

# 950M

## WHEEL LOADER



**Engine Maximum Power**  
**Operating Weight**

**TIER 3/STAGE IIIA EQUIVALENT<sup>1</sup>**  
196 kW (263 hp)  
19 213 kg (42,357 lb)

**TIER 4 FINAL/STAGE V<sup>2</sup>**  
187 kW (250 hp)  
19 213 kg (42,357 lb)

<sup>1</sup> Meets Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.

<sup>2</sup> Meets U.S. EPA Tier 4 Final, either EU Stage V or EU Stage IV\* emission standards.

\*Stage IV engines comply with the transition provisions of the EU nonroad emission regulation



The Cat® 950M Wheel Loader offers significant fuel savings while lowering long-term costs. Cat wheel loaders meet emission standards and are designed to improve fuel economy without interrupting performance. The reliability, durability, and versatility result in machines that are better built to meet your needs.

# CAT® 950M

## GREATER EFFICIENCY



### WHEEL LOADERS MADE FOR MORE

Cat wheel loaders were built with efficiency in mind, offering you the best in:

- + RELIABILITY
- + DURABILITY
- + PRODUCTIVITY
- + FUEL EFFICIENCY

Experience higher performance while reducing costs and fuel consumption with Cat wheel loaders.

## GREATER PRODUCTIVITY

Applying proven technology and components means more dependable results for your work.

## BETTER FUEL EFFICIENCY

Deep system integration results in lower fuel consumption on average as compared to previous generation machines.

## EASIER TO MAINTAIN

Extended engine oil, engine oil filter, hydraulic filter, and transmission oil change intervals save you time, money, and energy.

All comparisons to previous generation.

# FAST PAYBACK

How **CAT PAYLOAD WITH PRODUCTION MEASUREMENT** paid for itself in less than a week for one quarry customer.\*



... **PAYBACK: 6 DAYS** ...

CALCULATE **YOUR** ESTIMATED PAYBACK TIME AT  
[MA-CATINFO.COM/PAYLOADCALCULATOR](http://MA-CATINFO.COM/PAYLOADCALCULATOR)

\*Your results will vary. Six-day payback and 17% productivity boost based on results from [ma-catinfo.com/payloadcalculator](http://ma-catinfo.com/payloadcalculator)

Not legal for trade.



## COMPONENTS YOU CAN COUNT ON

Every machine is equipped with a combination of proven electronic, hydraulic, cooling, and power train systems. Our components save you time, money, and effort.



# RELIABLE, PROVEN COMPONENTS & TECHNOLOGY

Staying ahead of the competition, Caterpillar offers a wide variety of cutting-edge technologies to get the job done quickly and easily with outstanding accuracy.

# PRODUCTIVE RESULTS

WORK SMART AND MOVE MORE



## PERFORMANCE SERIES BUCKETS

Easy-to-load Performance Series Buckets improve material retention and reduce dig times, significantly improving productivity and fuel efficiency, resulting in unsurpassed production capabilities with increased fill factors – ranging from 100% to 115%.

## ADVANCED POWERSHIFT TRANSMISSION

With the addition of a 5-speed transmission including a lock-up clutch torque converter, our power trains deliver smooth shifting, fast acceleration, and speed on grade, amplifying your performance and fuel efficiency.

## OPTIMIZED RIDE CONTROL SYSTEM

Dual accumulator system enables a wide payload range and a better ride. Improves ride quality and smoothness over rough terrain, increasing your confidence, comfort, and efficiency, ensuring excellent material retention.

## BETTER TRACTION

Differential locks are activated on-the-go which improves traction resulting in increased productivity while also reducing tire scuffing for reduced operating costs.

## AUXILIARY COUNTERWEIGHT

Equipped with an auxiliary counterweight, payloads can be increased by installing larger buckets in compliance with Caterpillar payload policy.

### THE RIGHT TECHNOLOGIES

Fine-tuned for the right applications:

- + BETTER FUEL ECONOMY, MAXIMIZED UPTIME, AND LOWER MAINTENANCE COSTS
- + HIGH POWER AND PERFORMANCE ACROSS A VARIETY OF APPLICATIONS
- + ENHANCED RELIABILITY THROUGH COMMONALITY AND SIMPLICITY OF DESIGN
- + WORLD-CLASS SUPPORT FROM THE CAT DEALER NETWORK
- + DURABLE DESIGNS WITH LONG LIFE TO OVERHAUL



## ENHANCED POWER TRAIN

Our power trains come standard with a lock-up clutch transmission, matching the engine power to increase fuel efficiency while delivering optimal performance.



