



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

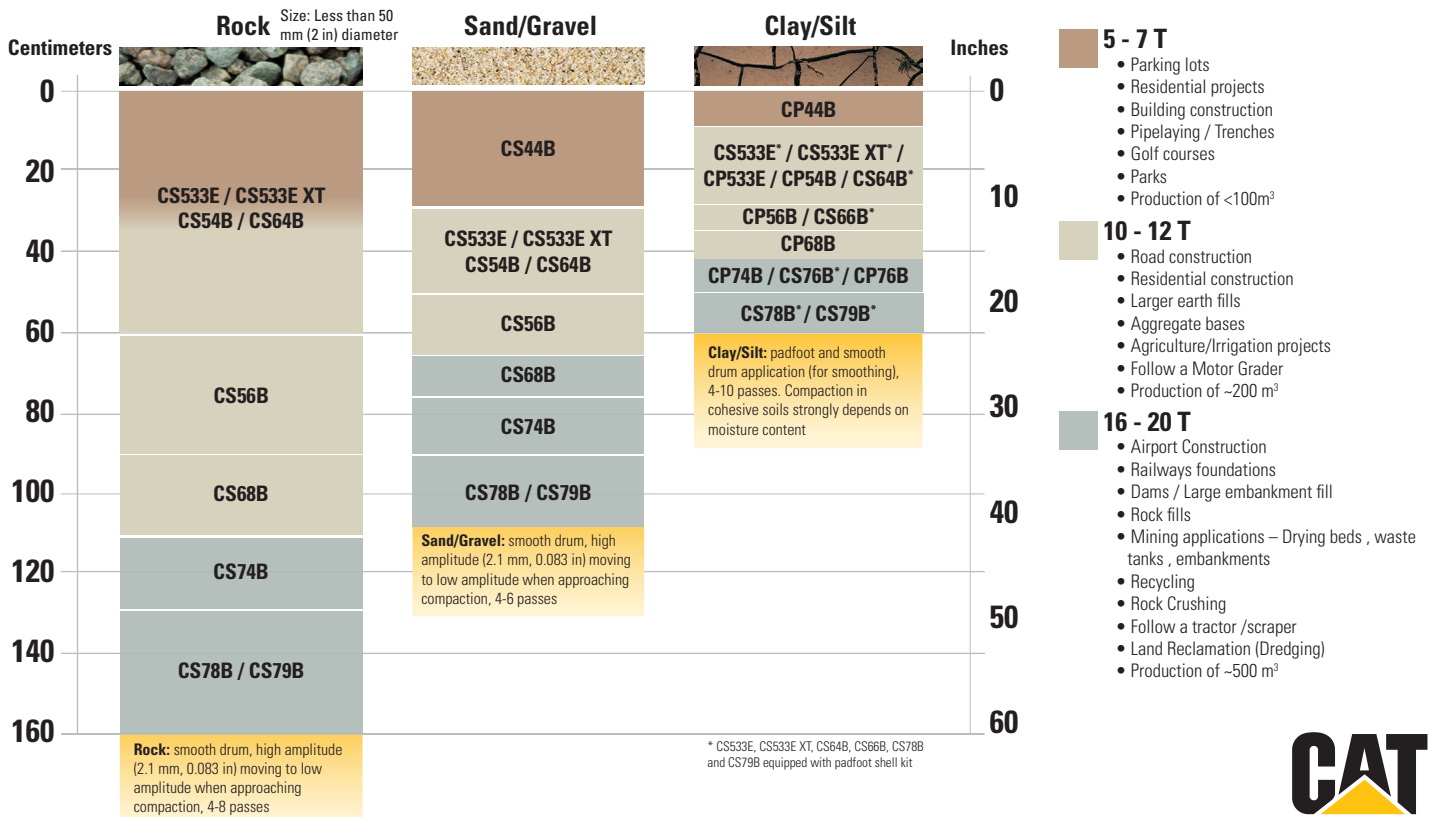
- More weight at the drum and greater amplitude.
- Automated speed control and vibratory system functions make it easy to ensure consistent, high quality compaction.

