



Cat[®] CS74B

Smooth Drum Vibratory Soil Compactor

The Cat[®] CS74B features a smooth drum and is ideally suited for granular soil applications.

Comfortable and Ergonomic Operator Station

- Features pivoting 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

- Built 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.
- Electronic propel control provides more precise machine control.

Virtually Maintenance Free

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

Enhanced Compaction Performance

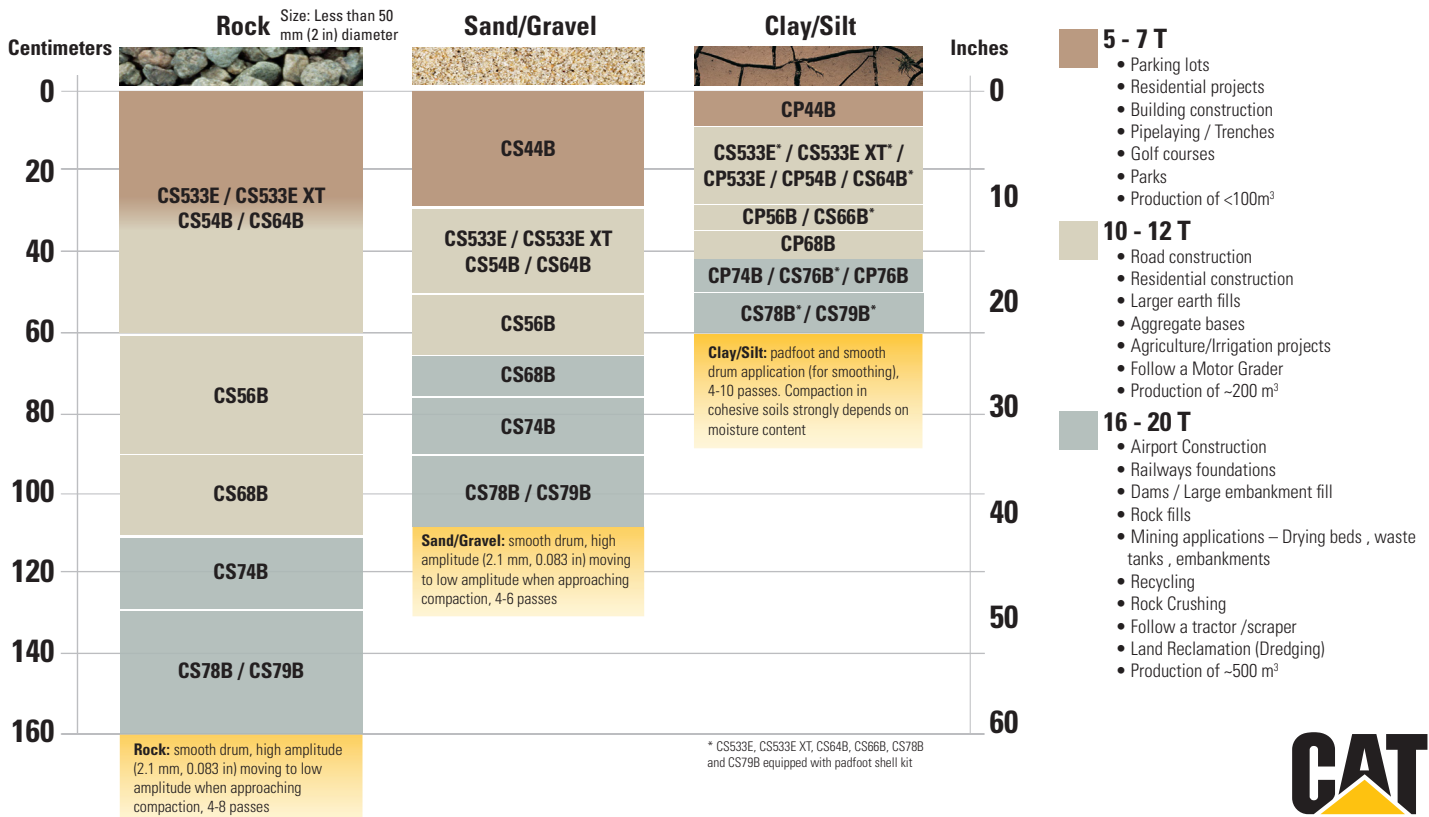
- More weight at the drum and greater amplitude.
- Automated speed control and vibratory system functions make it easy to ensure consistent, high quality compaction.

