

Cat[®] 950 Wheel Loader

The Cat[®] 950 Wheel Loader brings premium performance with simple-to-use technologies as a standard offering, boosting operator efficiencies and delivering consistent high bucket fill factors resulting in up to 10% increased productivity.* Extended service intervals lower maintenance costs by up to 30%.* This machine is designed to meet emission standards without interrupting operation. Improved performance, reliability, durability, and versatility result in a machine that is better built to meet your needs.

*Compared to previous Cat model

Proven Reliability

- Cat C7.1 engine[†] offers high power density with a combination of proven electronics, fuel, and air systems.
- Equipped with automatic Cat regeneration system, Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF), and Diesel Exhaust Fluid (DEF) tank and pump.
- Features an electric fuel priming pump, fuel-water separator, and secondary fuel filter.
- Thorough component design and machine validation processes result in unmatched reliability and uptime.

Work in Comfort in the All New Cab

- Next-generation, easily adjustable seat and suspension for improved operator comfort. It comes in three trim levels and can be equipped with a 4-point harness (kit).
- Increased legroom and adjustable seat controls for increased comfort and efficiency.
- Automatic air conditioning system keeps the cab temperature as desired.
- New in-cab dashboard and high-resolution touch display(s) are easy to use, intuitive, and user friendly.
- Sound suppression, seals, and viscous cab mounts decrease noise and vibration for a quieter work environment.
- The HMU steering wheel provides precision control, resulting in excellent comfort and accuracy. Standard in all regions except North America. Limited optional availability for North America, consult your Cat dealer.
- The seat-mounted electro-hydraulic joystick steering system provides precision control and dramatically reduces arm fatigue, resulting in excellent comfort and accuracy. Standard in North America and optional in all other regions.
- The next generation of ride control works as a shock absorber, improving ride quality over rough terrain.

Durability

- Heavy-duty transmission and axles designed to handle extreme applications.
- Automatic countershaft powershift (5F/3R) transmission features durable, long-lasting components.
- Full-flow hydraulic filtration system with additional kidney-loop filtration improves hydraulic system reliability and component life.
- Next Generation implement pump increases flow at lower engine speeds and improves hydraulic response.

Smart Machine for Efficient Operation

- Standard Cat technologies to monitor, manage, and enhance your jobsite operations.
 - Cat Payload with Assist provides accurate weighing** of the bucket payloads. Data is displayed in real time to improve productivity and loading accuracy with manual tip-off.
- Product Link[™] wirelessly connects the machine to the office, giving you access to production and essential health information needed to make timely, fact-based decisions to help you better run your business.
- New Autodig allows the operator to fully automate bucket loading to improve fill factors and loading time.
- Auto Set Tires promotes proper loading technique, significantly reducing tire slip and tire wear.
- Optional Cat Advanced Payload with Assist:
 - Tip Off Assist automatizes load adjustment of the final bucket to match hauling unit target.
 - Enhanced lists management, site integration, and extended scale features to help manage and improve productivity and profitability of operations.
- Optional Cat Productivity subscription provides detailed and comprehensive actionable information to help you manage and improve the productivity and profitability of your operations.

**Not legal for trade.



Achieve Greater Fuel Efficiency & Productivity

- New Autodig with Auto Set Tires for consistent high bucket fill factors deliver up to 10% more productivity compared to previous Cat model.
- 5-speed transmission and lock-up clutch torque converter, power trains deliver smooth shifting, fast acceleration, and speed on grade for greater performance and fuel efficiency.
- Single clutch and lock-to-lock shifting for faster acceleration and speed on grades.
- Z bar* linkage provides high breakout force at ground level.
- Optimized Z bar* linkage offers parallel lift capability for precise work tool control.
- Performance Series Buckets utilize a system-based approach to balance bucket shape against the machine's linkage, resulting in higher fill factors and better material retention when compared with other buckets of the same rated capacity.
- Application Profiles optimize machine settings for different applications at one push of a button.
- Job Aids help operators improve and optimize their operating skills.
- Automatic engine idle shutdown system significantly reduces idle time, overall operating hours, and fuel consumption.
- Deeply integrated engine, power train, and hydraulic systems deliver unmatched productivity and fuel efficiency.
- Standard front manual differential locks and optional auto front and rear differential locks improve traction, resulting in increased productivity while reducing tire scuffing for reduced operating costs.
- Fusion™ Quick Coupler allows for easy tool changes without leaving the cab, letting the machine move quickly from task to task.

*Not all configurations available in all regions, subject to availability

Safety Features

- Rear-vision camera enhances visibility behind the machine, helping you work safely and confidently.
- Cab access with wide door, optional remote door opening, and inclined steps add solid stability.
- Floor-to-ceiling windshield, large mirrors with integrated spot mirrors, and rear-vision camera provide industry leading all-around visibility.
- Computerized monitoring system includes several warning indicators.
- Monitored seat belt is standard and can be enhanced with an optional exterior indicator.
- Optional multiview (360°) vision system helps the operator monitor the surroundings of the machine at all times.
- Optional Cat Detect radar technology enhances awareness by monitoring the working environment and alerts operators to hazards.
- Optional access light and under-hood service light system to provide illuminated access to the machine and daily checks even in the dark.

