

# Cat® CS44B

Smooth Drum Vibratory
Soil Compactor

The Cat® CS44B features a smooth drum and is ideally suited for granular soil applications or cohesive soil applications with the use of an optional padfoot shell kit.

### **Comfortable and Ergonomic Operator Station**

- Features adjustable seat with integrated multifunction LCD display and control console.
- Outstanding visibility to the front and rear of machine.
- Low sound levels and vibration for greater operator comfort and productivity.

### **Rear Vision Camera**

 The rear vision camera enhances visibility for more complete operator control and safety.

### **Exceptional Propel System**

 Build around the exclusive Cat® dual pump propel system, two pumps provide separate dedicated flow to drum drive motor and rear axle motor for exceptional gradeability and traction in forward and reverse.

### **Virtually Maintenance Free**

- · Maintenance-free hitch bearings.
- Extended maintenance intervals for vibratory system and hydraulic system, providing more uptime and lower maintenance costs.

### **Powerful Cat C3.4B Engine**

· Meets US EPA Tier 4 Final and EU Stage IV emissions standards.

### **Optional Cat Compaction Control**

- Helps operator determine when compaction has been completed to specification for greater productivity and uniform compaction quality.
- Accelerometer-based (CMV) measurement technology available.

**Compact, Highly Maneuverable, and Transportable** 

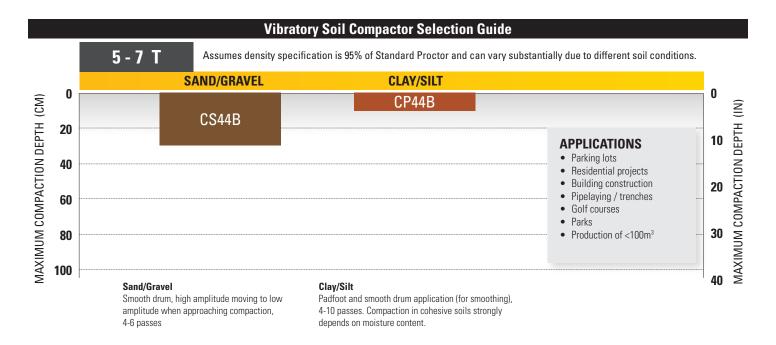


## **Standard and Optional Equipment**

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

	Standard	Optional
OPERATOR ENVIRONMENT		
ROPS/FOPS Canopy with Handrails, Floor Mat, Interior Rear View Mirror	✓	
Vinyl Adjustable Seat with Integrated Console and LCD Display with Lockable Vandalism Guard	✓	
Adjustable Tilting Steering Column with Integrated Cup Holders	✓	
Rear Vision Camera System with Color Touchscreen Display	✓	
Seat Belt	✓	
12-volt Power Outlet	✓	
Horn, Backup Alarm	✓	
ROPS/FOPS Cab with Climate Control, Cloth Seat, Exterior Rear View Mirrors, Sun Visor, Roll-down Sun Screen		✓
VIBRATORY SYSTEM		
Smooth Drum	✓	
Dual Amplitude, Single Frequency	✓	
Pod-Style Eccentric Weight Housings	$\checkmark$	
Auto-vibe Function	✓	
Front Adjustable Steel Scraper	✓	
Padfoot Shell Kit (oval or square pads available	)	✓
Leveling Blade		✓
Variable Frequency		✓
Dual Adjustable Steel Scrapers		✓

	Standard	Optional
POWER TRAIN		
Cat® C3.4B Engine	✓	
Air Cleaner, Dual Element	✓	
Two-Speed Throttle Switch, Eco-mode	✓	
Dual Propel Pumps; One for Drum Drive, One for Rear Axle	✓	
Fuel Filter, Water Separator, Priming Pump, Water Indicator	✓	
Tilting Radiator/Hydraulic Oil Cooler	✓	
Dual Braking System	✓	
Two-speed Hydrostatic Transmission	✓	
Transmission Guard		✓
TECHNOLOGY SOLUTIONS		
Measure - Compaction Meter Value (CMV)		✓
ELECTRICAL		
12-volt Electrical System	$\checkmark$	
120 ampere Alternator	✓	
1000 Cold-cranking Amps Battery Capacity	✓	
OTHER		
Product Link™	✓	
Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
S•O•S <sup>SM</sup> Sampling Valves: Engine Oil, Hydraulic Oil, and Coolant	✓	
Factory-Filled Bio Hydraulic Oil		✓
Upgraded Halogen Light Package		✓
Amber Rotating Light Package		<b>✓</b>



Not all models are available in each region. Contact your Cat® dealer representative for more information.