## DURABLE AXLES

M Series axles are designed to handle your extreme applications. The rear axle oscillates for excellent stability and traction on even the roughest terrain.



## OPTIMIZED Z-BAR LINKAGE

Parallel lift capabilities, high breakout forces, and high tilt forces at maximum lift enhance performance and versatility.



## OPTIMIZED HYDRAULICS

Our hydraulic systems come equipped with a mono-block main hydraulic valve. This design reduces weight while decreasing leak points by 40%.



## DURABLE FRAMES

The robotically welded two-piece structural frame absorbs impact associated with excavation and loading, while the hitch system provides high bearing force capacity.



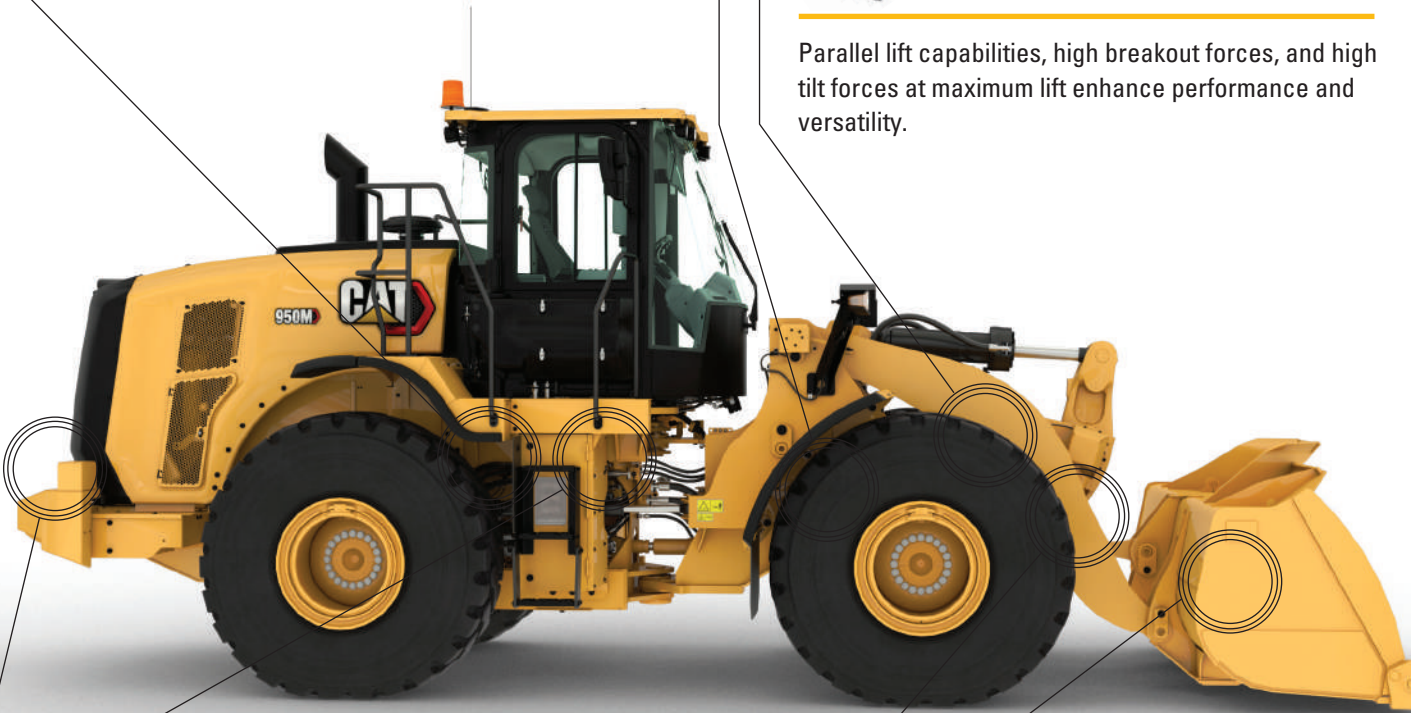
## EXTENSIVE RANGE OF ATTACHMENTS

Do more jobs with one machine. An extensive range of work tools and bucket styles are available to customize these machines for your operation.



