

# CB22/CB24 CB32

Utility Compactors

# CC24

Utility Combi Compactor



	CB22	CB24	CB32	CC24 Combi
<b>Cat® C1.5 Diesel Engine</b>				
Gross power (SAEJ1995) at 2800 rpm	24.6 kW/34 hp	24.6 kW/34 hp	24.6 kW/34 hp	24.6 kW/34 hp
Net power (ISO 9249) at 2800 rpm	23.7 kW/33 hp	23.7 kW/33 hp	23.7 kW/33 hp	23.7 kW/33 hp
Compaction width	1000 mm	1200 mm	1300 mm	1200 mm
Operating weight (with ROPS)	2500 kg	2700 kg	3230 kg	2400 kg

## Caterpillar® C1.5 Engine

*The C1.5 engine provides efficient power while meeting EU Stage IIIa engine emission requirements.*



**Power.** The liquid cooled, three cylinder C1.5 engine provides a gross power of 24.6 kW (34 hp) for good performance and reliability in all working conditions.

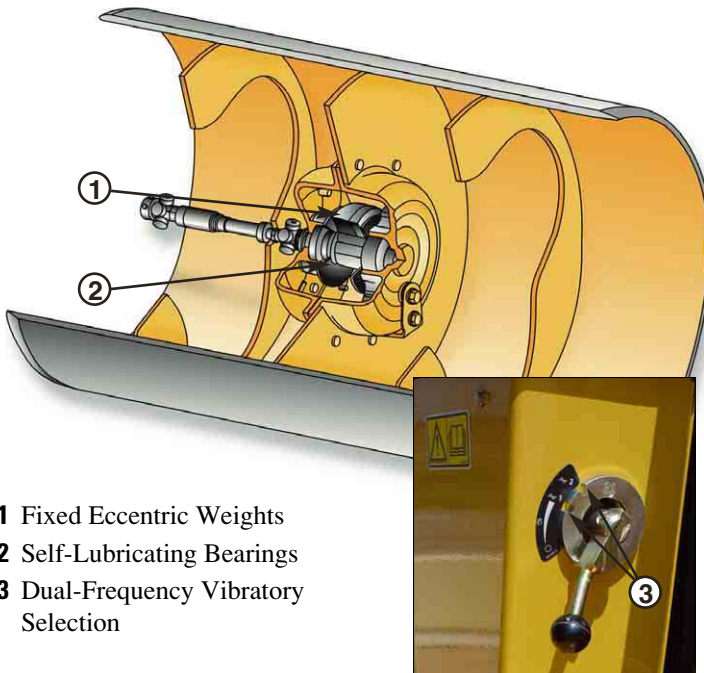
**Large Cooling Package.** The large cooling package with integrated water and oil coolers keep engine temperatures low in order to maximize fuel efficiency and minimize emissions.

**Reduced Sound Levels.** Low sound levels are achieved in both operating speeds. An intermediate throttle position enables even quieter operation for optimum operator comfort.

**Traction Control Option.** The optional traction control system transfers torque between front and rear drums (CB22, CB24 and CB32) or between the two sets of rear tyres (CC24), when slippage occurs.

## Vibratory System

*The dual-frequency vibratory system provides good balance between frequency and amplitude in order to meet various job site conditions.*



- 1 Fixed Eccentric Weights
- 2 Self-Lubricating Bearings
- 3 Dual-Frequency Vibratory Selection

**Dual Frequency Vibratory System.** The standard vibratory system incorporates two frequencies of 63 Hz and 55 Hz in order to provide increased application versatility.

**Vibration Selection.** A vibratory selection switch provides standard front and both drum vibratory capabilities. Vibration selection for the rear drum is optional.

**Automatic Vibratory Control.** The vibratory system includes an automatic start feature that activates whenever the propel lever is moved from the neutral position.

**Rear Drum Vibe Delay Option.** The vibe delay function controls the start of the rear drum in order to assist power management on slopes.

**Pod-style Eccentric Weights.** They time tested design of the eccentric weights are enclosed in a pod-style housing providing cleanliness that extends bearing life.