Technologies that Enhance Quality and Productivity

- Measurement and documentation technologies help 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.

VIBRATORY SOIL COMPACTOR SELECTION GUIDE

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 C7.1	
Global Emissions	US EPA Tier 3 EU Stage IIIA	
Gross Power ISO 14396	129.0 kW	173.0 hp
Gross Power SAE J1995	130.2 kW	174.6 hp
Net Power ISO 9249*	108.5 kW	145.5 hp
Net Power SAE J1349*	107.2 kW	143.8 hp
Displacement	7.01 L	428 in ³
Stroke	135 mm	5.3 in
Bore	105 mm	4.1 in
Max. Travel Speed (Forward or Reverse)	11.4 km/h	7 mph
Theoretical Gradeability, no vibration**	57%	

Weights		
Operating Weight w/ open platform	15 470 kg	34,106 lb
Operating Weight w/ steel sun canopy	15 565 kg	34,315 lb
Operating Weight w/ ROPS/FOPS canopy	15 735 kg	34,690 lb
Operating Weight w/ ROPS/FOPS cab	16 055 kg	35,395 lb
Weight at Drum w/ open platform	10 400 kg	22,928 lb
Weight at Drum w/ steel sun canopy	10 440 kg	23,016 lb
Weight at Drum w/ ROPS/FOPS canopy	10 500 kg	23,149 lb
Weight at Drum w/ ROPS/FOPS cab	10 630 kg	23,435 lb

Additional Weight with:		
Oval Padfoot Shell Kit	+1730 kg	+3,814 lb
Square Padfoot Shell Kit	+1880 kg	+4,145 lb
Leveling Blade	+620 kg	+1,373 lb

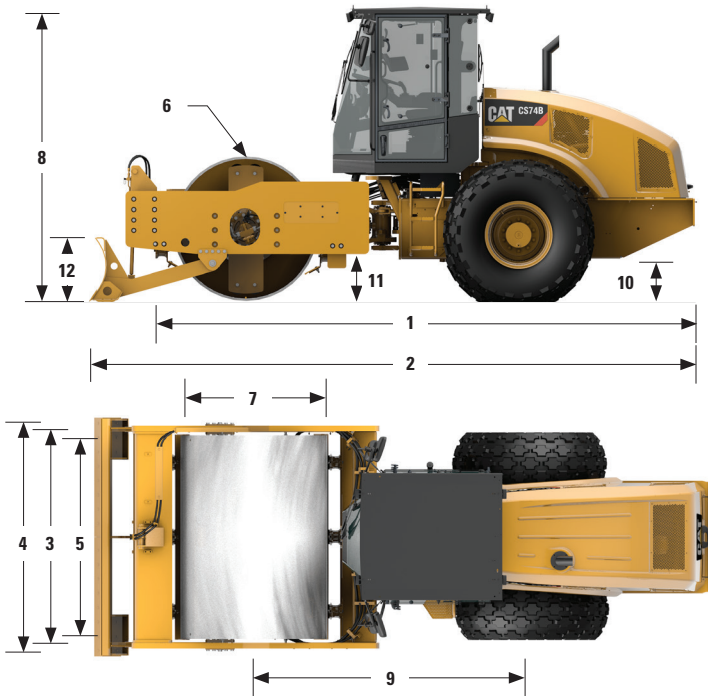
Vibratory System Specifications			
Frequency			
Standard	28 Hz	1680 vpm	
During Eco-mode Operation	25.5 Hz	1527 vpm	
Optional Variable Frequency	23.3-28 Hz	1400-1680 vpm	
Nominal Amplitude @ 30.5 Hz (1830 vpm)			
High	2.1 mm	0.083 in	
Low	0.98 mm	0.039 in	
Centrifugal Force @ 30.5 Hz (1830 vpm)			
Maximum	332 kN	74,600 lb	
Minimum	166 kN	37,300 lb	
Static Linear Load			
w/ open platform	48.8 kg/cm	273.0 lbs/in	
w/ steel sun canopy	48.9 kg/cm	274.0 lbs/in	
w/ ROPS/FOPS canopy	49.2 kg/cm	275.6 lbs/in	
w/ROPS/FOPS cab	49.8 kg/cm	279.0 lbs/in	