## CAT FUSION™ COUPLER SYSTEM

Caterpillar patented, Fusion is a wheel loader coupler system performing virtually identical to pin-on, with all the flexibility of a quick coupler system.





# INCREASE PRODUCTIVITY AND EFFICIENCY UP TO 15%

## CAT® CONNECT TECHNOLOGY

Technology gives you the edge. Operators of all experience levels will dig and load with more confidence, speed, and accuracy. The result? Better productivity and lower costs.



### PAYLOAD

Provides you accurate weighing\* of the materials you are loading and hauling. Payload data is displayed in real-time to improve productivity and reduce overloading. Optional Advanced Productivity subscription provides comprehensive actionable information to help you manage and improve the productivity and profitability of your operations.



### DETECT

Enhances awareness of the environment around working equipment and provides alerts to help keep people and assets safe on the jobsite.



### LINK

Wirelessly connects you to your equipment, giving you access to essential information you need to know to run your business. Gain valuable insight into how your machine or fleet is performing, allowing you to make timely, fact-based decisions that can boost jobsite efficiency and productivity.

\*Not legal for trade.

# REAL-TIME INFORMATION FROM CAT LINK TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

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Cat Link hardware (Product Link™) and software (VisionLink®) work together to put equipment information at your fingertips. Get real-time access to information on every machine in your fleet on any jobsite—no matter the size of the operation or the brands of equipment you run.



## **PRODUCT LINK**

Track asset location, hours, fuel usage, diagnostic codes, idle time, and more to improve your productivity and lower your operating costs. Cellular connectivity comes standard. Satellite connectivity is available.



## **VISIONLINK**

Using the online VisionLink interface, you can see a common, collective view of your information, making it easier to manage a mixed fleet and make informed decisions about your equipment.



## **MY.CAT.COM**

You can also access Caterpillar and Cat dealer information at my.cat.com. My.cat.com gives you access to PM schedules, parts and service records, warranty coverage, and more—with a single login. Plus, you can link directly to your VisionLink account.



# SUPERIOR FUEL EFFICIENCY



## ENGINE AND EMISSIONS

High power density and fuel efficiency set our engines apart. Certified to meet emission standards, our engines feature Cat electronics, a fuel injection process, and air-management systems.

## EFFICIENT ENGINE STRUCTURE

Significantly improved performance and fuel economy through engine speed and overall system heat load reduction.

## ADVANCED SYSTEM INTEGRATION

Lower fuel consumption resulting from the system integration of the engine and emissions system, power train, hydraulic system, and cooling system.

## PRODUCTIVE ECONOMY MODE

Automatically control engine torque and speed based on the machine's power train load, placing them in the most efficient operating range for fuel and performance.

### NEXT GENERATION FUEL SYSTEMS

Cat injection timing regulates the fuel injection process through a series of timed microbursts, providing more control of combustion for the cleanest, most efficient fuel burn.

### CAT NO<sub>x</sub> REDUCTION SYSTEM

The Cat NO<sub>x</sub> Reduction System (NRS) captures and cools a small quantity of exhaust gas, then routes it back into the combustion chamber where it reduces temperatures and emissions (Tier 4 Final, Stage V only).

### AFTERTREATMENT TECHNOLOGIES

The Selective Catalytic Reduction (SCR) has been added to our demonstrated aftertreatment solution, fully meeting emission standards (Tier 4 Final, Stage V only).

# EASY TO OPERATE

SAFE. COMFORTABLE. ACCESSIBLE.

A quiet operating environment and intuitive controls help to reduce the fatigue, stresses, sounds, and temperatures of a demanding job.



## CAB ACCESS

Inclined steps and convenient grab handles ease accessibility to the operating space.



## BETTER RIDE CONTROL

The next generation of ride control works as a shock absorber, improving ride quality over rough terrain.



## GREATER VISIBILITY

Extended windows enhance visibility while convex and spot mirrors extend the driver's view on the sides and rear.



## ADVANCED SEAT

The next generation of operator comfort includes an easily adjustable seat with updated styling and a revolutionary suspension system. It comes in three trim levels and can be equipped with a 4-point harness.



## NOISE REDUCTION

Sound-suppression, seals, and viscous cab mounts decrease noise and vibration for a quieter work environment.



