

# **Cat® 824K**

Wheel Dozer

#### Safe and Comfortable

- Improved ingress/egress with a totally redesigned cab with flip up armrest
- Keep your operators informed about machine conditions and operation with VIMS™ 3G machine monitoring system
- Safety and visibility enhanced with optional rearview camera
- Preferred temperature settings maintained with automatic climate control
- Operator productivity enhanced with new membrane switch panels, keyed ignition and E-H parking brake switch
- Improved comfort with low operator sound levels
- Improved spectator sound levels and optional low sound packages
- Added accessibility and safety with new angled stairway to cab

#### **Easy to Service**

- Easier access and in a controlled environment, electronics bay is located inside the cab
- Focused on safety with ground level or platform access to most major components
- Ground level emergency shutdown, battery disconnect, stairway light switch
- Quick visual inspection and minimize fluid contamination with sight gauges for coolant, transmission, and hydraulic oil
- · Electronic air inlet restriction indicator
- Designed for ease of service and inspection
  - Swing out fuel, hydraulic oil coolers and condenser for easy access cleanout
  - Centralized grease points

### **Built for Production, for Your Efficiency**

- Powerful, responsive, fuel-efficient Cat® C15 engine with ACERT™ Technology
- · Reliable performance, long life, low emissions
- · High productivity and excellent fuel efficiency
- 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
- Tier 4 Cat Clean Emissions Module contains a Diesel Oxidation Catalyst, Diesel Particulate Filter and Cat Regeneration System, utilizing SCR technology
- Regeneration is completely automatic and does not interrupt the machine's work cycle
- Cat blades are resilient, durable and designed with excellent dozing and rolling characteristics
  - Capacities and widths are set to achieve increased productivity
  - Spreading design allows for spreading of cover material, as well as dozing of heavier loads
  - Blade Options include:
    - Straight Blade: Production dozing in stockpile material and general earthmoving
    - Universal or U-Blade: Large loads over long distances
    - Semi-U Blade: Straight and U-Blade combined for increased capacity
    - Coal Blade: Precise and productive dozing
    - Extended Wear Bulldozer Arrangement: Large loads over long distances in harsh conditions
- Experience maximum responsiveness and control with Steering and Transmission Integrated Control System (STIC™)
- Conserve more fuel with the automatic engine and electrical system shutdown
- Transfer more power to the ground and optimize fuel efficiency with the lock up torque converter
- Achieve greater momentum on grades and fuel savings by carrying that momentum through the shift points with the all new Single Clutch Speed Shifting (SCSS) transmission controls
- Operators experience less fatigue with throttle lock to maintain engine speed



## **Cat 824K Wheel Dozer**

Engine								
Engine Model	Cat C15 ACERT							
	Meets U.S. EPA Tier 4 Final/EU Stage I' emission standards or meets U.S. EPA Tier 3/EU Stage IIIA equivalent emission standards.							
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						
Converter Drive – Gross Power	324 kW	435 hp						
Maximum 'Net' Torque @ 1,300 rpm	2005 N⋅m	1,478.8 lbf-ft						
Max Altitude w/out Derating (Tier 4 Final/Stage IV Equivalent)	2834 m	9,298 ft						
Max Altitude w/out Derating (Tier 3/Stage III 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 <sup>3</sup>						

Transmission								
	Forw	<i>v</i> ard	Reverse					
First	6.2 km/h	3.9 mph	7.1 km/h	4.4 mph				
Second	11.1 km/h	6.9 mph	12.6 km/h	7.8 mph				
Third	19.6 km/h	12.2 mph	22.4 km/h	13.9 mph				
Fourth	34.8 km/h	21.6 mph	39.7 km/h	24.7 mph				

Hydraulic System							
Main Relief Pressure	24 100 kPa	3,495 psi					
Bore	120 mm	4.7 in					
Stroke	1070 mm	42.1 in					
Steering System – Circuit	Double Acting – End Mounted						
Vehicle Articulation	Angle 86°						

Axles						
Front	Planetary – Fixed					
Rear	Planetary – Oscillating					
Oscillation Angle	11°					

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 Equivalent)	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						
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All non-road U.S. EPA Tier 4 Final, EU Stage IV, and Japan 2014 (Tier 4 Final) 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.

Weight									
Operating Weight (straight blade)	34 004 kg	74,966 lb							
Dimensions									
Ground Clearance to Bumper	852 mm	2 ft 9.5 in							
Wheelbase	3700 mm	12 ft 2 in							
Length with Blade on Ground (straight blade)	8422 mm	27 ft 7.6 in							
Ground Clearance	441 mm	1 ft 5.4 in							
Width over Wheels	3365 mm	11 ft 0.5 in							
Height to ROPS/Canopy	4100 mm	13 ft 5.4 in							
Height to Top of Cab with Strobe	4422 mm	14 ft 6.1 in							
Turning Radius – Outside Corner of Blade	6002 mm	19 ft 8 in							
Turning Radius – Inside Corner of Blade	1892 mm	6 ft 2 in							
Width over End Bits (straight blade)	4507 mm	14 ft 9.4 in							
Maximum Depth of Cut (straight blade)	448 mm	1 ft 5.6 in							
Maximum Lift above Ground (straight blade)	1057 mm	3 ft 5.6 in							
Capacity, Rated (straight blade)	5.05 m <sup>3</sup>	6.61 yd <sup>3</sup>							

Blades												
	Capacity Width Over End Bits		Height Di		Dig D	Dig Depth		Ground Clearance		Maximum Tilt		
Straight	5.0 m <sup>3</sup>	6.6 yd <sup>3</sup>	4507 mm	177.4 in	1230 mm	48.4 in	448 mm	17.6 in	1057 mm	3 ft 5.6 in	1167 mm	45.9 in
Semi-U	7.7 m³	10 yd³	4421 mm	174.1 in	1551 mm	61.1 in	477 mm	18.8 in	1068 mm	42.0 in	1120 mm	44.1 in
Universal	7.7 m <sup>3</sup>	10.0 yd <sup>3</sup>	4352 mm	171.3 in	1350 mm	53.1 in	461 mm	18.1 in	1051 mm	41.4 in	1132 mm	44.6 in

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**AEXQ1158** 



