

825K

Soil Compactor



Engine

Engine Model	Cat® C15 ACERT™	
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	
Gross Power	324 kW	435 hp
Maximum Net Torque @ 1,300 rpm	2005 N·m	1,478.8 lbf·ft

Operating Specifications

Operating Weight (Tier 4 Final/ Stage IV)	35 528 kg	78,326 lb
Operating Weight (Tier 3 Final/ Stage IIIA equivalent)	35 081 kg	77,340 lb

825K Soil Compactor Specifications

Engine

Engine Model	Cat C15 ACERT	
Emissions	Tier 4 Final/Stage IV Final or Tier 3/Stage IIIA equivalent	
Rated Power (Net SAE J1349)	302 kW	405 hp
Rated Power (Net ISO 9249)	302 kW	405 hp
Gross Power	324 kW	435 hp
Net Power		
Direct Drive – Gross Power	307 kW	412 hp
Direct Drive – Torque Rise	33%	
Converter Drive – Gross Power	324 kW	435 hp
Converter Drive – Torque Rise	8.5%	
Maximum Net Torque @ 1,300 rpm	2005 N·m	1,478.8 lbf·ft
Maximum Altitude without Derating (Tier 4 Final/Stage IV)	2834 m	9,298 ft
Maximum Altitude without Derating (Tier 3 Final/Stage IIIA equivalent)	2773 m	9,098 ft
Bore	137.2 mm	5.4 in
Stroke	171.4 mm	6.7 in
Displacement	15.2 L	927.6 in ³
High Idle Speed	2,300 rpm	
Low Idle Speed	800 rpm	

Operating Specifications

Maximum Operating Weight (Tier 4 Final/Stage IV)	35 528 kg	78,326 lb
Maximum Operating Weight (Tier 3 Final/Stage IIIA equivalent)	35 081 kg	77,340 lb

Transmission

Transmission Type	Planetary – Powershift – ECPC	
Travel Speeds		
Forward – First	5.5 km/h	3.4 mph
Forward – Second	9.7 km/h	6.0 mph
Forward – Third	17.2 km/h	10.7 mph
Reverse – First	6.2 km/h	3.9 mph
Reverse – Second	11.1 km/h	6.9 mph
Reverse – Third	19.7 km/h	12.2 mph

Hydraulic System

Pump Flow at 1,800 rpm	117 L/min	30.9 gal/min
Main Relief Pressure	24 100 kPa	3,495 psi
Maximum Supply Pressure	24 100 kPa	3,495 psi
Cylinder, Double-acting: Lift, Bore and Stroke	120 mm × 1070 mm	4.7 in × 42.1 in
Cylinder, Double-acting: Tilt, Bore and Stroke	95.25 mm × 216 mm	3.75 in × 8.5 in

Service Refill Capacities

Cooling System	116 L	30.6 gal
Engine Crankcase	34 L	9.0 gal
Transmission	66 L	17.4 gal
Fuel Tank	782 L	206.6 gal
Diesel Exhaust Fluid Tank (Tier 4 Final/Stage IV)	32 L	8.5 gal
Differentials and Final Drives – Front	100 L	26.4 gal
Differentials and Final Drives – Rear	110 L	29.1 gal
Hydraulic Tank Only	134 L	35.4 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 (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	±8°

Brakes

Parking Brake	Drum and Shoe, Spring Applied, Hydraulic Released
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Cab

	Standard	Suppression
Operator Sound Level (ISO 6396)	73 dB(A)	72 dB(A)
Machine Sound Level (ISO 6395)	113 dB(A)	110 dB(A)

Hydraulic System – Steering

Steering System – Circuit	Double Acting – End Mounted	
Bore	114.3 mm	4.5 in
Stroke	576 mm	22.7 in
Steering System – Pump	Piston – Variable Displacement	
Maximum System Flow	170 L/min @ 1,800 rpm	44.9 gal/min @ 1,800 rpm
Steering Pressure Limited	24 000 kPa	3,481 psi
Vehicle Articulation Angle	86 degrees	

