

# **Cat® 950M Z**

Wheel Loader

The new 950M Z Wheel Loader has a Japan 2014 (Tier 4 Final) 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
- · Z-bar with best-in-class visibility
- Fusion™ « zero-offset » coupler (option)

## **Engine and Aftertreatment Advancements**

- Cat® C7.1 ACERT engine
- Meets Japan 2014 (Tier 4 Final) emission standards
- Productive Economy Mode

### **Transmission Advancements**

- 5-speed powershift transmission
- · 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

#### **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
- Stair-like ingress and egress
- Seat-mounted fingertip electro-hydraulic implement controls
- · Automatic climate control
- · Low operator sound levels

#### **Advanced Technology with Cat Connect**

- Link technologies, like Product Link<sup>TM</sup> 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. 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.



# Cat® 950M Z Wheel Loader

Engine	
Engine Model	Cat C7.1 ACERT
Max Gross Power @ 2,100 rpm – SAE J1995	187 kW
Max Gross Power @ 2,100 rpm – ISO 14396	186 kW
Max Gross Power @ 2,100 rpm – ISO 14396 (metric)	253 hp
Max Net Power @ 2,100 rpm – SAE J1349	171 kW
Max Net Power @ 2,100 rpm – ISO 9249	171 kW
Max Net Power @ 2,100 rpm – ISO 9249 (metric)	232 hp
Peak Gross Torque (1,300 rpm) — SAE J1995	1235 N⋅m
Peak Gross Torque (1,300 rpm) – ISO 14396	1231 N⋅m
Maximum Net Torque (1,300 rpm)	1163 N⋅m
Displacement	7.01 L

Weights		
Operating Weight	18 211 kg	
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 Weight based on a machine configuration with Bridgestone 23.5R25 VJT L3 radial tires, full fluids, operator, standard counterweight, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering, sound suppression and a 3.4 m³ general purpose bucket with BOCE.

	<b>Bucket Capacities</b>	
Bucket Range		2.5-9.2 m <sup>3</sup>

Transmiss	sion
Forward 1	6.9 km/h
Forward 2	12 km/h
Forward 3	19.3 km/h
Forward 4	25.7 km/h
Forward 5	39.5 km/h
Reverse 1	6.9 km/h
Reverse 2	12 km/h
Reverse 3	25.7 km/h

 Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 787 mm 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, 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)	104 L <sub>WA</sub> **
**European Union Directive "2000/14/EC" as amended by "2005/88/EC."	

Operating Specifications	
Static Tipping Load – Full 40° Turn – with Tire Deflection	10 926 kg
Static Tipping Load – Full 40° Turn – No Tire Deflection	11 624 kg
Breakout Force	152 kN

- 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	
DEF Tank	16 L	
Cooling System	59 L	
Crankcase	22 L	
Transmission	43 L	
Differentials and Final Drives – Front	43 L	
Differentials and Final Drives – Rear	43 L	
Hydraulic Tank	125 L	

Hydraulic System		
Implement Pump Type	Variable Axial Piston	
Implement System: Maximum Pump Output (2,340 rpm)	322 L/min	
Implement System: Maximum Operating Pressure	27 900 kPa	
Hydraulic Cycle Time – Total	9.5 Seconds	

Dimensions		
	Standard Lift	High Lift
Height to Top of Hood	2697 mm	2697 mm
Height to Top of Exhaust Pipe	3414 mm	3414 mm
Height to Top of ROPS	3445 mm	3445 mm
Ground Clearance	368 mm	368 mm
Center Line of Rear Axle to Edge of Counterweight	1905 mm	2055 mm
Center Line of Rear Axle to Hitch	1675 mm	1675 mm
Wheelbase	3350 mm	3350 mm
Overall Length (without bucket)	6938 mm	7439 mm
Hinge Pin Height at Carry Height	663 mm	765 mm
Hinge Pin Height at Maximum Lift	3995 mm	4490 mm
Lift Arm Clearance at Maximum Lift	3410 mm	3794 mm
Rack Back at Maximum Lift	60 degrees	66 degrees
Rack Back at Carry Height	49 degrees	54 degrees
Rack Back at Ground	41 degrees	45 degrees
Maximum Width over Tires (loaded)	2822 mm	2822 mm
Tread Width	2140 mm	2140 mm
• All dimensions are approximate and based on Bridgestone 23.5R25 VJT		

 All dimensions are approximate and based on Bridgestone 23.5R25 VJT 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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Based on the Labor, Safety and Health Laws in Japan, employer of small construction equipment are required to provide specific training for all operators on machines with ship weight less than 3 metric ton. For machines greater than 3 metric ton, operator needs to obtain operator license certification from a Government approved registered training school.

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