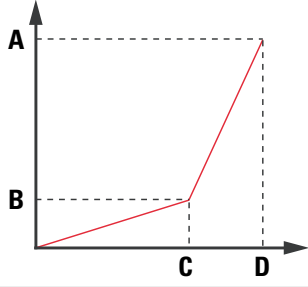


## Operator's Station

*The convenient, comfortable operating environment with three-position seating and a propel system that offers good control in tight quarters both promote day-long productivity.*



**Hydraulic Propel Lever's  
Regulating Curve**



- A** Maximum Speed
- B** Low Speed
- C** Half Stroke
- D** Maximum Stroke

**Operator's Station.** The operator's station incorporates a fully-equipped console and an adjustable sliding suspension seat. Arm and wrist rests provide better operator comfort for day-long productivity. The steering wheel includes a steering knob for easy maneuverability in turns.

**Instrument Panel.** The easy-to-understand instrument panel cluster integrates a fuel level indicator, hour meter and light indicators for machine functions. The key switch includes an automatic engine pre-heat feature in order to assist in cold-weather starting.

**Smooth Operation.** The hydraulic propel lever's two step regulating curve provides smooth and precise control at low speed. Machine speed increases gradually in the first half of lever stroke for optimum control in confined areas. The second half of lever stroke enables maximum transfer speed to be reached rapidly.

**Foldable ROPS (Optional).** The foldable ROPS folds forward or backward without the use of special tools.

**Unobstructed Visibility.** Sloped engine enclosure, low profile rear end and sliding operator's station provide unobstructed visibility to the drum edges or wheel contact points.

## Water Spray System

*Corrosion-proof system and extended-life components provide reliable operation, while the large water capacity extends operating intervals.*



**1** Drop Stop Spray Nozzle

**Water Tank.** A 150 liter high-capacity polyethylene water tank is enclosed within the machine frame, providing extended operation. An additional tank with a 90 L capacity provides a total water capacity of 240 L. A newly designed drain allows the entire system to be drained quickly.

**Extended Operating Intervals.** The standard 150 L tank provides an operating interval of 1.5 hours between refills. An additional 90 L tank extends the interval by an additional hour, while the intermittent spray mode doubles the operating time.

**Water Pump and Filters.** The extended life water pump and filters are conveniently located for easy access while providing optimum spray and flow. Triple water filtration increases machine uptime, leading to higher productivity.

**Spray Nozzles and Filters.** The retractable, self-adjusting scrapers utilize a hardened compound that provides durability. The ability to retract the scrapers when moving between job sites extends the service life and lowers owning and operating costs.

## Versatile Machines

*The CB22, CB24, CB32 and CC24 utility compactors offer versatility for a variety of applications.*



**CB22.** The CB22 is equipped with a 1.00 meter drum that provides a good balance of weight and power for good performance in tough applications.

**CB24.** The dimensions of the CB24 provide excellent maneuverability for working in tight areas, while the drum width and high static force perform well on larger job sites. This model is also available with an XT (eXtra Tonnage) option that features a higher static linear load (13.45 kg/cm) than the standard CB24.

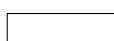
**CB32.** The 1.30 meter drums make this machine an excellent choice for thin asphalt lifts and larger job sites. The wider drum evenly distributes the weight across the entire width for better results on tender mixes.

**CC24.** The CC24 incorporates a steel, front drum with rear, pneumatic tires. The pneumatic tires provide even compaction on uneven surfaces. Four, 6-ply rubber tires generate high contact pressures that penetrate deep into the lift.

## Application Profile

*The following chart provides a guide to choosing the utility compactor that best fits your everyday needs.*

Material	Application	Layer Thickness mm	CB22	CB24	CC24	CB32
Asphalt	Walking Paths, Driveways, Patchwork	25-50				
		50-100				
	Parking Lots, City Streets	25-50				
		50-100				
	Roads, Highways	25-50				
		50-100				
Soil	Landscaping	<100				
	Small Area	<100				
	Medium Area	<100				

 Good

 Better

 Best

## Serviceability

*These machines provide the reliability and serviceability that you've come to expect from Caterpillar. Time tested features ensure that machine uptime is maximized.*



**Easy Access.** The vertical lift engine enclosure allows easy access to the engine oil filter, hydraulic filter, vibe block, radiator and propel pumps, making routine service quicker than ever.

**Water Spray System.** The filters in the water spray system can be easily removed without the use of special tools.

**Extended Life Oils.** Extended-life oils increase maintenance intervals for the vibratory system, hydraulic system and engine oil. Engine oil change interval has been extended to 500 hours. An oil-bath lubricates the eccentric weight bearings, extending routine maintenance to 3 year/3000 hour intervals. Remote-mounted drains for engine provide simplified collection of fluids.

