



Cat[®] 982 XE

Wheel Loader

The Cat[®] 982 XE Wheel Loader delivers up to 35% increased fuel efficiency,* premium performance with simple-to-use standard technologies to boost operator efficiencies, and lower maintenance costs by up to 25%.* 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**

Superior Fuel Efficiency

- Up to 35% better fuel efficiency compared to previous Cat model.
- Increased engine power resulting in improved machine performance and response.
- Deep system integration of the Cat continuously variable transmission, engine, hydraulic, and cooling systems results in significantly increased performance and fuel efficiency.
- Eliminating the torque converter allows the capability to control engine rpm and machine speed independently, resulting in efficient digging, fine control, and easy operation.
- Lower rated engine speed reduces component wear and operating noise.
- Power dense engine burns less fuel by providing power and torque when needed.

Achieve Greater Productivity

- Continuously variable transmission delivers smooth, fast acceleration and speed on grade.
- Great 2-pass match for larger on-highway trucks in rehandling applications.
- Strong performer in bank excavation and face loading in well shot rock applications.
- Machine maneuvering on grade is made easy with speed-hold and anti-rollback.
- Integrated continuously variable transmission provides maximum, steady power at optimal speeds.
- Advanced rimpull control for best loading efficiency in the pile and tire wear reduction.
- New Autodig with Auto Set Tires for consistent high bucket fill factors.
- Application Profiles optimizes machine settings for different applications at one push of a button.
- Job Aids helps operators improve and optimize their operating skills.
- 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.

- Automatic engine idle shutdown system significantly reduces idle time, overall operating hours, and fuel consumption.
- Dual ride control accumulator system enables a wide payload range and better ride quality.
- Optional limited slip differentials increase traction and reduce tire slip, lowering operating costs.
- Optional aggregate handler configuration offers higher payload capability for loose aggregate handling.**

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.
 - Onboard Job Aids and Operator Controls Help to ease operation.
- Optional Cat Advanced Payload with Assist:
 - Tip Off Assist automatizes load 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.

***Optional configurations and equipment may vary from region to region and require conformance to Caterpillar payload policy. Consult your dealer or Caterpillar representative for details.*

****Not legal for trade.*



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Proven Reliability

- Cat C13 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 filtration system.
- Thorough component design and machine validation processes result in unmatched reliability and uptime.

Safety Features

- Rear-vision camera enhances visibility behind the machine, helping you work safely and confidently.
- Optional 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.
- Cab access with wide door, optional remote door opening, and stair-like 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 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 25%.*
- Convenient access to hydraulic and electrical service centers for easy and safe 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.
- Integrated Autolube extends component and service life.
- One-piece tilting hood makes engine compartment access fast and easy.
- With Fusion™ Quick Coupler, buckets can be changed without leaving the cab, allowing the machine to quickly move from task to task.

*Parts and fluids only

Durability

- Increased power, purpose-built heavy-duty frames, transmission, axles, final drives, and low-profile tires assure long service life.
- Full-flow hydraulic filtration system with additional kidney-loop improves hydraulic system reliability and component life.

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.
- Increased legroom and adjustable seat controls for increased comfort and efficiency.
- Automatic air conditioning system keeps the cab cool 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 seat-mounted electro-hydraulic joystick steering system provides precision control and dramatically reduces arm fatigue, resulting in excellent comfort and accuracy.
- The next generation of ride control works as a shock absorber, improving ride quality over rough terrain.
- Inclined steps and convenient grab handles ease accessibility to the operating space.
- Extended windows enhance visibility, while convex and spot mirrors extend the driver's view on the sides and rear.

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 featuring 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.

†Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
OPERATOR ENVIRONMENT					
Cab, pressurized, sound suppression	✓				
Door, remote opening system		✓			
EH implement controls, parking brake	✓				
Steering, joystick	✓				
Entertainment radio (FM, AM, USB, BT)		✓			
Entertainment radio (DAB+)		✓			
CB radio ready		✓			
Seat, suede/cloth, air suspension, heated	✓				
Seat, leather/cloth, air suspension, heated/cooled		✓			
Touchscreen display	✓				
Visibility: mirrors, rear-vision camera	✓				
360° vision system		✓			
Cat Detect rear radar system		✓			
Dedicated rearview screen		✓			
Mirrors, heated	✓				
Air conditioner, heater, defroster (auto temp, fan)	✓				
Sun visor, front, retractable	✓				
Sun visor, rear, retractable	✓				
Window cleaning platform, front	✓				
Windows, front, safety laminated rounded glass	✓				
Windows, front, heavy duty, or full guards		✓			
ON-BOARD TECHNOLOGIES					
Cat Payload scale	✓				
Autodig with Auto Set Tires	✓				
Operator ID and machine security	✓				
Application Profiles	✓				
Job Aids	✓				
Controls Help and eOMM	✓				
Cat Advanced Payload		✓			
Cat Payload printer		✓			
POWER TRAIN					
Cat C13 engine	✓				
Electric fuel priming pump	✓				
Fuel-water separator and secondary fuel filter	✓				
Engine, air precleaner	✓				
Turbine, air precleaner		✓			
Radiator, high debris		✓			
Cooling fan, reversible		✓			
Axles, open differentials	✓				
Axles, limited slip differential(s)		✓			
Axles, ecology drains, AOC ready	✓				
Axles, extreme temperature seals		✓			
Axles, oil cooler		✓			
Transmission, continuous variable	✓				
Rimpull control	✓				
Throttle lock mode	✓				
Hill and speed hold on grades	✓				
POWER TRAIN (Continued)					
Service brakes, hydraulic, fully enclosed wet disc, wear indicators	✓				
Park brake, caliper on front axles, spring applied–pressure released	✓				
HYDRAULICS					
Implement system, load sensing with electro-hydraulic variable displacement piston pump	✓				
Steering system, load sensing with dedicated variable displacement piston pump	✓				
Ride control, dual accumulators	✓				
3 rd auxiliary function with ride control		✓			
Oil sampling valves, Cat XT™ hoses	✓				
Quick coupler control		✓			
ELECTRICAL					
Starting and charging system, 24V	✓				
Starter, electric, heavy duty	✓				
Cold start, 120V or 240V		✓			
Lights: halogen, 4 work lights, 2 rear-vision lights	✓				
Lights: roading with turn signals	✓				
Lights: LED		✓			
Warning beacon		✓			
MONITORING SYSTEM					
Front dash with analog gauges, LCD display, and warning lights	✓				
Primary touchscreen monitor (Cat Payload, quad screens, machine settings, and messages)	✓				
Reversing strobe lights		✓			
LINKAGE					
Standard lift, Z-bar	✓				
High lift, Z-bar		✓			
Kickouts: lift and tilt	✓				
ADDITIONAL EQUIPMENT					
Cat Autolube system		✓			
Fenders, roading		✓			
Guards: power train, crankcase, cab, cylinders, rear		✓			
Biodegradable hydraulic oil		✓			
High-speed oil change system		✓			
Fast fill fuel tank		✓			
Toolbox		✓			
Wheel chocks		✓			
Secondary steering system, electrical		✓			
SPECIAL CONFIGURATIONS					
Aggregate handler		✓			
Waste and industrial		✓			
Forestry, logger		✓			

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Technical Specifications

Engine		
Engine Model	Cat C13	
Engine Power @ 1,700 rpm – ISO 14396:2002	322 kW	432 hp
Gross Power @ 1,700 rpm – SAE J1995:2014	325 kW	436 hp
Net Power @ 1,700 rpm – ISO 9249:2007, SAE J1349:2011	301 kW	404 hp
Engine Torque @ 1,200 rpm – ISO 14396:2002	2197 N·m	1,620 lbf·ft
Gross Torque @ 1,200 rpm – SAE J1995:2014	2218 N·m	1,636 lbf·ft
Net Torque @ 1,100 rpm – ISO 9249:2007, SAE J1349:2011	2054 N·m	1,515 lbf·ft
Displacement	12.5 L	

- Cat engine meets U.S. EPA Tier 4 Final and EU Stage V 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.

