



Cat[®] CS11 GC

Smooth Drum Vibratory Soil Compactor

The Cat[®] CS11 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
- Accelerometer-based (CMV) and exclusive Machine Drive Power (MDP) measurement technologies available
- Scalable solutions can be configured to meet customer needs



Cat® CS11 GC Smooth Drum Vibratory Soil Compactor

Standard and Optional Equipment

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

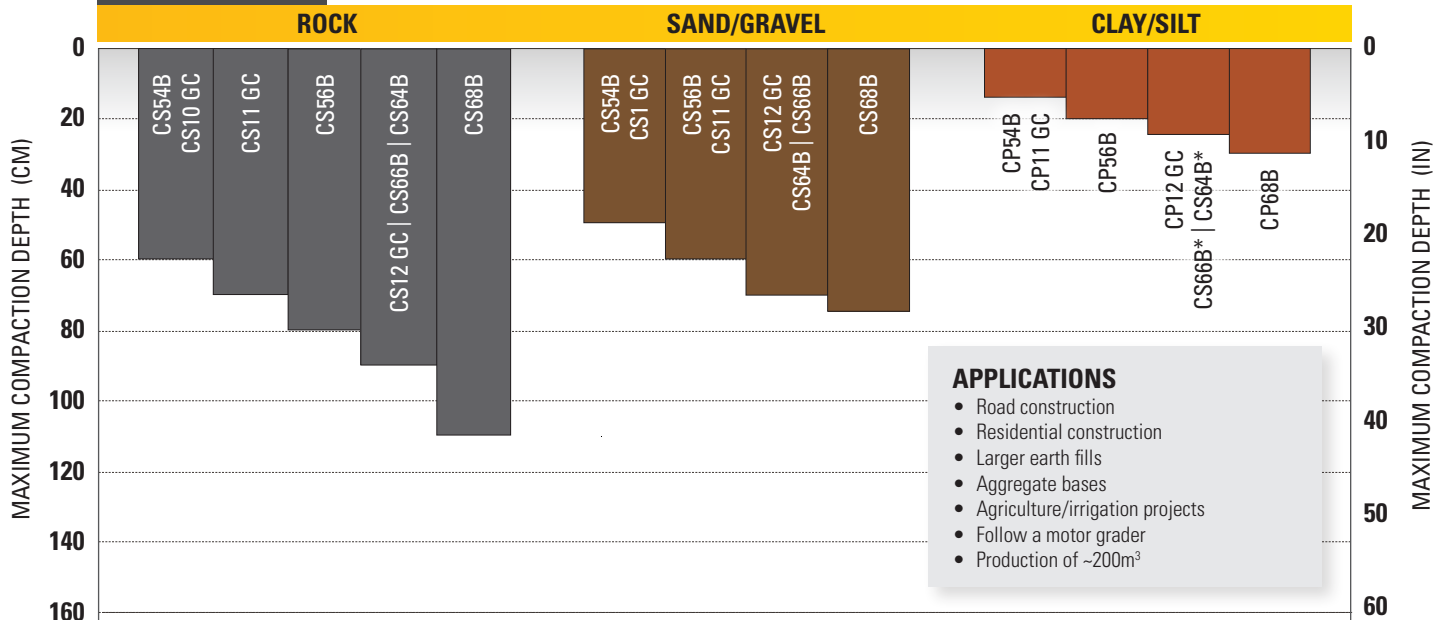
| | Standard | Optional | | Standard | Optional |
|--|----------|----------|---|----------|----------|
| OPERATOR ENVIRONMENT | | | POWERTRAIN | | |
| ROPS/FOPS Canopy with Handrails/ Guardrails, Floormat | ✓ | | Cat® C3.6 Diesel Engine, 4 cylinder | ✓ | |
| Vinyl Adjustable Seat, Seat Belt | ✓ | | Single 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 | | ✓ | Printer Port | | ✓ |
| | | | Seat Belt Switch | | ✓ |
| | | | Upgraded LED Light Package | | ✓ |
| | | | Amber Rotating Beacon | | ✓ |
| | | | XT Weight Kit | | |

Cat® CS11 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 ~200m³

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® CS11 GC Smooth Drum Vibratory Soil Compactor

Technical Specifications

Engine - Powertrain

| | | |
|---|-------------------------------------|-----------------------|
| Engine Model | Cat C3.6 | |
| Emissions | U.S. EPA Tier 4 Final EU Stage V | |
| Engine Power ISO14396:2002 | 90.0 kW | 121.0 hp |
| Gross Power SAE J1995:2014 | 91.7 kW | 122.9 hp |
| Net Power ISO 9249:2007* | 83.7 kW | 112.2 hp |
| Net Power SAE J1349:2011* | 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 | 6.8 mph |
| Theoretical Gradeability, with or without vibration** | 55% | |

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 |

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 | 28.6 kg/cm | 160.1 lbs/in |
| w/ ROPS/FOPS Cab | 28.8 kg/cm | 161.3 lbs/in |
| French Classification, data/class w/ ROPS/FOPS Cab | 40.7 | VM3 |

