



Cat[®] CD10

DRUM STEER VIBRATORY ROLLER

Top Features

The Cat[®] CD10 is a 10 ton drum-steer roller with 1700 mm (67") vibratory drums. It offers excellent visibility, simple vibratory selection, wide mat coverage, and is available in solid or split drum models. This machine excels on a variety of asphalt mix designs as well as other granular materials.

- **Versatile Vibratory Systems** include choice of Auto Adjustable Compaction (AAC), Oscillation and 2-amplitude/2-frequency systems. Multiple options available to match thick and thin lifts as well as various paving speeds.
- **Exceptional visibility and control** with handwheel steering technology, touch-pad machine functions, Eco-mode operation, and automatic speed control. This machine can be equipped with a Cab or ROPS/FOPS.
- **Smooth operating powertrain** with C3.4B engine that meets U.S. EPA Tier 4 Interim and EU Stage IIIB emissions standards. The split drum design delivers superior mat quality and smooth performance when turning. Four steering modes provide excellent maneuverability, while the large drum offset expands mat coverage. The traction control system automatically actuates and delivers a balanced torque to each drum.

- **Cat Compaction Control** keeps the operator informed for higher performance and efficiency. Infrared temperature sensors combined with mapping keep the operator informed of when optimal temperatures exist and where compaction has taken place. Temperature Mapping records temperatures for data analysis, while Pass-Count Mapping keeps the operator informed of where mat coverage has taken place and the number of passes made.
- **Auto-Adjustable Compaction** delivers faster compaction, increased productivity, and simple operation at a lower cost. Each drum is controlled independently and activation is as simple as the push of a button.
- **Oscillatory Vibration System** combines standard vibration on the front drum with oscillation technology on the rear drum. The oscillation system performs effectively on thin lifts and near sensitive structures such as buildings, bridge decks, and over underground utilities.
- **Machine to Machine Communication** provides real time progress of multiple machines. It allows operators to monitor each others rolling pattern and continue the pass where it was left off. The system greatly enhances nighttime operation when low lighting conditions exist.

Specifications

Weights

Operating Weight – Split Drum w/ROPS/FOPS/CAB

Standard machine	10 120 kg	22,311 lb
Maximum machine	11 440 kg	25,220 lb
Static linear load	29.5 kg/cm	165 lb/in

Operating Weight – Solid Drum w/ROPS/FOPS/CAB

Standard machine	9030 kg	19,908 lb
Maximum machine	9740 kg	21,475 lb
Static linear load	26.5 kg/cm	148 lb/in

Operating Weight – Split Drum w/ROPS/FOPS/CANOPY

Standard machine	9860 kg	21,738 lb
Maximum machine	11 170 kg	24,625 lb
Static linear load	28.6 kg/cm	160 lb/in

Operating Weight – Solid Drum w/ROPS/FOPS/CANOPY

Standard machine	8770 kg	19,335 lb
Maximum machine	9470 kg	20,880 lb
Static linear load	25.8 kg/cm	145 lb/in

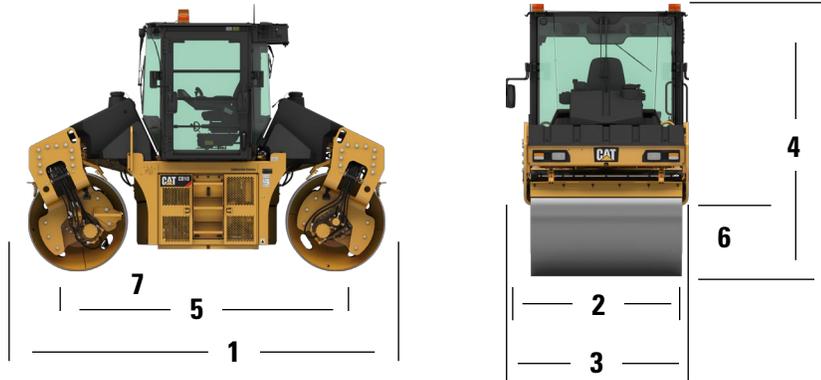
Engine – Powertrain

Engine Model	Cat C3.4B	
Number of Cylinders	4	
Rated Speed	2200 rpm	
Bore	99 mm	3.89"
Stroke	110 mm	4.33"
Gross Power:		
Tier 4 Interim, Stage IIIB	75 kW	100.5 hp (I), 101.9 hp (m)
Speed Ranges:		
Low	0 - 7 km/hr	4.3 mph
High	0 - 12 km/hr	7.5 mph
Gradeability (no vibs):		
Solid drum	32 ^º	
Split drum	39 ^º	
Steering (Inside)	2.8 m	(9' 3")
Articulation Angle	25 ^º	