Service Refill Capacities		
Fuel Tank, total capacity	332 L	88 gal
Cooling System	28.2 L	7.5 gal
Engine Oil w/ Filter	17.4 L	4.6 gal
Eccentric Weight Housings (combined)	26 L	6.9 gal
Axle and Final Drives	18 L	4.8 gal
Hydraulic Tank (service refill)	50 L	13.2 gal

* 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.

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Dimensions

1	Overall Length	6.05 m	19.9 ft
2	Overall Length w/ optional Leveling Blade	6.55 m	21.5 ft
3	Overall Width	2.33 m	7.64 ft
4	Overall Width w/ optional Leveling Blade	2.50 m	8.25 ft
5	Drum Width	2134 mm	84 in
6	Drum Shell Thickness	40 mm	1.6 in
7	Drum Diameter	1534 mm	60.4 in
8	Overall Height	3.11 m	10.2 ft
9	Wheelbase	2.9 m	9.5 ft
10	Ground Clearance	437 mm	17.2 in
11	Curb Clearance	489 mm	19.3 in
12	Optional Leveling Blade Height	688 mm	27.1 in
	Inside Turning Radius	3.68 m	12.07 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	123 cm ² 19.1 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		
Steel Sun Canopy with Handrails/Guardrails, Floor Mat	✓		Cat C7.1 Diesel Engine	✓	
Vinyl Adjustable Pivoting Seat with Integrated Console and LCD Display	✓		Air Cleaner, Dual Element	✓	
Adjustable Tilting Steering Column with Integrated Cup Holders	✓		Three-Speed Throttle Switch, Eco-mode and Automatic Speed Control	✓	
Rear Vision Camera with Color Touchscreen Display	✓		Dual Propel Pumps; One for Drum Drive, One for Rear Axle	✓	
Seat Belt	✓		Fuel Filter, Water Separator, Priming Pump, Water Indicator	✓	
12-volt Power Outlet	✓		Tilting Radiator/Hydraulic Oil Cooler	✓	
Horn, Backup Alarm	✓		Dual Braking System	✓	
ROPS/FOPS Canopy		✓	Two-speed Hydrostatic Transmission	✓	
ROPS/FOPS Cab with Climate Control		✓	Transmission Guard		✓
Internal Rear View Mirror		✓	CAT COMPACTION CONTROL TECHNOLOGY		
External Rear View Mirrors		✓	Measure - Machine Drive Power and/or CMV		✓
Sun Visor		✓	Map - SBAS GNSS Mapping		✓
Cab Internal Roll-down Sun Screen		✓	Connect - Machine to Machine Communication		✓
VIBRATORY SYSTEM			ELECTRICAL		
Smooth Drum	✓		24 volt Electrical System	✓	
Dual Amplitude, Single Frequency	✓		100 ampere Alternator	✓	
Dual Pod-Style Eccentric Weight Housings	✓		750 Cold-cranking Amps Battery Capacity	✓	
Auto-vibe Function	✓		OTHER		
Front Adjustable Steel Scraper	✓		Product Link™	✓	
Padfoot Shell Kit (oval or square pads available)		✓	Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
Leveling Blade		✓	S-O-S SM Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	✓	
Variable Frequency		✓	Upgraded Halogen Light Package		✓
Dual Adjustable Steel Scrapers		✓	Rotating Beacon		✓
Dual Adjustable Polyurethane Scrapers		✓	Fuel Fill Access Door		✓

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