



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.

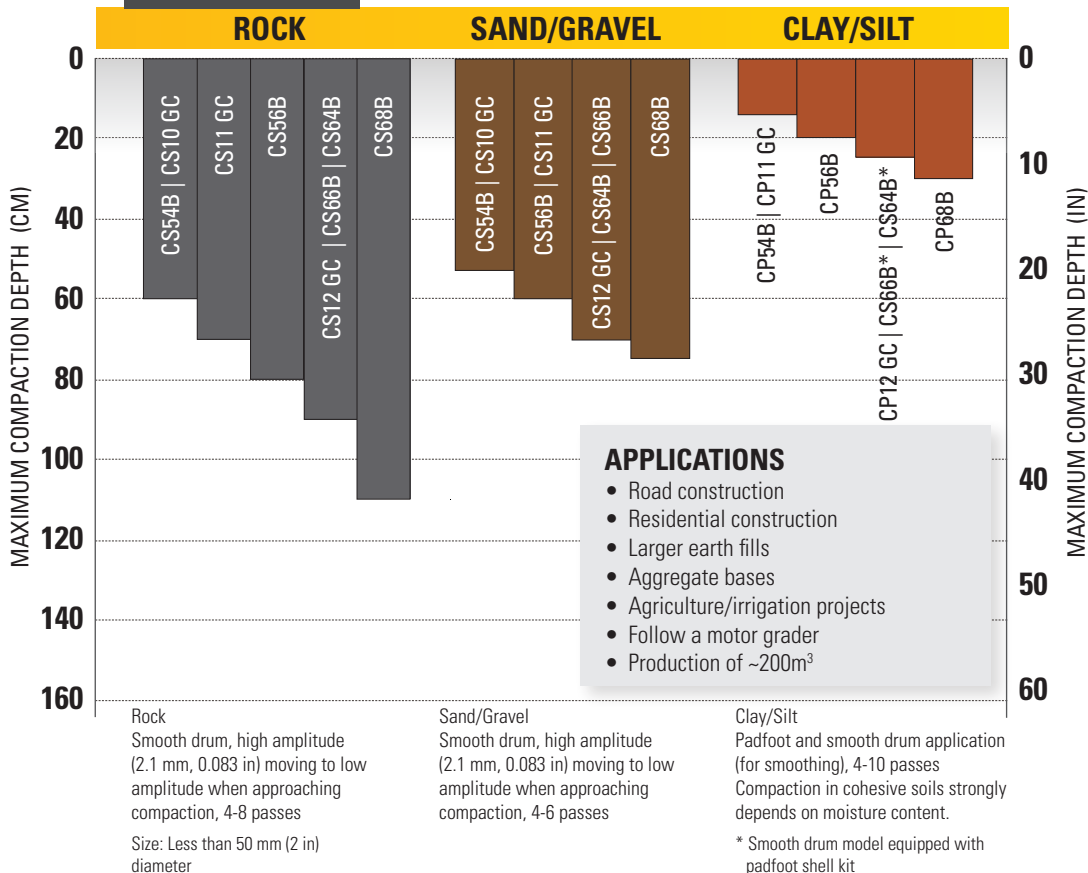
Optional Cat Compaction Control Technology

- 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.

VIBRATORY SOIL COMPACTOR SELECTION GUIDE

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



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Technical Specifications

Engine - Power Train		
Engine Model	Cat C3.6	
Global Emissions	US EPA Tier 4 Final EU Stage V	
Gross Power ISO 14396	90.0 kW	121.0 hp
Gross Power SAE J1995	91.7 kW	123.0 hp
Net Power ISO 9249*	83.7 kW	112.2 hp
Net Power SAE J1349*	82.9 kW	111.2 hp
Displacement	3.6 L	219.7 in ³
Stroke	120 mm	4.7 in
Bore	98 mm	3.9 in
Max. Travel Speed (Forward or Reverse)	11 km/h	6.84 mph
Theoretical Gradeability, with or without vibration**	50%	

Weights		
Operating Weight w/ ROPS/FOPS canopy	12 446 kg	27,438 lb
Operating Weight w/ ROPS/FOPS cab	12 609 kg	27,798 lb
Weight at Drum w/ ROPS/FOPS canopy	7637 kg	16,837 lb
Weight at Drum w/ ROPS/FOPS cab	7684 kg	16,940 lb

