

# 816K

## Landfill Compactor



### Engine

Engine Model	Cat® C7.1 ACERT™: configured for two emissions options	
Emissions	Meets U.S. EPA Tier 4 Final/EU Stage IV emission standards or meets U.S. EPA Tier 3/EU Stage IIIA equivalent emission standards	
	<b>Tier 4 Final/ Stage IV</b>	<b>Tier 3/ Stage IIIA equivalent</b>
Gross Power (SAE J1995)	212 kW/284 hp	213 kW/286 hp
Maximum Net Torque @ 1,400 rpm	1219 N·m/899 lbf·ft	1016 N·m/749 lbf·ft

### Operating Specifications

	<b>Tier 4 Final/ Stage IV</b>	<b>Tier 3/ Stage IIIA equivalent</b>
Operating Weight	25 809 kg/56,899 lb	25 541 kg/56,308 lb

# 816K Landfill Compactor Specifications

## Engine

Engine Model	Cat C7.1 ACERT	
	<b>Tier 4 Final/Stage IV</b>	
Rated Power (SAE J1349)	185 kW	248 hp
Rated Power (Net ISO 9249)	185 kW	248 hp
Gross Power (SAE J1995)	212 kW	284 hp
Gross Power (ISO 14396)	204 kW	274 hp
Maximum Net Torque @ 1,400 rpm	1219 N·m	899 lbf-ft
	<b>Tier 3/Stage IIIA equivalent</b>	
Rated Power (SAE J1349)	186 kW	249 hp
Rated Power (Net ISO 9249)	186 kW	249 hp
Gross Power (SAE J1995)	213 kW	286 hp
Gross Power (ISO 14396)	205 kW	275 hp
Maximum Net Torque @ 1,400 rpm	1016 N·m	749 lbf-ft
Torque Rise	52%	
Maximum Altitude without Derating	3000 m	9,842.52 ft
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	427.8 in <sup>3</sup>
High Idle Speed	2,270 rpm	
Low Idle Speed	800 rpm	

## Operating Specifications

Maximum Operating Weight (Tier 4 Final/Stage IV)	25 809 kg	56,899 lb
Maximum Operating Weight (Tier 3/Stage IIIA equivalent)	25 541 kg	56,308 lb

## Transmission

Transmission Type	Planetary – Powershift – ECPC	
Travel Speeds		
Forward – First	6.1 km/h	3.8 mph
Forward – Second	10.9 km/h	6.8 mph
Reverse – First	7.0 km/h	4.3 mph
Reverse – Second	12.5 km/h	7.8 mph

## Hydraulic System

Pump Flow at 2,111 rpm	89 L/min	23.5 gal/min
Main Relief Pressure	22 000 kPa	3,190 psi
Maximum Supply Pressure	20 200 kPa	2,930 psi
Cylinder, Double-acting: Lift, Bore and Stroke	120 mm × 915 mm	4.7 in × 36.0 in

## Service Refill Capacities

Cooling System – Tier 4 Final/Stage IV	81 L	21.4 gal
Cooling System – Tier 3/Stage IIIA equivalent	73 L	19.3 gal
Engine Crankcase	20 L	5.28 gal
Transmission	56 L	14.8 gal
Fuel Tank	500 L	132.1 gal
Diesel Exhaust Fluid Tank (Tier 4 Final/Stage IV only)	16 L	4.2 gal
Differentials and Final Drives – Front	43 L	11.4 gal
Differentials and Final Drives – Rear	43 L	11.4 gal
Hydraulic Tank Only	75 L	19.8 gal

- All non-road Tier 4 Final and Stage IV diesel engines are required to use:
  - Ultra Low Sulfur Diesel (ULSD) fuels containing 15 ppm for the EPA, 10 ppm for the EU (mg/kg) sulfur or less. Biodiesel blends up to B20 are acceptable when blended with 15 ppm (mg/kg) sulfur or less ULSD and when the biodiesel feedstock meets ASTM D7467 specifications.
  - Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specifications are required.
  - Diesel Exhaust Fluid (DEF) that meets all requirements defined in ISO 22241-1.

## Axles

Front	Planetary – Fixed
Rear	Planetary – Oscillating
Oscillation Angle	±6°

## Brakes

Parking Brake	Drum and Shoe, Spring Applied, Hydraulic Released
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# 816K Landfill Compactor Specifications

## Cab

	Standard	Suppression
Operator Sound Level (ISO 6396)	71 dB(A)	70 dB(A)
Machine Sound Level (ISO 6395) (Tier 4 Final/Stage IV)	111 dB(A)	109 dB(A)
Machine Sound Level (ISO 6395) Tier 3/Stage IIIA equivalent	112 dB(A)	110 dB(A)

## Hydraulic System – Steering

Steering System – Circuit	Closed Center Load Sensing	
Bore	101.6 mm	4.0 in
Stroke	597 mm	23.5 in
Steering System – Pump	Piston – Variable Displacement	
Maximum System Flow	147 L/min @ 2,111 rpm	38.8 gal/min @ 2,111 rpm
Steering Pressure Limited	27 600 kPa	4,003 psi
Vehicle Articulation Angle	84 degrees	

