



Cat[®] 854

Wheel Dozer

Maximize productivity in mining applications with the Cat[®] 854 Wheel Dozer, designed with efficiency in mind. Enhanced maintenance capabilities and simplified serviceability make for a longer lifecycle, lower owning and operating costs, and more uptime. Move more material with a machine built for the toughest conditions.

Unmatched Durability

- The full box-section rear frame resists torsional shock and twisting forces.
- Solid through-width push beams transfer and absorb stresses through a larger portion of the frame.
- Robust structures withstand the toughest conditions and multiple lifecycles to improve your bottom line.
- Resilient, durable blades are designed with excellent dozing and rolling characteristics.
- Optimized axle mounting results in increased structural integrity.
- Castings in the engine and frame are used in high stress areas to spread high loads.
- One-piece castings enhance strength in key pin areas.

Optimum Efficiency

- Experience reliable efficiency with complete control over injection timing, duration, and pressure with Mechanically Actuated Electronic Unit Injection (MEUI[™]).
- Best-in-class Cat planetary powershift transmission features consistent, smooth shifting and efficiency through integrated electronic controls.
- Extended engine life and improved fuel efficiency with reduced rated speed.
- Impeller Clutch Torque Converter (ICTC) and Rimpull Control System (RCS) provide precise rimpull control.
- Load sensing hydraulic steering system enables precise machine control for easier loading.
- Lock-up torque converter with advanced control of lock-up speed.
- On demand cooling fan protects investment and lengthens lifecycle.

Increased Safety

- Battery disconnect, emergency engine shutdown, and stairway light switch are accessed through the ground level power service center.
- Optional Cat Detect with Object Detection System (rearview camera and radar) or standard Vision (rearview camera) increase operator awareness around the machine.
- Cab-mounted LED strobes provide warning for others near the machine.
- Wider stairs with reduced stair angles increase safety for operators.
- Access stairs via a powered platform from cab or ground level and have emergency egress access.

Innovative Technology

- Integrated technologies allow you to monitor, manage, and enhance your jobsite operations.
- Product Link[™] remote monitoring provides valuable insight into machine or fleet performance through the VisionLink[®] interface, so you can make decisions that boost jobsite efficiency and lower operating costs.
- Vital Information Management System (VIMS[™]) 3G touchscreen monitor gives access to a wide range of sensor information and enhanced machine data to resolve problems before machine failure.
- Optional Cat Detect technologies enhance awareness of the environment around the machine for increased safety.



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Enhanced Operator Comfort

- Steering and Transmission Integrated Control System (STIC™) combines directional selection, gear selection, and steering into a single lever, maximizing responsiveness and control while reducing operator fatigue.
- Operators can easily enter and exit the cab with fold-up STIC steer/armrest, reduced access stairway angles, and standard stairway lighting.
- Experience reduced vibrations with isolated cab mounts and seat-mounted implement and steering controls.
- Reduced interior sound levels keep operators comfortable throughout their entire shift.

Improved Sustainability

- Meets U.S. EPA Tier 4 Final emission standards or emits equivalent to U.S. EPA Tier 2.
- Automatic Engine Idle Shutdown conserves fuel when machine is not in use.
- Generate less waste with maintenance-free batteries.
- Maximize machine life and lower operating costs with Caterpillar Reman and Certified Rebuild programs, which utilize reused or remanufactured components for 40 to 70 percent cost savings.
- Retrofit packages from Caterpillar deliver new features to older machines to get the most from your investment.

Simplified Maintenance

- Swing-out fuel, hydraulic oil coolers, and condenser allow for easy access cleanout.
- Machine features ground level or platform access to easily reach daily service points.
- Swing-out doors on either side of the engine compartment provide easy access to critical daily service checks.
- Optional tire pressure monitoring system provides real-time information to the operator in the cab for optimized tire life.
- Electronics bay is conveniently located inside the cab.
- Sight gauges offer quick visual inspection to minimize fluid contamination.
- Lighting inside the engine compartment improves visibility to service points.
- Ecology drains prevent spills and allow for easier service.
- 500-hour engine oil and filter change interval with Scheduled Oil Sampling (S-O-SSM) oil sampling analysis.
- Service center includes drain and fill, electronic technician connection, and fluid level status.
- Axle oil cooler and Automatic Retarder Control prevents unnecessary wear from accelerating down declines.

Purpose Built Specialty Arrangements

- Dependable blades are designed for mining with press rib construction and optimized widths and capacities for excellent dozing and rolling.
- Available Cat coal blades retain load control and a large capacity for lighter materials.
- Semi-U Blade features the increased capacity and spreading capabilities of a straight blade.
- Heavy-Duty Semi-U blade includes a Hardox 400 Liner plate, side plates, and additional reinforcements at the bottom of the blade.
- Equipped with the Cat MineStar System, a suite of integrated mine operations and mobile equipment technologies.
- Cat MineStar's capabilities help manage all aspects of operation.
- Fleet provides remote machine tracking capabilities.
- Terrain for Loading enables high precision management of load management.
- Detect assists the operator with areas of limited visibility.
- Health delivers machine condition and operating data and diagnostic tools for longer machine lifecycle.