Weights

Operating Weight 35 510 kg 78,264 lb

- Weight based on a machine configuration with Bridgestone 875/65R29 VLTS L4 radial tires, full fluids, operator, standard counterweight, ride control, cold start, roading fenders, Product Link, open differential axles (front/rear), secondary steering, sound suppression, and a 6.1 m³ (8.0 yd³) general purpose bucket with BOCE.

Transmission

Speed	km/h	mph	Speed	km/h	mph
Forward 1	6.2	3.9	Reverse 1	7.1	4.4
Forward 2	11.8	7.3	Reverse 2	13.5	8.4
Forward 3	20.9	13.0	Reverse 3	28.0	17.4
Forward 4	39.5	24.5	Reverse 4	N/A	N/A

- Maximum travel speed in standard vehicle with empty bucket and standard L4 tires with 914 mm (36 in) roll radius.

Sound

With Cooling Fan Speed at Maximum Value:

Operator Sound Pressure Level (ISO 6396:2008)	70 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	110 dB(A)
Exterior Sound Pressure Level (SAE J88:2013)	75 dB(A)*

*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

With Cooling Fan Speed at 70% of Maximum Value:**

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

**For machines in European Union countries and in countries that adopt the "EU Directives."

***European Union Directive "2000/14/EC" as amended by "2005/88/EC."

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.9 kg (4.2 lb) of refrigerant which has a CO₂ equivalent 2.717 metric tonnes (2.995 tons).

Bucket Capacities

Bucket Range 4.8-17.2 m³ 6.25-22.5 yd³

Operating Specifications

Static Tipping Load – Full 40° Turn:

With Tire Deflection	21 110 kg	46,526 lb
No Tire Deflection	22 418 kg	49,410 lb
Breakout Force	262 kN	59,060 lbf

- For a machine configuration as defined under "Weight."
- Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

Service Refill Capacities

Fuel Tank	426 L	112.5 gal
DEF Tank	21 L	5.5 gal
Cooling System	52 L	13.7 gal
Crankcase	37 L	9.8 gal
Transmission	77 L	20.3 gal
Differentials and Final Drives – Front	92 L	24.3 gal
Differentials and Final Drives – Rear	92 L	24.3 gal
Hydraulic Tank	153 L	40.4 gal

Hydraulic System

Implement System:

Maximum Pump Output (1,400 rpm)	457 L/min	121 gal/min
Maximum Operating Pressure	34 300 kPa	4,975 psi
Hydraulic Cycle Time – Total	10.1 seconds	

Dimensions

	Standard Lift		High Lift	
Height to Top of Hood	3036 mm	10'0"	3036 mm	10'0"
Height to Top of Exhaust Pipe	3736 mm	12'4"	3736 mm	12'4"
Height to Top of ROPS	3801 mm	12'6"	3801 mm	12'6"
Ground Clearance	428 mm	1'4"	428 mm	1'4"
Center Line of Rear Axle to Edge of Counterweight	2729 mm	9'0"	2843 mm	9'4"
Center Line of Rear Axle to Hitch	1900 mm	6'3"	1900 mm	6'3"
Wheelbase	3800 mm	12'6"	3800 mm	12'6"
Overall Length (without bucket)	8597 mm	28'3"	9104 mm	29'11"
Hinge-Pin Height at Maximum Lift	4741 mm	15'6"	5150 mm	16'10"
Hinge-Pin Height at Carry	791 mm	2'7"	896 mm	2'11"
Lift Arm Clearance at Maximum Lift	3902 mm	12'9"	4069 mm	13'4"
Rack Back at Maximum Lift	57 degrees		56 degrees	
Rack Back at Carry Height	48 degrees		49 degrees	
Rack Back at Ground	39 degrees		40 degrees	
Width over Tires (loaded)	3471 mm	11'5"	3471 mm	11'5"
Tread Width	2540 mm	8'4"	2540 mm	8'4"

- All dimensions are approximate and based on machine equipped with 6.1 m³ (8.0 yd³) general purpose bucket with BOCE and Bridgestone 875/65R29 VLTS L4 radial tires.

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