



Cat[®] CS12 GC

Smooth Drum Vibratory Soil Compactor

The Cat[®] 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

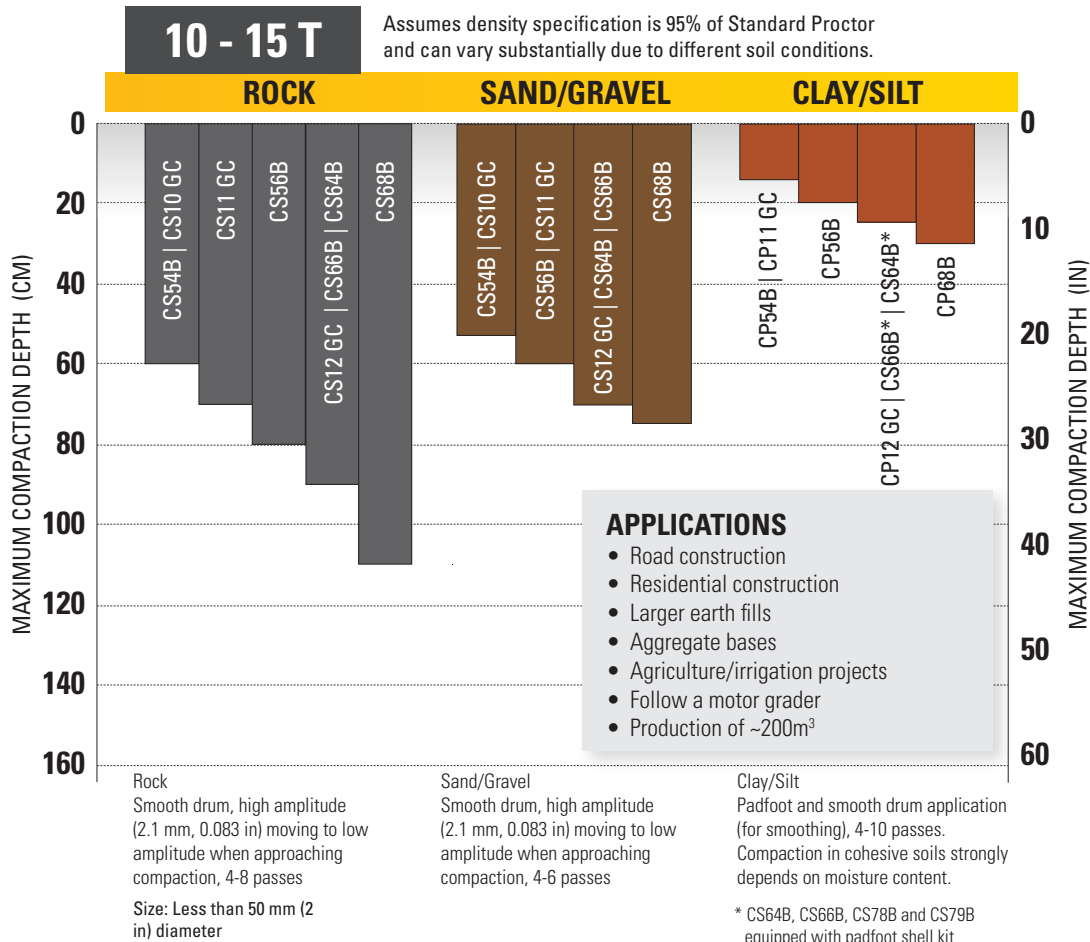
- The Cat engine provides ample power and consistent performance.
- Standard Eco-mode reduces fuel use during normal operation.

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.



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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 ³
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%	

Weights		
Operating Weight w/ sun canopy	12 275 kg	27,061 lb
Operating Weight w/ ROPS/FOPS canopy	12 453 kg	27,454 lb
Operating Weight w/ ROPS/FOPS cab	12 613 kg	27,807 lb
Weight at Drum w/ sun canopy	7594 kg	16,742 lb
Weight at Drum w/ ROPS/FOPS canopy	7663 kg	16,894 lb
Weight at Drum w/ ROPS/FOPS cab	7708 kg	16,993 lb

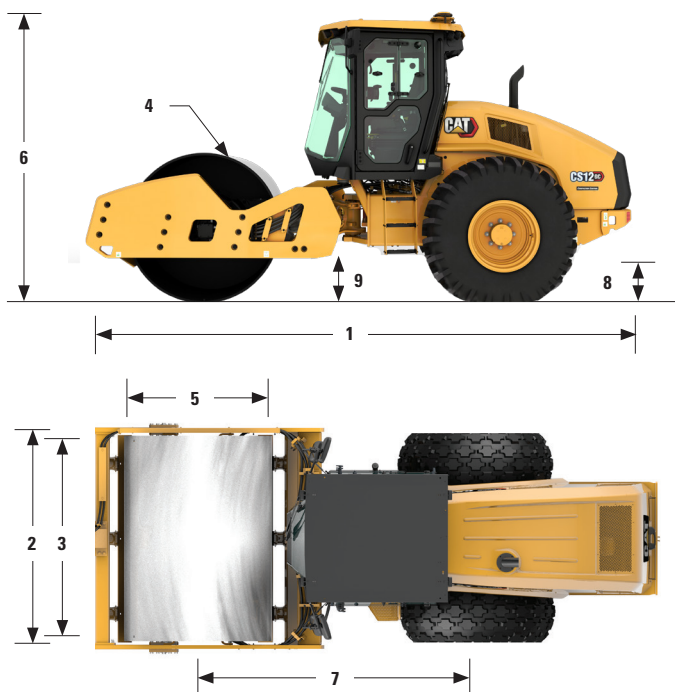
* Net power advertised is the power available at the engine flywheel when equipped with a fan at maximum speed, air cleaner, clean emissions module, and alternator.

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

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	35.6 kg/cm	199.3 lbs/in
w/ ROPS/FOPS canopy	35.9 kg/cm	201.0 lbs/in
w/ ROPS/FOPS cab	36.1 kg/cm	202.1 lbs/in
French classification, data/class w/ ROPS/FOPS cab	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 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

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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	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	

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Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
OPERATOR ENVIRONMENT			POWER TRAIN		
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	✓	
Sun/Debris Shields (Canopy)		✓	Transmission Guard		✓
Cab Internal Roll-down Sun Screen (Cab)		✓	TECHNOLOGY SOLUTIONS		
Sound Reduction Kit		✓	Measure - Machine Drive Power and/or CMV		✓
Sun Visor (Cab)		✓	Map - SBAS GNSS Mapping		✓
Deluxe High-back Air-ride Seat (Cab)		✓	Connect - Machine-to-Machine Communication		✓
VIBRATORY SYSTEM			ELECTRICAL		
Smooth Drum	✓		12 volt Electrical System	✓	
Dual Amplitude, Dual Frequency	✓		120 ampere Alternator	✓	
Pod-Style Eccentric Weight Housings	✓		900 Cold-cranking Amps Battery Capacity	✓	
Auto-vibe Function	✓		OTHER		
Rear Adjustable Steel Scraper	✓		Product Link™	✓	
Padfoot Shell Kit (oval or square pads available)		✓	Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
Dual Adjustable Steel Scrapers		✓	S-O-S SM Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	✓	
Dual Adjustable Polyurethane Scrapers		✓	High Ambient Temperature Oil Factory Fill		✓
			Upgraded LED Light Package		✓
			Amber Rotating Beacon		✓
			Flotation Tread or Lug Tread Tires		✓

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