



Cat[®] CS12 GC

VIBRATORY SOIL COMPACTOR

FEATURES:

The Cat[®] CS12 GC features a smooth drum ideal for granular soil applications. A padfoot shell kit is available for cohesive soil applications.

- **Superior compaction performance** due to high weight at the drum and high amplitude.
- **Easy-to-use and comfortable** with simple controls within easy reach. Outstanding visibility to the front and rear of machine.
- **Proven, exclusive, world-class Cat features** including the ultra-reliable pod-style vibratory system; the sealed-for-life, maintenance-free hitch bearing; and optional Cat Compaction Control.
- **Reliable Cat engine** provides ample power and consistent performance. Standard Eco-mode reduces fuel use during normal operation.
- **Simple maintenance** due to maintenance-free hitch bearings and extended maintenance intervals for vibratory system and hydraulic system, providing more uptime and lower maintenance costs.
- **Optional Cat Compaction Control technology** helps the operator determine when compaction has been completed to specification for greater productivity and uniform compaction quality. Scalable solution can be configured to meet needs.

Specifications

Engine - Powertrain

| | | |
|---|---|-----------------------|
| Engine Model | Cat C4.4 | |
| Emissions | US EPA Tier 3/EU Stage IIIA/ equivalent | |
| Gross Power ISO 14396 | 83 kW | 111.3 hp |
| Net Power - SAE J1349 | 78.5 kW | 105.3 hp |
| Net Power - ISO 9249 | 79.4 kW | 106.5 hp |
| Displacement | 4.4 L | 268.5 in ³ |
| Stroke | 127 mm | 5 in |
| Bore | 105 mm | 4.1 in |
| Max. Travel Speed (Forward or Reverse) | 11.2 km/h | 6.9 mph |
| Theoretical Gradeability, no vibration* | 50% | |

Weights

| | | |
|--------------------------------|-----------|-----------|
| Operating Weight w/ sun canopy | 12 230 kg | 26,963 lb |
| w/ oval padfoot shell kit | 12 976 kg | 28,607 lb |
| w/ square padfoot shell kit | 13 135 kg | 28,958 lb |
| w/ padfoot bumper, no shell | 11 460 kg | 25,265 lb |
| Weight at Drum w/ sun canopy | 7582 kg | 16,716 lb |
| w/ oval padfoot shell kit | 7879 kg | 17,370 lb |
| w/ square padfoot shell kit | 8038 kg | 17,721 lb |
| w/ padfoot bumper, no shell | 6363 kg | 14,028 lb |

Vibratory System Specifications

| | | |
|---------------------------------------|------------|--------------|
| Nominal Amplitude - High | 2.0 mm | 0.079 in |
| Standard Frequency | 30 Hz | 1800 vpm |
| Eco-mode Frequency | 28.6 Hz | 1716 vpm |
| Nominal Amplitude - Low | 1.00 mm | 0.039 in |
| Standard Frequency | 33 Hz | 1980 vpm |
| Eco-mode Frequency | 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 | 35.5 kg/cm | 198.8 lbs/in |
| w/ sun canopy, shell bumper, no shell | 29.8 kg/cm | 166.9 lbs/in |

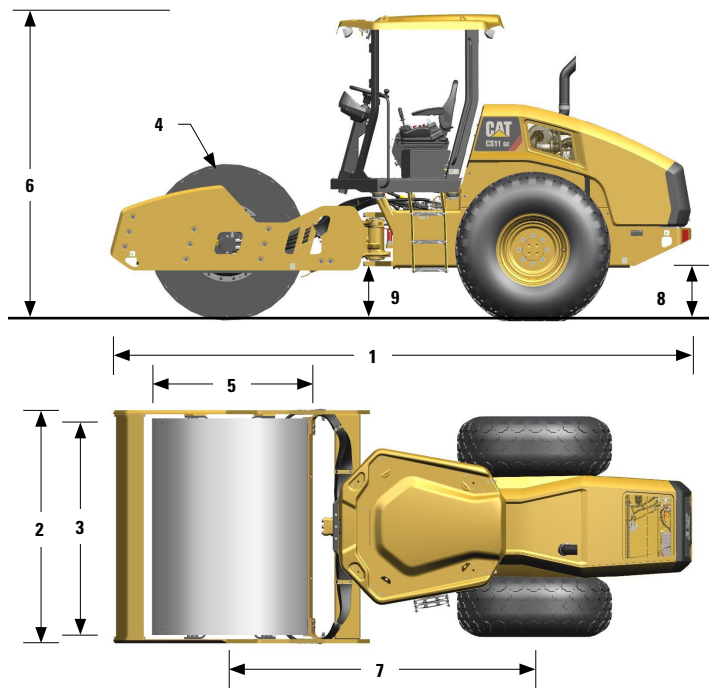
Service Refill Capacities

| | | |
|--------------------------------------|--------|----------|
| Fuel Tank (total capacity) | 248 L | 65.5 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 | 10.1 L | 2.7 gal |
| Hydraulic Tank (service refill) | 23 L | 6 gal |

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



CS12 GC Vibratory Soil Compactor



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 Maximum Overall Height | 2.99 m | 9.8 ft |
| with Padfoot Shell Kit option | 3.09 m | 10.1 ft |
| 7 Wheelbase | 3.00 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, square pads | 90 mm | 3.5 in |
| Pad Face Area, square pads | 105.6 cm ² | 16.4 in ² |
| Number of Chevrons | 16 | |

STANDARD EQUIPMENT *Varies by market- contact your Dealer for specifics.*

ELECTRICAL

- 12-volt Electrical System
- 120-ampere Alternator
- 900 Cold-cranking Amps Battery Capacity

OPERATOR ENVIRONMENT

- Sun Canopy with Platform Handrails/Guardrails
- Vinyl Adjustable Seat, Seat Belt
- Steering Wheel Console with gauges and/or audible warning alarm for: *Hydraulic oil temperature, Engine oil pressure, Engine coolant temperature, Alternator charge, Fuel level, Service hour meter, Engine RPM, Optional Cat Compaction Control*
- Adjustable Tilting Steering Column
- 12-volt Power Outlet
- Floor Mat
- Interior Rear View Mirror
- Horn, Backup Alarm

POWERTRAIN

- Cat® C4.4 Diesel Engine, 4-cylinder
- Propel Pump
- Dual Fuel Filters, Water Separator, Electronic Priming Pump, Water Indicator
- Radiator/Hydraulic Oil Cooler, Charge Air Cooler
- Dual Braking System
- Two-speed Hydrostatic Transmission

VIBRATORY SYSTEM

- Smooth Drum, Adjustable Steel Scraper
- Dual Amplitude, Dual Frequency
- Pod-Style Eccentric Weight System
- Auto-vibe Function

OTHER

- Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level
- Cat ToughGuard™ Hose
- S-O-SSM Sampling Valves, Engine Oil, Hydraulic Oil and Coolant
- Product Link™

OPTIONAL EQUIPMENT

- Padfoot Shell Kit (oval or square pad)
- Rotating Beacon
- Polyurethane Drum Scrapers
- Additional Steel Drum Scraper
- High Ambient Temperature Oil Factory Fill
- Cat Compaction Control, Machine Drive Power or CMV or Both
- SBAS GNSS Mapping for Cat Compaction Control (RTK available)
- Machine-to-Machine Communication for Cat Compaction Control
- Upgraded LED Light Package
- Flotation Tread or Lug Tread Tires
- Transmission Guard
- Side Mounted Rear View Mirrors
- Sound Reduction Kit
- Sun/Debris Shields

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.

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Product ID: CS12 GC