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional
ELECTRICAL AND LIGHTING		
Electronic transmission control	✓	
Lighting system, halogen (front and rear) lighting, access stairway, engine compartment	✓	
Lights, HID		✓
Light, LED		✓
Product Link™ (Cellular)		✓
Product Link (Satellite)		✓
POWERTRAIN		
Planetary powershift, 3F/3R electronic control transmission	✓	
Rimpull Control System	✓	
Standard ICTC with Lock-Up Clutch	✓	
Fuel Priming Pump (electric)	✓	
Automatic, ether starting aid	✓	
Aluminum Modular Radiator (AMR)	✓	
No spin rear axle		✓
No spin rear axle and axle oil cooler		✓
OPERATOR ENVIRONMENT		
Air conditioner and heater with automatic temperature control	✓	
Converter (12V, 10-15 amp) and power port	✓	
Digital display on center console: gear, ground speed, machine hours	✓	
Instrumentation, gauges: engine coolant temperature, fuel level, hydraulic oil temperature, powertrain oil temperature, tachometer	✓	
Instrumentation, warning indicators: action alert system – three categories, automatic transmission model enable status, brake malfunction, bucket float status, delayed engine shutdown status, engine idle shutdown status, engine malfunction, fuel economy mode enable status, hydraulic lockout, lockup clutch enable status, low fuel level, parking brake status, rimpull control enable status, seat belt warning, secondary steering (if equipped), throttle lock status, transmission gear	✓	
Premium seat with heated and actively cooled leather, adjustable lumbar support, air adjustable bolsters on the seat and backrest, seat cushion tilt adjustment, and adjustable-length seat cushion	✓	
Radio, AM/FM with Bluetooth®, USB Port, 3.5 mm auxiliary input		✓
Radio, Sirius XM/AM/FM radio with Bluetooth technology, USB Port, 3.5 mm AUX input	✓	
Wet-arm wipers/washers (front, rear, and corner) – intermittent front wiper	✓	

	Standard	Optional
SAFETY		
Rear vision camera	✓	
Back-up alarm	✓	
Mirrors, rearview (externally mounted)	✓	
Seat belt, retractable, 76 mm (3 in) wide	✓	
Seat, trainer with lap belt, 76 mm (3 in) wide	✓	
Emergency platform egress	✓	
Stairway, left and right rear access	✓	
Toe kicks	✓	
SERVICE		
Vital Information Management System (VIMS™) 3G with graphical information display: external data port, customizable operator profiles	✓	
Engine, crankcase, 500-hour interval with CH4	✓	
Ground level service center with Electronic Technician (ET) port, fast fill fluid ports, ecology drains	✓	
Ground-level fast-fill fuel system	✓	
Product Link		✓
Grouped/Labeled lube points	✓	
Automatic Lubrication System greases the hitch, steering, and axle trunnion bearings	✓	
Case drain filters	✓	
High pressure hydraulic oil screen		✓
High speed oil change system		✓
Axle ecology drains	✓	
Battery disconnect and jump start receptacle in bumper	✓	
Starter and Transmission lockouts in bumper	✓	
Oil sampling valves	✓	
Sight gauges for steering, implement and transmission oil	✓	
Tire pressure monitoring		✓
COOLING		
Standard ambient package (recommended for site conditions that do not exceed 43° C [110° F])	✓	
High ambient cooling system (recommended for ambient temperatures up to 50° C [122° F] for EPA Tier 4 Final emissions certified machines and 55° C [131° F] for EPA Tier 2 equivalent machines)		✓

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Technical Specifications

Engine		
Engine Model	Cat C32B	
Rated Speed	1,750 rpm	
Emissions	U.S. EPA Tier 4 Final	
Gross Power – SAE J1995:2014	671 kW	900 hp
Net Power ISO – 9249:2007	607 kW	814 hp
Emissions	Tier 2 Equivalent	
Gross Power – SAE J1995:2014	676 kW	907 hp
Net Power ISO – 9249:2007	614 kW	823 hp
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1,958 in³
Peak Torque @ 1,200 rpm	4242 N-m	3,139 lbf-ft

- Torque Rise 30%
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
 - Net torque rise meets SAE J139.
 - No engine derating required up to 3050 m (10,000 ft) altitude.

Weight		
Operating Weight	101 898 kg	224,647 lb

Blade		
Blade Capacity Range	30.5 to 44.8 m³	40 to 58.6 yd³

Axles	
Front	Fixed
Rear	Trunnion
Oscillation Angle	± 10°

Transmission					
Transmission Type			Cat planetary powershift		
Speed	km/h	mph	Speed	km/h	mph
Converter Drive			Direct Drive		
Forward 1	7.1	4.4	Forward 1	Lock-up disabled	
Forward 2	12.4	7.7	Forward 2	13.0	8.1
Forward 3	21.2	13.2	Forward 3	22.8	14.2
Reverse 1	7.7	4.8	Reverse 1	8.0	5.0
Reverse 2	13.5	8.4	Reverse 2	14.3	8.9
Reverse 3	23.5	14.6	Reverse 3	25.1	15.6

Service Refill Capacities		
Fuel Tank – Standard	1562 L	413 gal
Cooling System	1562 L	413 gal
Crankcase	120 L	32 gal
Transmission	169 L	45 gal
Differentials and Final Drives – Front	369 L	98 gal
Differentials and Final Drives – Rear	342 L	90 gal
Hydraulic System – Implement and Brakes (tank only)	261 L	68.9 gal
Hydraulic System – Steering and Engine Cooling Fan (tank only)	290 L	77 gal

- ### Air Conditioning System
- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.8 kg of refrigerant which has a CO₂ equivalent of 2.574 metric tonnes.

- ### Sound Performance
- | | Standard | Suppression |
|--------------------------------------|-----------|-------------|
| Operator Sound Level (ISO 6396:2008) | 71 dB(A) | 70 dB(A) |
| Machine Sound Level (ISO 6395:2008) | 116 dB(A) | 113 dB(A) |
- The machine sound power level was measured according to ISO 6395:2008. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
 - The operator sound pressure level was measured according to ISO 6396:2008. The measurement was conducted at 70 percent of the maximum engine cooling fan speed.
 - Hearing protection may be needed when the machine is operated with a cab that is not properly maintained or when the doors or windows are open for extended periods or in a noisy environment.



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