Weights

| | | |
|--------------------------------------|-----------|-----------|
| Operating Weight w/ ROPS/FOPS Canopy | 11 084 kg | 24,435 lb |
| w/ XT Weight Kit | 12 501 kg | 27,560 lb |
| w/ Oval Padfoot Shell Kit | 12 765 kg | 28,142 lb |
| w/ Square Padfoot Shell Kit | 12 924 kg | 28,493 lb |
| w/ Padfoot Bumper, no shell | 11 248 kg | 24,797 lb |
| Operating Weight w/ ROPS/FOPS Cab*** | 11 238 kg | 24,775 lb |
| w/ XT Weight Kit | 12 655 kg | 27,900 lb |
| w/ Oval Padfoot Shell Kit | 12 919 kg | 28,482 lb |
| w/ Square Padfoot Shell Kit | 13 078 kg | 28,832 lb |
| w/ Padfoot Bumper, no shell | 11 402 kg | 25,137 lb |
| Weight at Drum w/ ROPS/FOPS Canopy | 6102 kg | 13,453 lb |
| w/ XT Weight Kit | 7691 kg | 16,955 lb |
| w/ Oval Padfoot Shell Kit | 7730 kg | 17,042 lb |
| w/ Square Padfoot Shell Kit | 7889 kg | 17,393 lb |
| w/ Padfoot Bumper, no shell | 6213 kg | 13,698 lb |
| Weight at Drum w/ ROPS/FOPS Cab | 6146 kg | 13,549 lb |
| w/ XT Weight Kit | 7734 kg | 17,051 lb |
| w/ Oval Padfoot Shell Kit | 7774 kg | 17,138 lb |
| w/ Square Padfoot Shell Kit | 7933 kg | 17,488 lb |
| w/ Padfoot Bumper, no shell | 6257 kg | 13,794 lb |

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

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

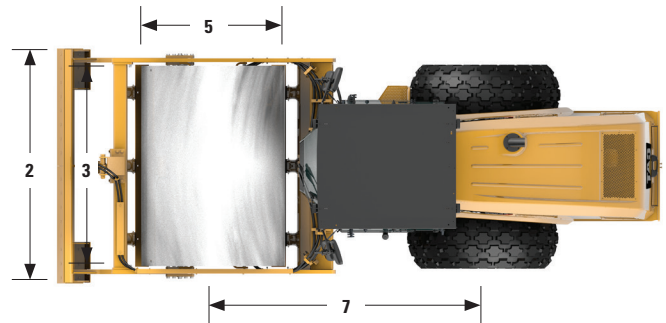
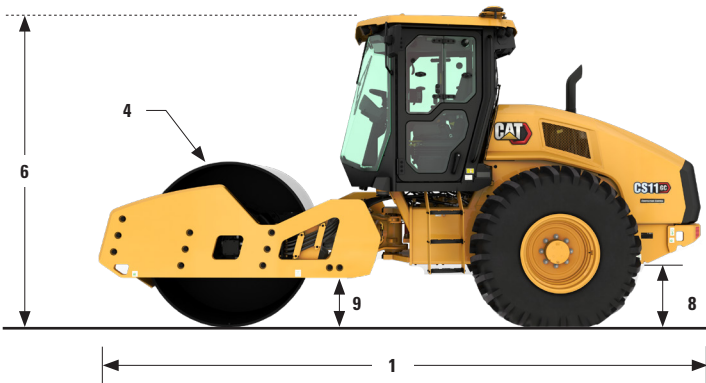
*** Standard operating weight considers full fuel tank, 75 kg operator, flotation tires, smooth drum, and cab with A/C.

Cat® CS11 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 ft |
| 6 | Maximum Overall Height | 3.0 m | 9.8 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 | 3.9 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 ² | 9.8 in ² |
| Pad Height, optional square pads | | 89.8 mm | 3.5 in |
| Pad Face Area, optional square pads | | 105.7 cm ² | 16.4 in ² |
| Number of Chevrons | | 16 | |



Cat® CS11 GC Smooth Drum Vibratory Soil Compactor

Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit www.caterpillar.com/en/company/sustainability.html.

ENGINE

- The Cat C3.6 is available in configurations that meet U.S. EPA Tier 4 Final and Stage V emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
 - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

**Engines with no aftertreatment devices can use higher blends, up to 20% biodiesel.*

AIR CONDITIONING SYSTEM

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.2 kg (4.91 lb) of refrigerant, which has a CO₂ equivalent of 3.146 metric tonnes (3.468 tons).

PAINT

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

SOUND PERFORMANCE

With cooling fan speed at maximum value:

Exterior Sound Pressure Level (SAE J88:2013) – 107 dB(A)

Operator Sound Pressure Level (ISO 6396:2008) – 85 dB(A)

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

OILS AND FLUIDS

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat BIO HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

FEATURES AND TECHNOLOGY

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Standard eco-mode limits engine RPM, lowering overall fuel consumption by up to 10% compared to high idle
 - Optional compaction control reduces unnecessary passes, contributing to lower overall fuel consumption
 - Extended maintenance intervals reduce fluid and filter consumption
 - Auto engine idle shutdown reduces unproductive hours and fuel burned

Cat® CS11 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.

© 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.

QEHQ2758-02 (09-2022)
Build Number: 01A