## **Technical Specifications**

Engine - Power Train		
Engine Model	Cat® (	C3.4B
Emissions	U.S. EPA Tier 4 Final EU Stage IV	
Engine Power ISO 14396:2002	75.0 kW	100.6 hp
Gross Power SAE J1995:2014	75.5 kW	101.2 hp
Net Power ISO 9249:2007*	70.4 kW	94.4 hp
Net Power SAE J1349:2011*	69.7 kW	93.5 hp
Displacement	3.4 L	207 in <sup>3</sup>
Stroke	110 mm	3.9 in
Bore	99 mm	3.9 in
Max. Travel Speed (Forward or Reverse)	11.4 km/h	7.0 mph

Weights**		
Operating Weight w/ ROPS/FOPS Canopy	6943 kg	15,307 lb
w/ Padfoot Shell Kit	8001 kg	17,639 lb
w/ Padfoot Shell Kit and Leveling Blade	8528 kg	18,801 lb
Operating Weight w/ ROPS/FOPS Cab	7210 kg	15,895 lb
w/ Padfoot Shell Kit	8232 kg	18,148 lb
w/ Padfoot Shell Kit and Leveling Blade	8711 kg	19,204 lb
Weight at Drum w/ ROPS/FOPS Canopy	3384 kg	7460 lb
w/ Padfoot Shell Kit	4418 kg	9740 lb
w/ Padfoot Shell Kit and Leveling Blade	5138 kg	11,327 lb
Weight at Drum w/ ROPS/FOPS Cab	3518 kg	7756 lb
w/ Padfoot Shell Kit	4490 kg	9899 lb
w/ Padfoot Shell Kit and Leveling Blade	5217 kg	11,502 lb

Vibratory System Specifications			
Frequency			
Standard	31.9 Hz	1914 vpm	
During Eco-mode Operation	29 Hz	1744 vpm	
Optional Variable Frequency	23.3 - 31.9 Hz	1400 - 1914 vpm	
Nominal Amplitude @ 31.9 Hz (1914 vpm)			
High	1.67 mm	0.066 in	
Low	0.84 mm	0.033 in	
Centrifugal Force @ 31.9 Hz (1914 vpm)			
Maximum	133 kN	29,900 lb	
Minimum	67 kN	15,000 lb	
Static Linear Load			
w/ ROPS/FOPS Canopy	20.2 kg/cm	113 lbs/in	
w/ ROPS/FOPS Cab	21.0 kg/cm	118 lbs/in	

Service Refill Capacities			
Fuel Tank, total capacity	140 L	37.0 gal	
Diesel Exhaust Fluid Refill	18.9 L	5 gal	
Cooling System	19.5 L	5.3 gal	
Engine Oil w/ Filter	9 L	2.4 gal	
Eccentric Weight Housing	13 L	3.5 gal	
Axle and Final Drives	14.6 L	3.9 gal	
Hydraulic Tank (service refill)	26 L	6.9 gal	

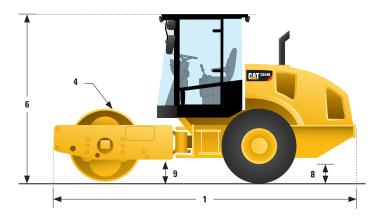
Net power advertised is the power available at the engine flywheel when equipped with a fan at maximum speed, air cleaner, clean emissions module, and alternator.

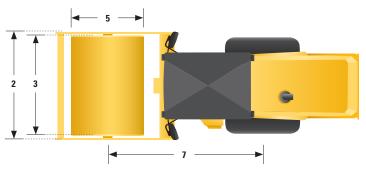
<sup>\*\*</sup> Standard operating weight considers full fluids and 80 kg operator.

# **Technical Specifications**

	Dimensions		
1	Overall Length	5.1 m	16.7 ft
	Overall Length w/ optional Leveling Blade	5.6 m	18.4 ft
2	Overall Width	1.8 m	5.9 ft
	Overal Width w/ optional Leveling Blade	2.1 m	6.95 ft
3	Drum Width	1676 mm	66 in
4	Drum Shell Thickness	25 mm	1 in
5	Drum Diameter	1221 mm	48.1 in
6	Overall Height		
	w/ ROPS/FOPS Cab	2.9 mm	9.4 ft
	w/ ROPS/FOPS Canopy	2.8 mm	9.2 ft
7	Wheelbase	2.6 m	8.5 ft
8	Ground Clearance	411 mm	16.2 in
9	Curb Clearance	369 mm	14.5 in
	Inside Turning Radius	3.1 m	10.0 ft
	Hitch Articulation Angle	37°	
	Hitch Oscillation Angle	15 °	

Optional Padfoot Shell Kit Specifications			
Number of Pads	98	98	
Pad Height, oval pads	86.8 mm	3.4 in	
Pad Face Area, oval pads	63.8 cm <sup>2</sup>	9.9 in <sup>2</sup>	
Pad Height, optional square pads	79.4 mm	3.13 in	
Pad Face Area, optional square pads	95.5 cm <sup>2</sup>	14.8 in <sup>2</sup>	
Number of Chevrons	14		





#### **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 C4.4 is available in configurations that meet U.S. EPA Tier 4
   Final and EU Stage V emissions 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

### **AIR CONDITIONING SYSTEM**

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.8 kg (1.8 lb) of refrigerant, which has a  ${\rm CO_2}$  equivalent of 1.144 metric tonnes (1.261 tons).

### **PAINT**

- Based on best available knowledge, the maxi mum 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 Power Level (ISO 6395:2008) - 109 dB(A)

With cooling fan speed at 70% of maximum value:

Operator Sound Pressure Level (ISO 6396:2008) - 79 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 mode limits engine RPM, lowering overall fuel consumption 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 idle shutdown reduces unproductive hours and fuel burned
  - Hydraulic on-demand fan changes speed with temperature



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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.

