



Cat[®] 950M

Wheel Loader

The new 950M Wheel Loader has a U.S. EPA Tier 4 Final/EU Stage IV ACERT™ engine equipped with a combination of proven electronic, fuel, air and aftertreatment components. Applying proven technologies systematically and strategically lets us meet our customer's high expectations for productivity, fuel efficiency, reliability and service life. Deep system integration results in reduced emissions, improved performance and improved fuel economy without interrupting machine performance making it seamless to operators. M Series Loaders are 10% more fuel efficient than the K Series Loaders and up to 25% more efficient than the H Series Loaders they replace. Optional configurations are available.***

RELIABILITY, PRODUCTIVITY AND FUEL EFFICIENCY

- 10% more fuel efficient than K Series*
- Up to 25% more efficient than H Series*

Linkage and Work Tools

- Performance Series buckets and range of work tools
- Optimized Z-bar with best-in-class visibility
- -0°/+5° parallelism
- Increased tilt capacity at height, equal to payload
- Fusion™ « zero-offset » coupler (option)

Engine and Aftertreatment Advancements

- Cat[®] C7.1 engine
- Meets Tier 4 Final/Stage IV emission standards
- Cat Clean Emissions Module with Selective Catalytic Reduction
- Productive Economy Mode

Transmission Advancements

- 5-speed powershift transmission with single clutch speed shifts and torque based down shifts
- Lock up clutch torque converter with lock-to-lock shifting
- Split flow oil system and multi-viscosity oil

Axle Advancements

- On-the-go disc-type front differential locks (front and rear fully automatic option)
- Caliper disc parking brake
- Bevel gear shrouds

Next Generation Hydraulic Systems

- Next generation main valve
- Next generation ride control system with dual accumulators
- Next generation implement pump with increased displacement
- Full flow and kidney loop filtration
- Load-sensing hydraulics with simultaneous hydraulic functions
- 3rd and 4th function (option)

EASE OF OPERATION

Best-in-class Operator Environment

- Optimized all-around visibility
- Steering wheel (E-H joystick steering option)
- Touch screen multifunction color display with integrated controls and rearview camera
- Stair-like ingress and egress
- New wider door and increased glass area
- Seat-mounted fingertip electro-hydraulic implement controls
- Large convex rearview mirrors with integrated spot mirror
- Remote door opening (option)
- Automatic climate control
- Viscous cab mounts
- Low operator sound levels

Advanced Technology with Cat Connect

- Link technologies, like Product Link™ to monitor equipment and manage production using online VisionLink[®] software
- Payload technologies, like Cat Production Measurement (option) to measure payloads and optimize productivity
- Detect technologies, like the rear vision camera to keep people safe and help the operator work more productively

SERVICE ACCESS

- One-piece tilting hood with side and rear doors
- Centralized service centers for hydraulic and electrical components
- Windshield cleaning platform and harness tie-off

*Fuel efficiency is measured in mass of material moved per volume of fuel burned. Average efficiency improvement as tested and analyzed for an average composite cycle and stand configuration with variations per comparable model with and without economy mode active. Factors influence result variation such as, but not limited to, machine configuration, operator technique, machine application, climate, etc.

**Optional configuration and equipment may vary from region to region. Consult your Caterpillar representative for further details.



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Engine

Engine Model	Cat C7.1 ACERT	
Max Gross Power @ 2,100 rpm – SAE J1995	187 kW	250 hp
Max Gross Power @ 2,100 rpm – ISO 14396	186 kW	249 hp
Max Gross Power @ 2,100 rpm – ISO 14396 (metric)	253 hp	
Max Net Power @ 2,100 rpm – SAE J1349	171 kW	230 hp
Max Net Power @ 2,100 rpm – ISO 9249	171 kW	230 hp
Max 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 ³

• 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 CO₂ equivalent of 2.288 metric tonnes.

Weights

Operating Weight	19 213 kg	42,357 lb
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• 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 m³ (4.1 yd³) general purpose bucket with BOCE.

Bucket Capacities

Bucket Range	2.5-9.2 m ³	3.3-12.0 yd ³
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Transmission

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

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)	108 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 (ISO 6395:2008)	106 L _{WA} **

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

Operating Specifications

Static Tipping Load – Full 40° Turn – with Tire Deflection	11 005 kg	24,262 lb
Static Tipping Load – Full 40° 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 143971:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

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

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	8.9 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	3451 mm	11'4"	3451 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"	1942 mm	6'4"
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 Carry Height	647 mm	2'1"	782 mm	2'7"
Hinge Pin Height at Maximum Lift	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		59 degrees	
Rack Back at Carry Height	49 degrees		49 degrees	
Rack Back at Ground	36 degrees		40 degrees	
Maximum Width over Tires (loaded)	2822 mm	9'3"	2822 mm	9'3"
Tread Width	2140 mm	7'0"	2140 mm	7'0"

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

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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