**Hydraulic Test Ports.** Quick-connect hydraulic test ports simplify system diagnosis.

**Electrical System.** Electrical wiring is color-coded and numbered for simple troubleshooting. Nylon-braided wrap and all-weather connectors ensure electrical system integrity.

## Engine

Four-stroke cycle, three cylinder Caterpillar C1.5 diesel engine meets EU directive 97/68/EC Stage IIIa emission requirements.

Gross Power	2800 rpm
SAE J1995	24.6 kW/34 hp
Net Power	2800 rpm
ISO 9249	23.7 kW/33 hp
80/1269/EEC	23.7 kW/33 hp
Bore	84 mm
Stroke	90 mm
Displacement	1.5 L

- All engine horsepowers are metric including front cover.
- Net power ratings are tested at the reference conditions for the specified standard.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.

## Transmission

**CB22, CB24 and CB32** – Variable-displacement piston pump supplies pressure flow to fixed-displacement hydraulic motors that drive the front and rear drums.

**CC24** – Variable-displacement piston pump supplies pressure flow to a fixed-displacement hydraulic motor that drives the front drum. The pump also supplies pressure flow to two, fixed-displacement motors that drive the rear wheels.

### Speed

Forward and reverse	0-10.5 km/h
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## Steering

Priority-demand hydraulic power-assist steering system provides smooth machine handling.

### Minimum turning radius

CB22	
Inside drum edge	2640 mm
Outside drum edge	3640 mm
CB24/CC24	
Inside drum edge	2540 mm
Outside drum edge	3740 mm
CB32	
Inside drum edge	2490 mm
Outside drum edge	3790 mm
Steering angle	32°

## Instrumentation

- The control console includes: steering wheel with knob, water spray system switch, vibratory drum selector switch, horn, hazard flasher control, turn signals, warning and working light switches, engine start switch with preheat and the secondary brake.
- The instrument panel cluster integrates the fuel level indicator, service hour meter and also the light indicators for: roading lights, secondary brake, hydraulic oil temperature, engine coolant temperature, alternator, engine oil pressure, vibration on, engine preheat and the turn signals.
- The vibratory system is actuated with a switch on the top of the propel lever.
- When the vibratory system is activated, a vibration indicator light illuminates.
- The engine throttle control is operated via a three-position lever for low, intermediate and high engine speed.
- The control console, the hood and the literature compartment are equipped with lockable covers.

## Water Spray System

- Spray bars are constructed of stainless steel for corrosion resistance. The water tank is reinforced polyethylene.
- An electric water pump provides either continuous or intermittent spray. Intermittent spray setting increases spray time by 50 percent over continuous setting.
- Triple filtration includes a filter in the tank fill spout, an in-line filter at the water pump and filters on each spray nozzle. Spray nozzles are easily removed without tools for cleaning.

## Frame

Fabricated from heavy gauge steel plate and rolled sections. The two sections are joined by two hardened steel pins that are supported by heavy-duty roller bearings. A vertical pin provides a  $\pm 35^\circ$  steering angle and the frame/yoke provides  $\pm 10^\circ$  oscillation for a smooth ride and uniform drum loading.

## Tyre Spray System Option

- Tyre Spray System allows a solvent to be sprayed on the tire surfaces, helping prevent asphalt from adhering to the tyres.
- One spray nozzle is positioned above each tyre.
- The system is controlled with an on/off switch on the control console.

## Electrical System

The 12-volt electrical system includes one maintenance-free Cat battery and color-coded and numbered wiring wrapped in nylon braid. The system includes a 65-amp alternator.

## Final Drives

**CB22, CB24 and CB32** – High-torque, low-speed hydraulic motors directly drive each drum.

**CC24** – High-torque, low-speed hydraulic motor directly drives the front drum, and two high-torque, low-speed hydraulic motors directly drive the rear wheels.

## Brakes

Brake systems meet EN500-4.

The braking system will automatically engage if a pressure drop in the hydraulic system occurs.

### Service

Closed-loop hydrostatic drive system provides dynamic braking during machine operation.

### Secondary and Parking

Spring-applied/hydraulically released brake on front and rear drums. Actuated by switch on console or automatically when pressure is lost in brake circuit or when engine is shut off.