Blades

Moldboard Length	4390 mm	14.4 ft
Height Including Cutting Edge	1032 mm	3.4 ft
Maximum Depth of Cut	602 mm	1.97 ft
Maximum Lift Above Ground	958 mm	3.14 ft
Blade Tip Angle – Total	14.8°	
Blade Tip Angle – Forward	7.3°	
Blade Tip Angle – Back	7.5°	
Blade Tilt Angle – Right – Mechanical	5.1°	
Blade Tilt Angle – Left – Mechanical	4.1°	
Blade Tilt Angle – Right – Hydraulic	6.3°	
Blade Tilt Angle – Left – Hydraulic	5.4°	
Blade Tilt Angle – Right Full	10.8°	
Blade Tilt Angle – Left Full	10.1°	
Total Tilt Adjustment	890 mm	2.9 ft
Width Over End Bits	4628 mm	15.18 ft

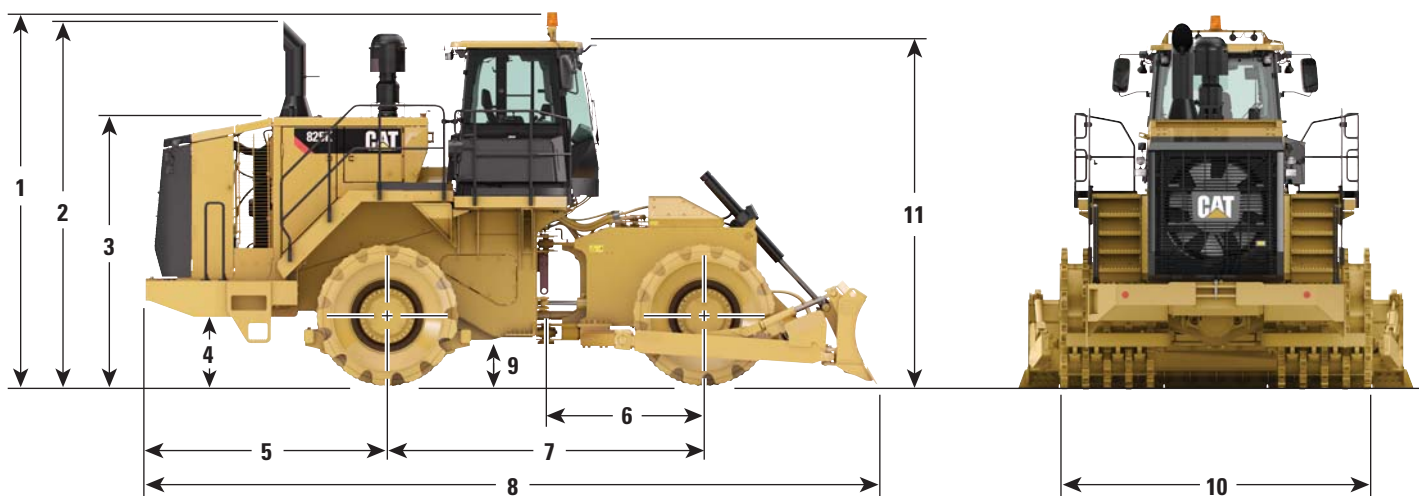
Wheels

Weight	7333 kg	16,167 lb
Outside Diameter	1672 mm	5 ft 5.8 in
Drum Diameter	1299 mm	4 ft 3.1 in
Drum Width	1125 mm	3 ft 8.3 in
Tips per Wheel	65	
Width over Drums	3650 mm	11 ft 11.7 in

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Dimensions

All dimensions are approximate.



1 Height to Top of Beacon	4381 mm	14 ft 14.5 in
2 Height to Top of Exhaust Pipe	4290 mm	14 ft 0.9 in
3 Height to Top of Hood	3162 mm	10 ft 4.5 in
4 Ground Clearance to Bumper	810 mm	2 ft 7.9 in
5 Center Line of Rear Axle to Edge of Counterweight	2830 mm	9 ft 3.4 in
6 Hitch to Center Line of Front Axle	1850 mm	6 ft 1 in
7 Wheelbase	3700 mm	12 ft 2 in
8 Length with Blade on Ground	8561 mm	28 ft 1 in
9 Ground Clearance	492 mm	1 ft 7.4 in
10 Width over Wheels	3650 mm	11 ft 11.7 in
11 Height to ROPS/Canopy	4059 mm	13 ft 3.8 in
Turning Radius – Inside of Push Arms	2627 mm	8 ft 7.4 in