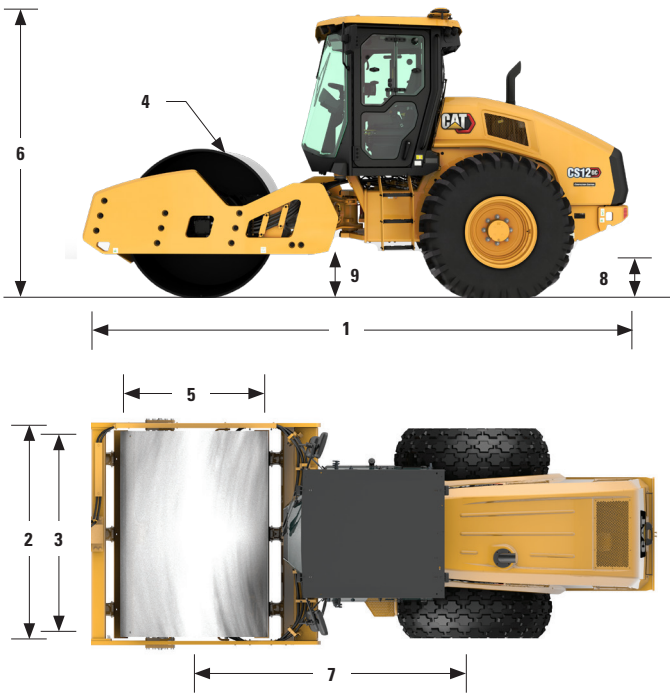
Fuel Tank, total capacity	248 L	65.6 gal
Cooling System	18.5 L	4.9 gal
Engine Oil w/ Filter	9.5 L	2.5 gal
Eccentric Weight Housings (combined)	26 L	6.9 gal
Axle and Final Drives	10 L	2.6 gal
Hydraulic Tank (service refill)	23 L	6.1 gal

### Weights

Operating Weight w/ Sun Canopy	12,321 kg	27,163 lb
w/ Oval Padfoot Shell Kit	12,989 kg	28,636 lb
w/ Square Padfoot Shell Kit	13,148 kg	28,986 lb
w/ Padfoot Bumper, no shell	11,472 kg	25,291 lb
Operating Weight w/ROPS/FOPS Canopy	12,499 kg	27,555 lb
w/ Oval Padfoot Shell Kit	13,167 kg	29,027 lb
w/ Square Padfoot Shell Kit	13,326 kg	29,378 lb
w/ Padfoot Bumper, no shell	11,650 kg	25,683 lb
Operating Weight w/ROPS/FOPS Cab***	12,653 kg	27,894 lb
w/ Oval Padfoot Shell Kit	13,321 kg	29,367 lb
w/ Square Padfoot Shell Kit	13,480 kg	29,718 lb
w/ Padfoot Bumper, no shell	11,804 kg	26,002 lb
Weight at Drum w/Sun Canopy	7646 kg	16,857 lb
w/ Oval Padfoot Shell Kit	7934 kg	17,491 lb
w/ Square Padfoot Shell Kit	8093 kg	17,841 lb
w/ Padfoot Bumper, no shell	6417 kg	14,146 lb
Weight at Drum w/ROPS/FOPS Canopy	7715 kg	17,009 lb
w/ Oval Padfoot Shell Kit	8003 kg	17,644 lb
w/ Square Padfoot Shell Kit	8162 kg	17,994 lb
w/ Padfoot Bumper, no shell	6486 kg	14,299 lb
Weight at Drum w/ROPS/FOPS Cab	7758 kg	17,104 lb
w/ Oval Padfoot Shell Kit	8046 kg	17,738 lb
w/ Square Padfoot Shell Kit	8205 kg	18,089 lb
w/ Padfoot Bumper, no shell	6529 kg	14,394 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.