Reduced Maintenance Time and Costs

- Extended fluid and filter change intervals reduce maintenance costs by up to 30%.**
- Convenient access to hydraulic and electrical service centers for easy ground-level servicing.
- Remote Troubleshoot can connect the machine to the dealer service department to help diagnose problems quickly so you can get back to work.
- Remote Flash works around your schedule to ensure your machine's software is up to date for optimal performance.
- The Cat App helps you manage fleet location, hours, and maintenance schedules; it also alerts you for required maintenance and allows you to request service from your local Cat dealer.
- One-piece tilting hood makes engine compartment access fast and easy.
- Optional Integrated Autolube extends component and service life. **Parts and fluids only

Purpose-built Specialty Configurations

- Application-specific arrangements direct from the factory for optimized performance and added durability in the toughest applications, including:
 - Industrial and waste models feature guarding and reinforcement necessary for work in transfer stations, recycling depots, scrap yards, and demolition sites.
 - Forestry model increases lift and tilt capacities for efficient and productive log and chip handling in paper, pellet, and sawmills.

Standard and Optional Equipment

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

	Standard	Optional
OPERATOR ENVIRONMENT		
Cab, pressurized, sound suppression	\checkmark	
Door, remote opening system		\checkmark
EH implement controls, parking brake	\checkmark	
HMU steering wheel ¹	\checkmark	\checkmark
Steering, joystick ²	✓	\checkmark
Entertainment radio		\checkmark
CB radio ready		\checkmark
Seat, cloth, air suspension	\checkmark	
Seat, suede/cloth, air suspension, heated		\checkmark
Seat, leather/cloth, air suspension, heated/cooled		\checkmark
Touchscreen display	\checkmark	
Visibility: mirrors, rear-vision camera	\checkmark	
Multiview (360°) vision system		\checkmark
Cat Detect rear radar system		\checkmark
Dedicated rearview screen		\checkmark
Mirrors, heated		\checkmark
Air conditioner, heater, defroster (auto temp, fan)	\checkmark	
Sun visor, front and rear, retractable	\checkmark	
Window cleaning platform, front	\checkmark	
Window, front, laminated	\checkmark	
Windows, front, heavy duty		\checkmark
Full cab window guard		\checkmark
ON-BOARD TECHNOLOGIES		
Cat Payload scale	\checkmark	
Autodig with Auto Set Tires	\checkmark	
Operator ID & machine security	\checkmark	
Application Profiles	\checkmark	
Job Aids	\checkmark	
Controls Help and eOMM		\checkmark
Cat Advanced Payload		\checkmark
Cat Payload Printer		✓
POWERTRAIN		
Cat C7.1 engine	\checkmark	
Electric fuel priming pump	\checkmark	
Fuel-water separator and secondary fuel	\checkmark	
filter Engine, air precleaner		
Turbine, air precleaner	v	✓
Radiator, high debris		•
Cooling fan, reversible		•
Axles, front differential lock	√	v
Axles, auto differential locks front and rear	¥	1
Axles, ecology drains, AOC ready, extreme temperature seals		✓
Axles, oil cooler		✓
Transmission, countershaft, automatic	√	•
Torque converter with lock-up	√	

¹ Standard in all regions except North America (limited optional availability for North America, consult your Cat dealer). ² Standard in North America; optional in all other regions.

	Standard	Optional
POWERTRAIN (Continued)		
Service brakes, hydraulic, fully enclosed wet disc, wear indicators, Integrated Braking System (IBS)	\checkmark	
Park brake, caliper on front axles, spring applied–pressure released	\checkmark	
HYDRAULICS		
Implement system, load sensing with variable displacement piston pump	✓	
Steering system, load sensing with dedicated variable displacement piston pump	✓	
Ride control, dual accumulators	✓	
3 rd and 4 th auxiliary functions with ride control		✓
Oil sampling valves, Cat XT™ hoses	✓	/
Quick coupler control ELECTRICAL		V
	1	
Starting and charging system, 24V Starter, electric, heavy duty	• •	
Cold start, 120V or 240V	v	
Lights: halogen, 4 work lights, 2 front roading		v
lights with turn signals, 2 rear-vision lights	•	
Lights: LED		•
Warning beacon		v
Reversing strobe lights MONITORING SYSTEM		v
Front dash with analog gauges, LCD display,	✓	
And warning lights Primary touchscreen monitor (Cat Payload,	• 	
quad screens, machine settings & messages)	v	
Parallel Lift, Z-bar*	✓	
Standard lift, Z-bar*		./
·		•
High Lift available with both linkages*		v
Kickouts: lift and tilt	✓	
ADDITIONAL EQUIPMENT		
Cat Autolube system		√
Fenders, extensions or roading		\checkmark
Guards: power train, crankcase, cab, cylinders, rear		\checkmark
Biodegradable hydraulic oil		\checkmark
High-speed oil change system		\checkmark
Rear cab access		\checkmark
Toolbox		\checkmark
Wheel chocks		\checkmark
Secondary steering system, electrical**		√
SPECIAL CONFIGURATIONS		
Auxiliary Counterweight		√
Waste and industrial		√
Forestry		√
Tunneling***		√
Corrosion resistant		

Corrosion resistant

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* Not all configurations available in all regions, subject to availability.

