

# **Cat® 950M**

Wheel Loader **2017** 

The new 950M Wheel Loader, with the 2017 product update, applies proven technologies systematically and strategically to meet your high expectations for reliability, productivity, fuel efficiency, and long service life.

Meets Brazil MAR-1 emission standards.

## Reliability

- Cat® C7.1 ACERT™ engine offers increased power density with a combination of proven electronic, fuel and air systems.
- Utilizing rigorous component design and machine validation processes results in unmatched reliability, durability and high uptime.

# **Durability**

- Tough countershaft powershift transmission and axles handle extreme applications.
- Full flow hydraulic filtration system with additional loop filtration improves hydraulic system robustness and component life.

### **Productivity**

- Engine power increased by approximately 22% improves machine performance and response (compared to H Series).
- Lock-up clutch torque converter, combined with lock-to-lock shifting, delivers smooth shifts, fast acceleration and speed on grade.
- Optimized Z-bar linkage provides high breakout force at ground level along with excellent  $-0^\circ/+5^\circ$  parallelism for precise work tool control.
- Easy-to-load Performance Series Buckets feature a wider mouth and curved side plates that improve material retention (fill factor) and decrease cycle times.
- On-the-go disc-type front manual differential locks (front and rear fully automatic option).
- Optional auxiliary counterweight option offers slightly higher payload capability for loose aggregate rehandling.\*

# **Fuel Efficiency**

- Up to 25% more fuel efficient than H Series loaders.\*\*
- Power dense ACERT engine burns less fuel by providing power and torque when needed.
- Standard productive Economy Mode provides maximum fuel savings with minimal productivity impact.
- \*Optional configurations and equipment may vary from region to region and requires conformance to Caterpillar payload policy. Consult your dealer or Caterpillar representative for details.
- \*\*Actual results may vary based on factors such as, but not limited to, machine configuration, operator technique, machine application, climate, etc.

# **Ease of Operation**

- Best-in-class operator environment provides unmatched comfort, visibility, and efficiency.
- · Steering wheel (E-H joystick steering option).
- Intuitive, ergonomic controls and touch screen multifunction display keep operators focused on their work.
- Ride control system with dual accumulators provides excellent ride quality and lowers cab vibrations.

## Safety

- Excellent cab access with wide door, remote door opening option and stair-like steps.
- Floor to ceiling windshield, large mirrors with integrated spot mirrors and rear vision camera provide industry leading all-around visibility.

### Serviceability

- One-piece tilting hood with side and rear doors; hydraulic and electrical service centers make access fast and easy.
- Convenient access to fuel fill and daily maintenance points means less servicing time is required.
- Optional, fully integrated Cat Autolube system provides full lube system monitoring and diagnostic test visibility.

## **Cat Connect Technology**

- Monitor, manage and enhance job site operations.
- Cat LINK Technologies: VisionLink® enables owners to access data wirelessly to monitor machine health, utilization and location.
- Cat DETECT Technologies: Integrated rear vision camera enhances visibility behind machine to help operators work safely. Optional Cat Rear Object Detection increases operator awareness of the working environment which enhances site safety.
- Cat PAYLOAD Technologies: Optional Cat Production Measurement 2.0 brings simple and accurate on-the-go payload scale allowing operators to deliver exact loads and work more efficiently.
   Advanced Productivity subscription provides comprehensive actionable information to help you manage and improve the productivity and profitability of your operations.



# Cat® 950M Wheel Loader

Engine		
Engine Model	Cat C7.1 ACERT	
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>

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Operating Weight	19 214 kg	42,360 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 m³
(4.1 yd³) general purpose bucket with BOCE.

	<b>Bucket Capacities</b>		
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 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)	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.



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."			

 $\bullet$  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		
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 A	xial 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 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		56 degrees	
Rack Back at Carry Height	46 degrees		49 degrees	
Rack Back at Ground	38 degrees		42 degrees	
Maximum Width over Tires (loaded)	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 Michalin 22 ED2E VIIA 2 I 2				

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

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