## PRECISION STEERING

Choose the standard steering wheel configuration or the optional seat-mounted electro-hydraulic joystick steering system

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## TOUCHSCREEN DISPLAY

Easy interface, machine controls, rear vision camera, intuitive navigation, and integrated Cat Production Measurement payload system let operators modify and monitor their machines instantly.

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## CENTRAL DISPLAY

Featuring a large text box with information about machine operation, features, system troubleshooting, and calibration, the central display is equipped with LED indicators and analog gauges, allowing the operator to easily analyze key systems.

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## CONTROL PANEL

With easy-to-reach controls and touchscreen display, the LED switch panel provides immediate access to frequently required functions, even while wearing gloves.



# EASIER MAINTENANCE MORE SAVINGS



Cat wheel loaders are easy to maintain and service, eliminating any potential waste of time or money. Major components are rebuildable, giving the machine a second life, and often a third life.

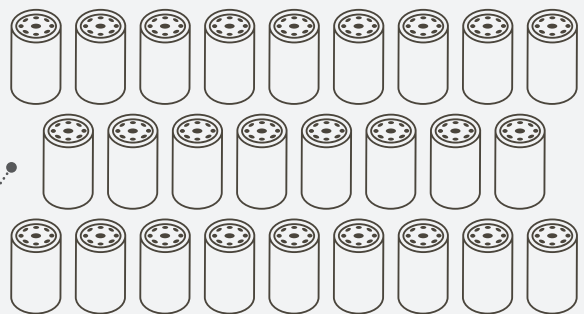
## KEY FEATURES SAVING YOU TIME, MONEY, AND ENERGY:

- + Extended engine oil and engine oil filter change interval up to 1,000 hours (Tier 4 Final, Stage V only)
- + Extended hydraulic filter change interval up to 1,000 hours
- + Extended transmission oil change interval up to 2,000 hours
- + Optional integrated Cat Autolube system
- + Remote flash support
- + Longer tire life with on-the-go traction aids
- + Safe and simple preventive maintenance



## LOWER MAINTENANCE COSTS

SAVE ON MAINTENANCE  
BY USING FEWER FILTERS



Extended filter change intervals mean using fewer filters over the machine's lifetime.

# DO MORE JOBS

## VERSATILE ATTACHMENTS AND COUPLERS

For worksites that demand more, you need a wheel loader that is purpose-built for the job. Cat work tools are engineered to handle all of your specific application needs.



### OPTIMIZED Z-BAR LINKAGE

The optimized Z-bar linkage combines parallel lift capabilities with the Performance Series Buckets and the Fusion Coupler work tool range to enhance visibility, performance, and fuel efficiency.



### FUSION QUICK COUPLER

The Fusion Coupler System allows machines to use a wide range of tools that can each be picked up by machines of varying sizes. Fusion is designed to integrate the work tool and the machine by pulling the coupler and tool closer to the loader, increasing overall lift capability.

- + Improved machine performance
- + Unsurpassed durability
- + Increased visibility

### HIGH LIFT LINKAGE

The optional high lift linkage offers increased hinge pin height to load more easily in a variety of applications with any type of bucket or fork.



### PERFORMANCE SERIES BUCKETS

Performance Series Buckets use a system-based approach to balance bucket shape with the machine's lift and tilt capacity, weight, and linkage. A variety of work tools and bucket styles let you customize these machines to meet your operation needs.

- + Easy loading
- + Fuel efficient
- + Carry more
- + Lower operating costs
- + Higher productivity



#### Industrial and Waste Handler

Industrial and waste packages offer integrated guards to protect your machine from the harsh environment of a scrap or waste handling application.

#### Forestry Arrangement

The forestry package includes a heavy-duty linkage, a larger tilt cylinder, and a heavier counterweight to handle the larger loads met in logging and mill yard applications.

# TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

ENGINE – TIER 3/STAGE IIIA EQUIVALENT			
Engine Model	Cat C7.1		
Maximum Power @ 2,000 rpm – SAE J1995	196 kW	263 hp	
Maximum Power @ 2,000 rpm – ISO 14396	195 kW	261 hp	
Maximum Power @ 2,000 rpm – ISO 14396 (metric)	265 hp		
Maximum Net Power @ 2,000 rpm – SAE J1349	185 kW	248 hp	
Maximum Net Power @ 2,000 rpm – ISO 9249	185 kW	248 hp	
Maximum Net Power @ 2,000 rpm – ISO 9249 (metric)	252 hp		
Peak Gross Torque (1,400 rpm) – SAE J1995	1053 N·m	777 lbf-ft	
Peak Gross Torque (1,400 rpm) – ISO 14396	1050 N·m	774 lbf-ft	
Maximum Net Torque (1,400 rpm)	984 N·m	726 lbf-ft	
Displacement	7.01 L	428 in <sup>3</sup>	