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** Standard or optional depending on region. Consult your dealer. ***Japan only.

Technical Specifications

Engine		
Engine Model	Cat C	7.1
Engine Power @ 2,100 rpm – ISO 14396:2002	186 kW	249 hp
ISO 14396:2002 (DIN)	253 mhp (PS)	
Gross Power @ 2,100 rpm – SAE J1995:2014	188 kW	253 hp
SAE J1995:2014 (DIN)	257 mhp (PS)	
Net Power @ 2,100 rpm – ISO 9249:2007, SAE J1349:2011	172 kW	231 hp
ISO 9249:2007 (DIN)	235 mhp (PS)	
Engine Torque @ 1,300 rpm – ISO 14396:2002	1231 N⋅m	908 lbf-ft
Gross Torque @ 1,300 rpm – SAE J1995:2014	1242 N⋅m	916 lbf-ft
Net Torque @ 1,300 rpm – ISO 9249:2007, SAE J1349:2011	1170 N·m	863 lbf-ft
Displacement	7.0	L

• Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.

- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
- 20% biodiesel FAME (fatty acid methyl ester)*
- 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

* Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.

Weight Operating Weight 19 260 kg 42,461 lb • Weight based on a machine configuration with with Parallel lift z-bar linkage, Bridgestone 23.5R25 VJT L3 radial tires, full fluids, operator, standard

Bridgestone 23.5R25 VJT L3 radial tires, full fluids, operator, standard counterweight, ride control cold start, roading fenders, Product Link, front manual differential/open rear axles, power train guard, secondary steering, sound suppression, and a 3.1 m³ (4.1 yd³) general purpose bucket with BOCE.

Transmission						
Speed	km/h	mph	Speed	km/h	mph	
Forward 1	6.9	4.3	Reverse 1	6.9	4.3	
Forward 2	12.0	7.5	Reverse 2	12.0	7.5	
Forward 3	19.3	12.0	Reverse 3	25.7	16.0	
Forward 4	25.7	16.0				
Forward 5	39.5	24.5				

 Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 787 mm (31 in) roll radius.

Sound	
Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	107 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)*	69 dB(A)
Exterior Sound Power Level (ISO 6395:2008)**	104 dB(A)

*Including countries that adopt the EU and UK Directives.

**European Union Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg (3.5 lb) of refrigerant which has a CO₂ equivalent 2.288 metric tonnes (2.522 tons).

Bucket Capacities					
Bucket Range	2.67-9.90 m ³	3.5-13.0 yd³			
Operating Specificati	ons				
Static Tipping Load – Full 40° Turn:					
With Tire Deflection	11 201 kg	24,694 lb			
No Tire Deflection	11 961 kg	26,369 lb			
Breakout Force	181 kN	40,690 lbf			
• For a machine configuration as defined under "V	Veight."				

Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

Service Refill Capacities					
Fuel Tank	259.5 L	68.6 gal			
DEF Tank	15 L	4.0 gal			
Cooling System	54 L	14.3 gal			
Crankcase	21 L	5.5 gal			
Transmission	43 L	11.4 gal			
Differentials and Final Drives – Front	43 L	11.4 gal			
Differentials and Final Drives – Rear	43 L	11.4 gal			
Hydraulic Tank	97 L	25.6 gal			

Hyuraulic System		
Implement System:		
Maximum Pump Output (2,340 rpm)	322 L/min	85 gal/min
Maximum Operating Pressure	29 300 kPa	4,250 psi
Hydraulic Cycle Time – Total	9.1 se	conds

Dimensions				
	Standard Lift		High Lift	
Height to Top of Hood	2695 mm	8'10"	2695 mm	8'10"
Height to Top of ROPS	3456 mm	11'4"	3456 mm	11'4"
Ground Clearance	354 mm	1'1"	354 mm	1'1"
Wheelbase	3350 mm	11'0"	3350 mm	11'0"
Overall Length (without bucket)	7024 mm	23'1"	7490 mm	24'7"
Hinge-Pin Height at Carry Height	623 mm	2'0"	775 mm	2'6"
Hinge-Pin Height at Maximum Lift	4009 mm	13'1"	4514 mm	14'9"
Lift Arm Clearance at Maximum Lift	3255 mm	10'8"	3615 mm	11'10"
Rack Back at Maximum Lift	59 degrees		56 degr	ees
Rack Back at Carry Height	49 degrees		49 degrees	
Width over Tires (Loaded)	2824 mm	9'4"	2824 mm	9'4"
Tread Width	2140 mm	7'0"	2140 mm	7'0"

 \bullet All dimensions are approximate and based on machine equipped with 3.1 m³ (4.1 yd³) general purpose bucket with BOCE and Bridgestone 23.5R25 VJT L3 radial tires.



AEXQ3441-00 (01-2023) Build Number 14A (N Am, Europe, Japan, Turkey)

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