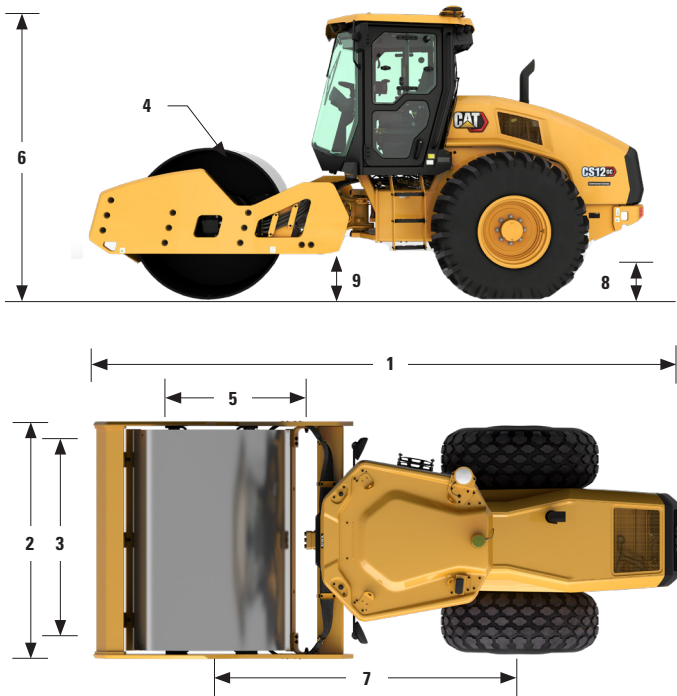
* Net power advertised is the power available at the engine flywheel when equipped with a fan at maximum speed, air cleaner, clean emissions module, and alternator.

** 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 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/ ROPS/FOPS canopy	35.8 kg/cm	200.5 lb/in
w/ ROPS/FOPS cab	36.0 kg/cm	201.6 lbs/in
French classification, data/class	50.9	VM3
w/ ROPS/FOPS cab		

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 w/ 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

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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		
ROPS/FOPS Canopy with Handrails/Guardrails, Floor Mat	✓		Cat C3.6 Diesel Engine, 4 cylinder	✓	
Vinyl Adjustable Seat, Seat Belt	✓		Single Propel Pump	✓	
Adjustable Tilting Steering Column	✓		Fuel Filter, Water Separator, Priming Pump, Water Indicator	✓	
12-volt Power Outlet	✓		Radiator/Hydraulic Oil Cooler	✓	
Horn, Backup Alarm	✓		Dual Braking System	✓	
Internal Rear View Mirror	✓		Two-speed Hydrostatic Transmission	✓	
ROPS/FOPS Cab with Climate Control		✓	Transmission Guard		✓
Deluxe High-back Air-ride seat (Cab)		✓	TECHNOLOGY SOLUTIONS		
Sun/Debris Shields (Canopy)		✓	Measure - Machine Drive Power and/or CMV		✓
Cab Internal Roll-down Sun Screen (Cab)		✓	Map - SBAS GNSS Mapping		✓
Rear View Camera with Color Touchscreen Display		✓	Connect - Cloud and Machine Connectivity		✓
Sound Reduction Kit		✓	ELECTRICAL		
VIBRATORY SYSTEM			12 volt Electrical System	✓	
Smooth Drum	✓		150 ampere Alternator	✓	
Dual Amplitude, Dual Frequency	✓		900 Cold-cranking Amps Battery Capacity	✓	
Pod-Style Eccentric Weight Housings	✓		OTHER		
Auto-vibe Function	✓		Product Link™	✓	
Rear Adjustable Steel Scraper	✓		Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
Padfoot Shell Kit (oval or square pads available)		✓	S-O-S SM Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	✓	
Dual Adjustable Steel Scrapers		✓	High Ambient Temperature Oil Factory Fill		✓
Dual Adjustable Polyurethane Scrapers		✓	Upgraded LED Light Package		✓
			Amber Rotating Beacon		✓
			Flotation Tread or Lug Tread Tires		✓

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