Technologies that Enhance Quality and Productivity

- Exclusive semi-autonomous Command for Compaction technology automates compaction to offer complete process control and help promote more uniform results.
- 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 C4.4	
Global Emissions	US EPA Tier 4 Final EU Stage IV	
Gross Power ISO 14396	129.4 kW	173.5 hp
Gross Power SAE J1995	131.0 kW	175.7 hp
Net Power ISO 9249*	109.7 kW	147.1 hp
Net Power SAE J1349*	108.3 kW	145.2 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)	11.4 km/h	7 mph
Theoretical Gradeability, no vibration**	59%	

Weights		
Operating Weight w/ ROPS/FOPS cab	16 000 kg	35,264 lb
w/ Padfoot Shell Kit	17 395 kg	38,338 lb
w/ Leveling Blade	16 645 kg	36,687 lb
w/ Padfoot Shell Kit and Leveling Blade	18 050 kg	39,777 lb
Weight at Drum w/ ROPS/FOPS cab	10 620 kg	23,410 lb
w/ Padfoot Shell Kit	12 020 kg	26,494 lb
w/ Leveling Blade	11 580 kg	25,517 lb
w/ Padfoot Shell Kit and Leveling Blade	12 980 kg	28,603 lb

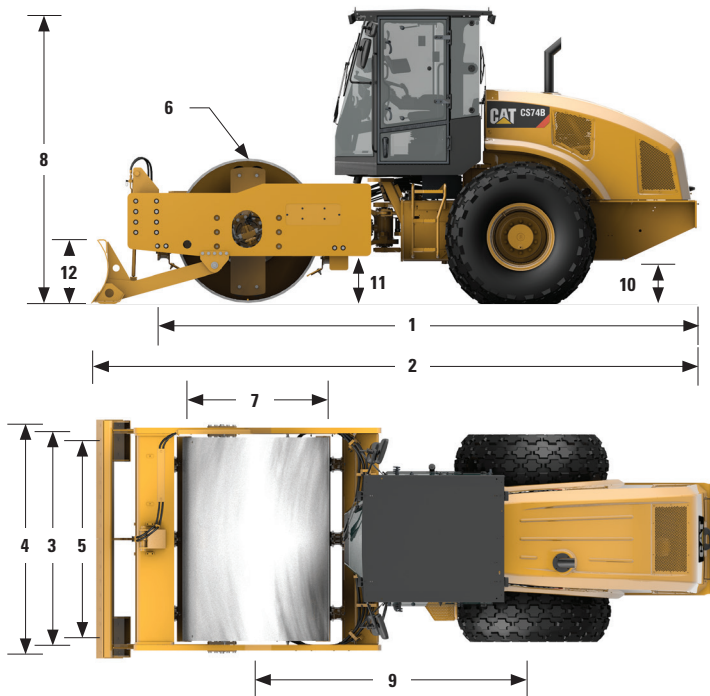
* Net power advertised is the power available at the engine flywheel when equipped with a fan at maximum speed, air cleaner, clean emissions module, and alternator.

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

Vibratory System Specifications		
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/ ROPS/FOPS cab	49.7 kg/cm	278.7 lbs/in

Service Refill Capacities		
Fuel Tank, total capacity	332 L	88 gal
Diesel Exhaust Fuel refill capacity	19 L	5 gal
Cooling System	28.2 L	7.5 gal
Engine Oil w/ Filter	11.6 L	3.1 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

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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		
ROPS/FOPS Cab with Climate Control, External Rear View Mirrors	✓		Cat C4.4 Diesel Engine	✓	
Cloth 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	✓	
Sun Visor		✓	Two-speed Hydrostatic Transmission	✓	
Cab Internal Roll-down Sun Screen		✓	Transmission Guard		✓
VIBRATORY SYSTEM			TECHNOLOGY SOLUTIONS		
Smooth Drum	✓		Measure - Machine Drive Power and/or CMV		✓
Dual Amplitude, Single Frequency	✓		Map - SBAS GNSS Mapping		✓
Dual Pod-Style Eccentric Weight Housings	✓		Connect - Cloud and Machine Connectivity		✓
Auto-vibe Function	✓		Command for Compaction		✓
Front Adjustable Steel Scraper	✓		ELECTRICAL		
Padfoot Shell Kit (oval or square pads available)		✓	24 volt Electrical System	✓	
Leveling Blade		✓	100 ampere Alternator	✓	
Variable Frequency		✓	750 Cold-cranking Amps Battery Capacity	✓	
Dual Adjustable Steel Scrapers		✓	OTHER		
Dual Adjustable Polyurethane Scrapers		✓	Product Link™	✓	
			Sight Gauges for Hydraulic Oil Level and Radiator Coolant Level	✓	
			S-O-S SM Sampling Valves: Engine Oil, Hydraulic Oil and Coolant	✓	
			Recording Module		✓
			Factory Filled Bio Hydraulic Oil		✓
			Upgraded Halogen Light Package		✓
			Amber Rotating Beacon		✓
			Fuel Fill Access Door		✓
			Italian Road Homologation (IRH)		✓

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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.

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