## Blades

Width – Moldboard Length	3580 mm	11.75 ft
Height Including Cutting Edge and Screen	1961 mm	6.4 ft
Maximum Depth of Cut	362 mm	1.2 ft
Maximum Lift Above Ground	1140 mm	3.7 ft
Width Over End Bits	3656 mm	12.0 ft

## Wheels

### Paddle Tips

Weight (Group)	5954 kg	13,126 lb
Outside Diameter	1717 mm	67.6 in
Drum Diameter	1400 mm	55.1 in
Drum Width	1016 mm	40.0 in
Tips per Row	5	
Tips per Wheel	20	
Replaceable	Welded	
Width over Drums	3338 mm	131.4 in
Tip Height	159 mm	6.25 in

### Plus Tips

Weight (Group)	6342 kg	13,982 lb
Outside Diameter	1717 mm	67.6 in
Drum Diameter	1400 mm	55.1 in
Drum Width	1016 mm	40.0 in
Tips per Row	5	
Tips per Wheel	20	
Replaceable	Welded	
Width over Drums	3338 mm	131.4 in
Tip Height	159 mm	6.25 in

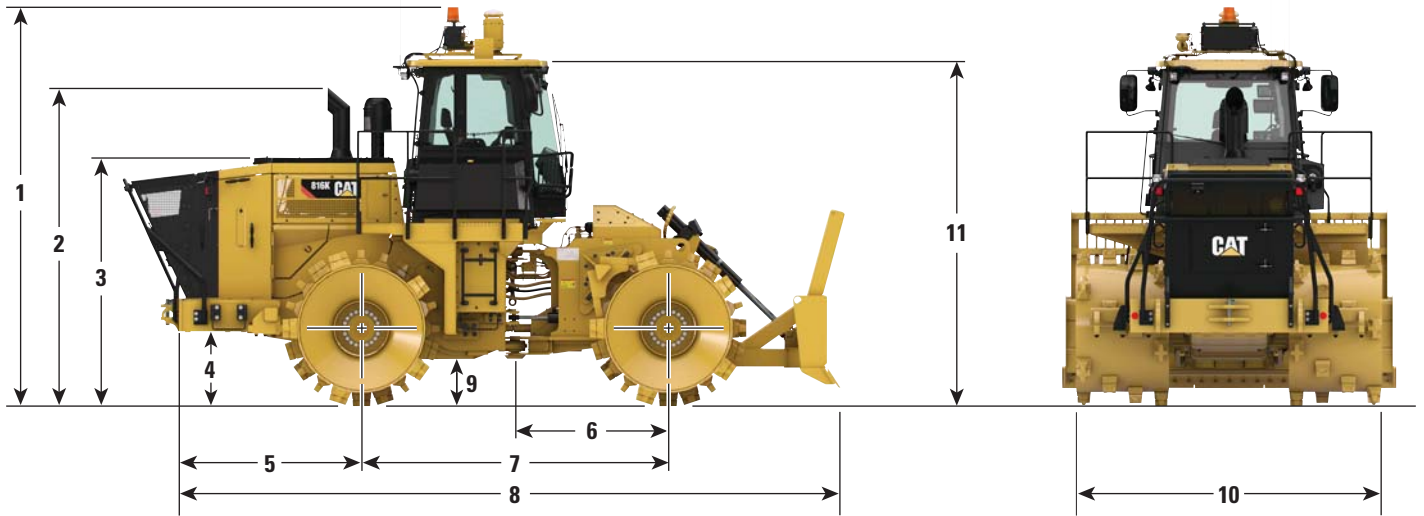
### Combo Wheels

Weight (Group)	6148 kg	13,554 lb
Outside Diameter	1717 mm	67.6 in
Drum Diameter	1400 mm	55.1 in
Drum Width	1016 mm	40.0 in
Tips per Row	5	
Tips per Wheel	20	
Replaceable	Welded	
Width over Drums	3338 mm	131.4 in
Tip Height	159 mm	6.25 in

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## Dimensions

All dimensions are approximate.



<b>1</b> Height to Top of Beacon	4368 mm	14.3 ft
<b>2</b> Height to Top of Exhaust Pipe	3497 mm	11.5 ft
<b>3</b> Height to Top of Hood	2720 mm	8.9 ft
<b>4</b> Ground Clearance to Bumper	818 mm	2.7 ft
<b>5</b> Center Line of Rear Axle to Bumper	1990 mm	6.5 ft
<b>6</b> Hitch to Center Line of Front Axle	1675 mm	5.5 ft
<b>7</b> Wheelbase	3350 mm	11.0 ft
<b>8</b> Overall Length (maximum)	8058 mm	26.4 ft
<b>9</b> Ground Clearance	516 mm	1.7 ft
<b>10</b> Width over Wheels	3338 mm	131.4 ft
<b>11</b> Height to Cab Roof	3878 mm	12.7 ft
Inside Turning Radius (Wheels)	2700 mm	8.9 ft
Inside Turning Radius (Blade)	2910 mm	9.5 ft
Outside Turning Radius (Blade)	6473 mm	21.2 ft