ENGINE – TIER 4 FINAL/STAGE V			
Engine Model	Cat C7.1		
Maximum Power @ 2,100 rpm – SAE J1995	187 kW	250 hp	
Maximum Power @ 2,100 rpm – ISO 14396	186 kW	249 hp	
Maximum Power @ 2,100 rpm – ISO 14396 (metric)	253 hp		
Maximum Net Power @ 2,100 rpm – SAE J1349	171 kW	230 hp	
Maximum Net Power @ 2,100 rpm – ISO 9249	171 kW	230 hp	
Maximum Net Power @ 2,100 rpm – ISO 9249 (metric)	232 hp		
Peak Gross Torque (1,300 rpm) – SAE J1995	1235 N·m	911 lbf-ft	
Peak Gross Torque (1,300 rpm) – ISO 14396	1231 N·m	908 lbf-ft	
Maximum Net Torque (1,300 rpm)	1163 N·m	858 lbf-ft	
Displacement	7.01 L	428 in <sup>3</sup>	

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant which has a CO<sub>2</sub> equivalent of 2.288 metric tonnes.

WEIGHTS			
Operating Weight	19 213 kg	42,357 lb	

- Weight based on a machine configuration with Michelin 23.5R25 XHA2 L3 radial tires, full fluids, operator, standard counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering, sound suppression, and a 3.1 m<sup>3</sup> (4.1 yd<sup>3</sup>) general purpose bucket with BOCE.

BUCKET CAPACITIES			
Bucket Range	2.5-9.2 m <sup>3</sup>	3.3-12.0 yd <sup>3</sup>	

TRANSMISSION					
Forward 1	6.9 km/h	4.3 mph	Forward 5	39.5 km/h	24.5 mph
Forward 2	12 km/h	7.5 mph	Reverse 1	6.9 km/h	4.3 mph
Forward 3	19.3 km/h	12.0 mph	Reverse 2	12 km/h	7.5 mph
Forward 4	25.7 km/h	16.0 mph	Reverse 3	25.7 km/h	16.0 mph

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

SERVICE REFILL CAPACITIES			
Fuel Tank	275 L	72.6 gal	
DEF Tank	16 L	4.2 gal	
Cooling System	59 L	15.6 gal	
Crankcase	22 L	5.8 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	125 L	33.0 gal	

SOUND			
With Cooling Fan Speed at Maximum Value:			
Operator Sound Pressure Level (ISO 6396:2008)			
Tier 3/Stage IIIA Equivalent		72 dB(A)	
Tier 4 Final/Stage V		70 dB(A)	
Exterior Sound Power Level (ISO 6395:2008)		107 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)			
		69 dB(A)	
Exterior Sound Power Level		104 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."

OPERATING SPECIFICATIONS			
Static Tipping Load – Full 37° Turn – with Tire Deflection	11 005 kg	24,262 lb	
Static Tipping Load – Full 37° Turn – no Tire Deflection	11 760 kg	25,926 lb	
Breakout Force	181 kN	40,690 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.

HYDRAULIC SYSTEM			
Implement Pump Type	Variable Axial Piston		
Implement System:			
Maximum Pump Output (2,150 rpm)	286 L/min	76 gal/min	
Maximum Operating Pressure	29 300 kPa	4,250 psi	
Hydraulic Cycle Time – Total	9.1 Seconds		