## Wheels and Tyres

**CC24** – 9.5/65 - 15 6-ply tyres are standard. Each tyre is equipped with a replaceable scraper.

- The scrapers help clean asphalt or soil off the tyres. The scrapers can be retracted when they are not needed.

## Service Refill Capacities

	Liters
Fuel Tank	56
Engine oil with filter	6
Hydraulic fluid tank	36.6
Water spray system	150
additional tank	90
Tyre spray system	90



## Compaction Characteristics

### Vibration selections

CB22/CB24	Front and both*
CB32	Front and both*
CC24	Front
Eccentric weight drive	Hydraulic
Frequency	
CB22/CB24/CC24	63/55 Hz
CB32	63/55 Hz

### Nominal amplitude

CB22/CB24/CC24	0.5 mm
CB24 XT/CB32	0.3 mm

### Centrifugal force per drum

CB22	27.6/21 kN
CB24/CC24/CB32	31.3/23.9 kN

### Static linear load

CB22	12.5 kg/cm
CB24**	11.25 kg/cm
CB32	12.5 kg/cm
CC24	10 kg/cm

\* Rear vibration is optional

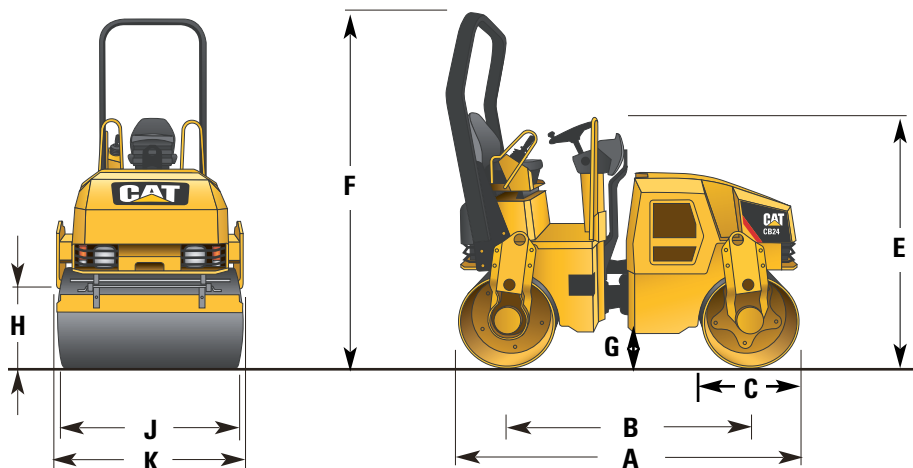
\*\* Static Linear Load for CB24 XT is 13.45 kg/cm

## Optional Equipment

Roll Over Protective Structure (ROPS)  
 Foldable ROPS  
 Sun Canopy  
 Traction Control  
 Rearing and Working Light Package  
 Lights Protection  
 Rotating Beacon  
 Battery Disconnect Switch  
 Engine Tachometer  
 Suspension Seat with Seat Switch  
 Coco Mats  
 Spark Arrestor Muffler  
 Non-Machined Drum Edges  
 Tyre Wetting System (CC24 only)  
 Italian Road Homologation

## Dimensions

All dimensions are approximate.



	CB22 mm	CB24/32 mm	CC24 mm
<b>A</b> Length	2500	2500	2513
<b>B</b> Wheelbase	1800	1800	1827
<b>C</b> Drum diameter	700	700/717	700
Drum shell thickness	13.5	13.5/22	13.5
Tyre diameter (CC24)	—	—	671
<b>E</b> Height at steering wheel	1800	1800	1800
<b>F</b> Height at ROPS	2680	2680/2688	2673
Height with ROPS folded	1800	1800	1800
<b>G</b> Ground clearance	262	262	262
<b>H</b> Curb clearance	520	520	520
<b>J</b> Compaction width	1000	1200/1300	1200
<b>K</b> Machine width	1098	1298/1398	1298

## Weights

Operating weights include lubricants, 80 kg operator, full fuel tank, full hydraulic system and half-full water tanks (all weights are approximate).

	CB22 kg	CB24/32 kg	CC24 kg
Operating weight with ROPS	2500	2700/3230	2400
at front drum	1210	1280/1570	1340
at rear drum	1290	1420/1660	—
at rear wheels	—	—	1050
weight per rear wheel	—	—	262

# **CB22, CB24 and CB32 Utility Compactors**

## **CC24 Combi Utility Compactor**

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Caterpillar dealer for available options.

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