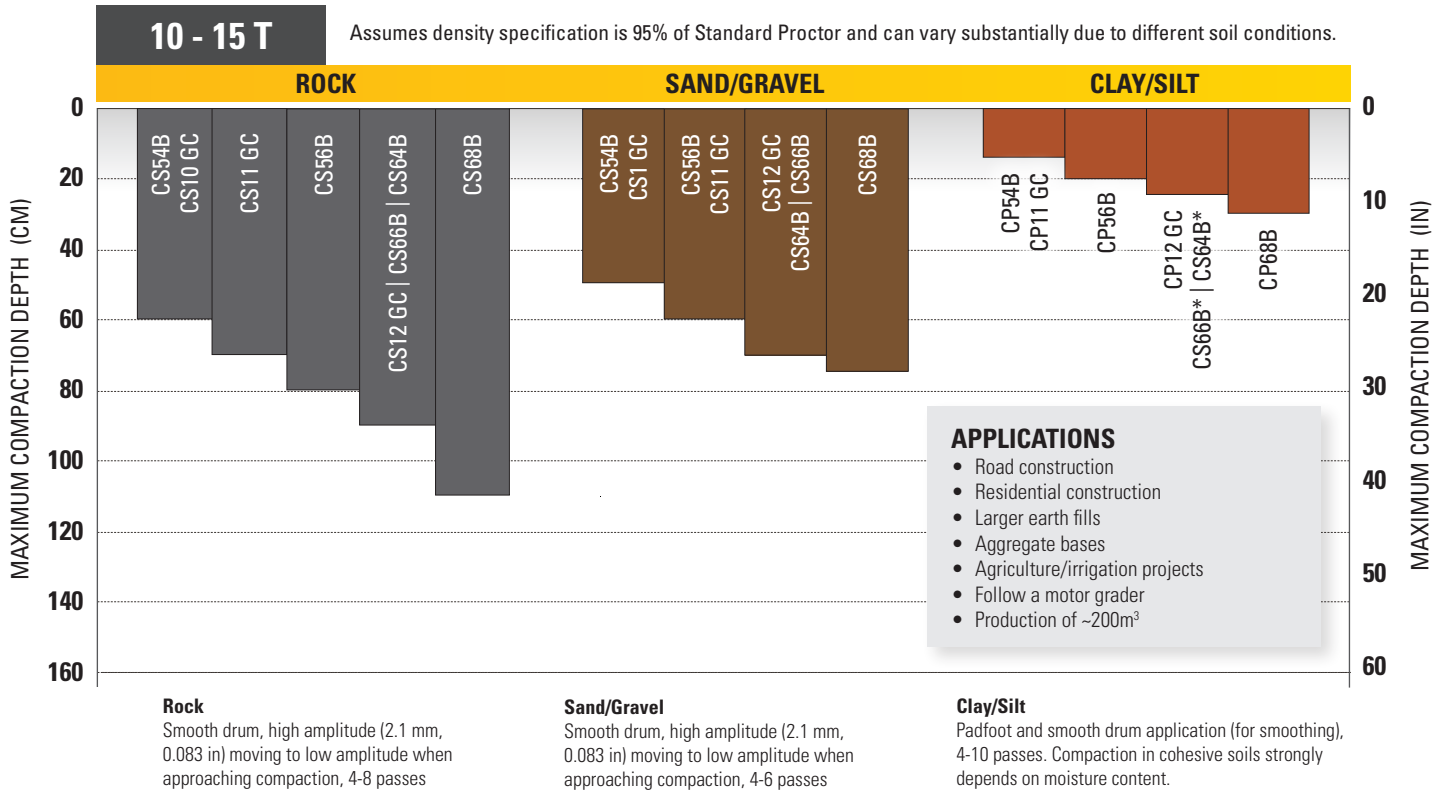
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Dimensions			
1	Overall Length	5.70 m	18.71 ft
2	Overall Width	2.30 m	7.53 ft
3	Drum Width	2134 mm	84 in
4	Drum Shell Thickness	25 mm	0.98 in
5	Drum Diameter	1535 mm	60.4 in
6	Overall Height	3.0 m	9.8 ft
	w/ Padfoot Shell Kit option	3.03 m	9.93 ft
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	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	

## Vibratory Soil Compactor Selection Guide



# Cat® CS12 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>POWER TRAIN</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		✓



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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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QEHQ2429-03 (07-2021)  
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