DIMENSIONS				
	Standard Lift		High Lift	
Height to Top of Hood	2697 mm	8'10"	2697 mm	8'10"
Height to Top of Exhaust Pipe	3413 mm	11'2"	3413 mm	11'2"
Height to Top of ROPS	3446 mm	11'4"	3446 mm	11'4"
Ground Clearance	367 mm	1'2"	367 mm	1'2"
Center Line of Rear Axle to Edge of Counterweight	1942 mm	6'4"	2071 mm	6'10"
Center Line of Rear Axle to Hitch	1675 mm	5'6"	1675 mm	5'6"
Wheelbase	3350 mm	11'0"	3350 mm	11'0"
Overall Length (without bucket)	6906 mm	22'8"	7488 mm	24'7"
Hinge Pin Height at Maximum Lift	647 mm	2'1"	782 mm	2'7"
Hinge Pin Height at Carry	4027 mm	13'3"	4527 mm	14'10"
Lift Arm Clearance at Maximum Lift	3280 mm	10'9"	3634 mm	11'11"
Rack Back at Maximum Lift	59 degrees		56 degrees	
Rack Back at Carry Height	46 degrees		49 degrees	
Rack Back at Ground	38 degrees		42 degrees	
Maximum Width over Tires	2822 mm 9'4"		2822 mm 9'4"	
Tread Width	2140 mm 7'0"		2140 mm 7'0"	

- All dimensions are approximate and based on Michelin 23.5R25 XHA2 L3 radial tires.

# STANDARD & OPTIONAL EQUIPMENT

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

OPERATOR ENVIRONMENT	STANDARD	OPTIONAL
Cab, pressurized, sound suppression	•	
Door, remote opening system		•
Touchscreen display	•	
Steering		
Steering wheel	•	
EH: Joystick steering		•
EH: Controls, parking brake	•	
Seat, cloth, air suspension	•	
Seat, suede/cloth, air suspension, heated		•
Seat, leather/cloth, air suspension, heated/cooled		•
Radio, AM/FM, Bluetooth®, CD/USB/MP3/Sirius XM, CB ready		•
Visibility: Mirrors, rear vision camera	•	
Air conditioner, heater, defroster (auto temp, fan)	•	
Windows, front, heavy duty, or full guards		•
CAT TECHNOLOGIES	STANDARD	OPTIONAL
Link: Product Link	•	
Link: VIMS™		•
Detect: Rear vision camera	•	
Detect: Cat Rear Object Detection		•
Machine Security System		•
Printer, Aggregate Autodig, Cat Production Measurement 2.0		•
POWER TRAIN	STANDARD	OPTIONAL
Cat C7.1 engine, meets emission standards	•	
Emissions: CEM, DPF, DEF (Tier 4 Final/Stage V)	•	
Fuel priming pump, fuel/water separator	•	
Radiator, high debris, wide fin spacing		•
Fan, variable pitch fan, auto/manual control		•
Torque converter, lock up clutch	•	
Precleaner, engine air intake	•	
Brakes, full hydraulic, Integrated Braking System, wear indicators	•	
Axles, manual differential locks, ecology drains	•	
Axles, automatic locks, oil cooler, temperature seals, guards		•

HYDRAULICS	STANDARD	OPTIONAL
Hydraulic system, steering, load sensing	•	
Ride Control, 2V	•	
3 <sup>rd</sup> and 4 <sup>th</sup> function w/ Ride Control		•
Oil sampling valves, hoses, Cat XT™	•	
ELECTRICAL	STANDARD	OPTIONAL
Starter, electric, heavy duty	•	
Starting and charging system, 24V	•	
Lights: Halogen, 4 work lights, 2 roading lights, 2 rear vision lights	•	
Lights: Additional 4 halogen work lights OR replace full lighting with LED packages		•
Cold start, 120V, 240V		•
MONITORING SYSTEM	STANDARD	OPTIONAL
Gauges: Speedometer, temperature, fuel level, DEF level	•	
Indicators: Regeneration, temperature, pressure, battery, oil, DEF	•	
ADDITIONAL EQUIPMENT	STANDARD	OPTIONAL
Cat Autolube System		•
Fenders, roading		•
Guard, power train		•
Oil change, high speed engine		•
Precleaner, turbine		•
Precleaner, trash		•
LINKAGE	STANDARD	OPTIONAL
High Lift		•
Forestry		•
Quick Coupler Ready		•
Linkage, Z-bar, cast crosstube/tilt lever	•	
Kickout, lift and tilt, automatic	•	
OTHER OPTIONAL CONFIGURATIONS	STANDARD	OPTIONAL
Industrial and Waste Handler		•
Forestry		•
Steel Mill (T3 equivalent only)		•
Auxiliary Counterweight		•

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.

For additional information, refer to the Technical Specifications brochures for the 966M model available at [www.cat.com](http://www.cat.com) or your Cat dealer.



For more complete information on Cat products, dealer services and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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AEXQ2439-01  
Replaces AEXQ2439-00  
2020 Product Update