CD10 Drum Steer Vibratory Roller

Dimensions



1 Overall length	4322 mm	14' 2"
2 Drum width	1700 mm	67"
Drum offset	1320 mm	51"
Max. compaction width	3020 mm	118"
Drum shell thickness (std)	17 mm	0.67"
Drum shell thickness (osc)*	13 mm	0.51"
Drum diameter	1202 mm	44"
3 Overall width	1874 mm	6' 2"
4 Height at ROPS/FOPS	2990 mm	9' 8"
Height at cab	2985 mm	9' 9"
5 Wheelbase	3120 mm	10' 3"
6 Curb clearance	808 mm	31"
7 Ground clearance	272 mm	10"

* Optional oscillatory hardened drum shell

Vibratory Systems

Two Amplitude, Two Frequency – Split Drum

Frequency – Hz (vpm)	42/53.3	(2520/3200)
Amplitude – mm (in)	0.61 - 0.33	(0.024 - 0.013)
Centrifugal Force (high) – kN (lbF)	86.7	(19,491)
Centrifugal Force (low) – kN (lbF)	75.5	(16,973)

Two Amplitude, Two Frequency – Solid Drum

Frequency – Hz (vpm)	43/53.3	(2700/3200)
Amplitude – mm (in)	0.82 - 0.32	(0.026 - 0.013)
Centrifugal Force (high) – kN (lbF)	81.6	(18,344)
Centrifugal Force (low) – kN (lbF)	49.6	(11,150)

Oscillatory Vibration System – Rear Drum

Frequency – Hz (vpm)	40	(2400)
Amplitude – mm (in)	Hardened Drum*	1.35 (0.053)
	Standard Drum	1.12 (0.044)

* Beneficial for rigid stone mix designs.

Auto-Adjustable Compaction (AAC) – Split Drum

Frequency – Hz (vpm)	42	(2520)
Amplitude Range – mm (in) – high	0.84	(0.033)
	low	0.18 (0.007)
Centrifugal Force (high) – kN (lbF)	128.9	(28,977)
Centrifugal Force (low) – kN (lbF)	27.1	(6,092)
Frequency – Hz (vpm)	53.3	(3200)
Amplitude Range – mm (in) – high	0.45	(0.017)
	low	0.18 (0.007)
Centrifugal Force (high) – kN (lbF)	111.1	(24,976)
Centrifugal Force (low) – kN (lbF)	43.6	(9,806)

Standard and Optional Equipment

Standard Equipment:

- 12-Volt Electrical System
- 120 Amp Alternator
- 750 L (198 gal) Water Tank Capacity
- Automatic Traction Control
- 2-Amplitude, 2-Frequency Vibratory System
- Front and Rear Split Drums
- Locking Engine Compartment
- Roading Lights
- ROPS/FOPS Cab
- Sealed Pod Vibratory System
- Suspension Seat
- Triple Filtered Water Spray System
- Two-Speed Hydrostatic Transmission

OPTIONAL EQUIPMENT:

- AccuGrade Temperature and Pass-Count Mapping
- Air Conditioning
- Air Suspension Seat w/Heat
- Bio-Degradable Oil
- Chip Spreader Ready (split drum)
- CMV
- Edge Cutter
- Freeze Protection Kit
- Front and Rear Solid Drums
- Halogen Lights w/Drum Edge Lights
- High Ambient Cooling System
- High Intensity Discharge (HID) w/Drum Edge Lighting
- IRH Compliant
- LED Lighting
- Machine to Machine Communication
- Mirrors
- Product Link™
- Recording Module (cab only)
- ROPS/FOPS Open Platform
- Temperature Gauge
- Temperature Gauge (single sensor)
- Warning Beacon
- Water Distribution Mats (cocoa)
- Water Distribution Mats (rubber)

Service Refill Capacities

Fuel Tank	191 L	50 gal
Fuel Usage (50% duty)	12 hours	
Cooling System	15 L	3.9 gal
Engine Oil	9 L	2.4 gal
Hydraulic Tank	36 L	9.5 gal
Water Tank	750 L	198 gal

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