

# Cat® CB7

TANDEM VIBRATORY ROLLER

## **Top Features**

The Cat® CB7 is a 7 ton roller with 1500 mm (59") tandem vibratory drums. It is available in solid or split drum models and excels on a variety of asphalt mix designs as well as other granular materials.

- 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 or solid drum designs provide the contractor with options to meet paving requirements. The split drum delivers superior mat quality and smooth performance when turning.
- Versatile Vibratory Systems include choice of two amplitude/two frequency or 5-amplitude systems. Versatile systems for both thick and thin lifts as well as varying paving speeds.
- 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 data for analysis, while Pass-Count Mapping keeps the operator informed of where mat coverage has taken place and the number of passes made.
- Industry-Leading Water Spray System features a single fill point, dual water pumps, triple filtration, intermittent operation and high capacity for optimal performance. An optional freeze protection kit offers protection in cold temperatures.
- 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**

**Service Refill Capacities** 

Fuel Usage (50% duty)

**Fuel Tank** 

Engine Oil

Water Tank

Cooling System

Hydraulic Tank

#### Weights

Operating Weight – Split Drum w/ROP	S/FOPS/CAB	
Standard machine	9330 kg	20,569 lb
Maximum machine	10 470 kg	23,082 lb
Static linear load	31.1 kg/cm	174 lb/in
Operating Weight - Solid Drum w/ROI	PS/FOPS/CAB	
Standard machine	8190 kg	18,056 lb
Maximum machine	8940 kg	19,709 lb
Static linear load	26.9 kg/cm	151 lb/in
Operating Weight – Split Drum w/ROP	S/FOPS/CANOPY	
Standard machine	9030 kg	19,908 lb
Maximum machine	10 250 kg	22,597 lb
Static linear load	29.8 kg/cm	167 lb/in
Operating Weight - Solid Drum w/ROI	PS/FOPS/CANOPY	
Standard machine	7990 kg	17,615 lb
Maximum machine	8720 kg	19,224 lb
Static linear load	26.3 kg	147 lb/in

208 L

18 L

9 L

36 L

742 L

12 hours

55 gal

4.7 gal

2.4 gal

9.5 gal

196 gal

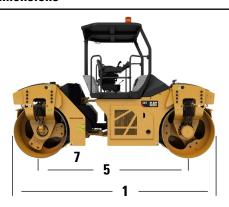
**Engine – Powertrain** 

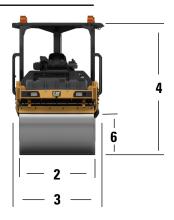
Engine Model	Cat C3.4B	
Number of Cylinders	4	
Rated Speed	2200 rpm	
Bore	99 mm	3.89"
Stroke	110 mm	4.33"
Gross Power:		
Tier 4 Interim, Stage IIIE	75 kW	100 hp (I), 102 hp (m)
Speed Ranges:		
Low	0 - 7 km/hr	4.3 mph
High	0 - 12 km/hr	7.5 mph
Gradeability (no vibe):		
Solid drum	35 <u>º</u>	
Split drum	38º	
Steering (Inside)	4.4 m	(14′ 8″)
Articulation Angle	35 <u>º</u>	
Hitch Oscillation	±6º	



# **CB7 Tandem Vibratory Roller**

#### **Dimensions**





1	Overall Length	4565 mm	14′ 5"
2	Drum Width	1500 mm	59"
	Drum Offset	170 mm	6"
	Drum Shell Thickness	16 mm	0.67"
	Drum Diameter	1108 mm	44"
3	Overall width	1670 mm	5′ 5"
4	Height at ROPS/FOPS	2980 mm	9′ 9"
	Height at Cab	2980 mm	9′ 9″
5	Wheelbase	3300 mm	10′ 10"
6	Curb Clearance	898 mm	35"
7	<b>Ground Clearance</b>	226 mm	9"

#### **Vibratory Systems**.

2-Amplitude, 2-Frequency - Split Drum (VT1)*			
Frequency – Hz (vpm)	42/53.3	(2520/3200)	
Amplitude – mm (in)	0.62 - 0.31	(0.024 - 0.012)	
Centrifugal Force (high) – kN (lbF)	73.8	(16,590)	
Centrifugal Force (low) – kN (lbF)	59.2	(13,309)	
2-Amplitude, 2-Frequency - Solid Drum (VT1)*			
Frequency – Hz (vpm)	53.3/63.3	(3200/3800)	
Amplitude – mm (in)	0.65 - 0.31	(0.026 - 0.012)	
Centrifugal Force (high) – kN (lbF)	78.3	(17,603)	
Centrifugal Force (low) – kN (lbF)	53.3	(11,982)	
2-Amplitude, 2-Frequency - Solid Drum (CE)*			
Frequency – Hz (vpm)	50	(3000)	
Amplitude – mm (in)	0.65	(0.026)	
Centrifugal Force (high) – kN (lbF)	68.8	(15,467)	
Frequency – Hz (vpm)	57	(3420)	
Amplitude – mm (in)	0.31	(0.012)	
Centrifugal Force (low) – kN (lbF)	43.2	(9,712)	
* Meets French VT1 Method Spec Classifica	ation		

#### 5-Amplitude - Solid Drum (VT1)\*

Frequency – Hz (vpm	)	53.3	(3200)
Amplitude – mm (in)	high	0.64	(0.025)
	medium high	0.56	(0.022)
	medium	0.45	(0.018)
	medium low	0.35	(0.014)
	low	0.25	(0.010)
Centrifugal Force (hig	jh) – kN (lbF)	76.9	(17,288)
Centrifugal Force (lov	v) – kN (lbF)	30.2	(6,789)

<sup>\*</sup> Meets French VT1 Method Spec Classification

### **Standard and Optional Equipment**

#### STANDARD EQUIPMENT:

- 5-Amplitude Vibratory System
- 742 L (196 gal) Water Tank Capacity
- 12-Volt Electrical System
- 120 Amp Alternator
- Front and Rear Solid Drums
- Locking Engine Compartment
- ROPS/FOPS Platform
- Sealed Pod Vibratory System
- Suspension Seat
- Two-Speed Hydrostatic Transmission
- Triple Filtered Water Spray System
- · Working Lights

#### OPTIONAL EQUIPMENT:

- · Air Conditioning
- Air Suspension Seat w/Heat
- · Bio-Degradeable Oil
- Cat Compaction Control (Temperature and Pass-Count Mapping)
- Chip Spreader Ready (split drum)
- CMV Sensor
- Edge Cutter
- Freeze Protection Kit
- Front and Rear Split Drum
- Halogen Lights w/Drum Edge Lights
- High Ambient Cooling System
- High Intensity Discharge (HID) w/ Drum Edge Lighting

- LED Lighting
- Machine to Machine Communication
- Mirrors
- Product Link
- Recording Module (cab only)
- ROPS/FOPS Cab
- Roading Lights
- Temperature Gauge (single sensor)
- Two Amplitude, Two Frequency Vibratory System
- Water Distribution Mats (cocoa)
- Water Distribution Mats (rubber)
- Warning Beacon

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