

# 950M Z/962M Z

## Wheel Loaders



\*写真は海外仕様機でオプション品を含みます。

	950M Z	962M Z
Engine Model	Cat® C7.1 ACERT™	Cat C7.1 ACERT
Maximum Gross Power – SAE J1995	187 kW	202 kW
Maximum Net Power – SAE J1349	171 kW	186 kW
Bucket Capacities	2.5-9.2 m³	2.5-9.2 m³
Operating Weight	18 211 kg*	19 211 kg**

\*For 3.4 m³ general purpose bucket with BOCE.

\*\*For 3.6 m³ general purpose bucket with BOCE.



オフロード法2014年  
基準適合



国土交通省指定  
低騒音型建設機械

RELIABLE, PRODUCTIVE AND FUEL EFFICIENT

- Up to 10% more fuel efficient than the industry leading K Series\*
- Up to 25% more fuel efficient than H Series\*
- **Z-bar Linkage** provides optimal visibility, performance and fuel efficiency
- **Performance Series buckets** are easy to load and improve material retention
- **Cat Fusion™ coupler system and work tools** provide a wide range of work tools and allow the same work tool on different sizes of wheel loaders
- **Cat engine with ACERT Technology** which meets Japan 2014 (Tier 4 Final) emission standards and includes Cat Clean Emissions Module for continuous and efficient operation
- **Advanced powershift transmission** with a standard lock up clutch torque converter and lock-to-lock shifting delivers smooth shifts, fast acceleration and speed on grade
- **Next generation axle** with standard on-the-go disc-type front manual differential locks to provide optimal traction in varying underfoot conditions for improved productivity
- **Next generation load-sensing hydraulic system** to provide optimal control of machine functions

EASE OF OPERATION

- **Best-in-class operator environment** for unmatched operator comfort and efficiency
- **Advanced technology with Cat Connect** to monitor, manage and enhance job site operations

SERVICE ACCESS

- Legacy one-piece hood, centralized service centers, windshield cleaning platform and harness tie-off to provide the best in class service access

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*\*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 standard 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.*





**The new 950M Z and 962M Z Wheel Loaders have 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 and fuel efficiency. Deep system integration results in reduced emissions, improved performance and improved fuel economy without interrupting machine performance making it seamless to operators. The reliability, durability, and versatility of both the 950M Z and 962M Z result in machines that are better built to meet your needs.**

# Reliable

Proven Components and Technology You Can Count On.



Every Japan 2014 (Tier 4 Final) engine is equipped with a combination of proven electronic, fuel, air and aftertreatment components.

## More Powerful, Reliable Engine Electronics

The electronics used in Cat Japan 2014 (Tier 4 Final) engines are more powerful and robust than ever. Increased features and connection commonality improve the customer experience and increase quality and reliability. Over-foam wiring harness adds to reliability even in the most demanding applications.

## Hydraulics

The 950M Z and 962M Z hydraulic systems have significant design changes and customer value improvements. The main hydraulic valve is a mono-block with an integrated ride control section. The mono-block design reduces weight, has forty percent fewer leak points and is common across all M Z Series models. Auxiliary third and fourth hydraulic functions can be easily added at the factory or in the field with the addition of a second remote valve.

## Equipment Monitoring

Cat Connect technologies and Cat dealer services take the guesswork out of equipment management. Product Link™ and the online VisionLink® application enable you to monitor real-time machine data and manage machines health. Your Cat dealer offers expert advice and S·O·S<sup>SM</sup> Services to maintain equipment reliability and efficiency.

## Cold Start Package

The new optional cold start package provides dependable starts in extreme cold weather and high altitudes.



# Durable

Better Designed to Meet Your Needs.



## Frames

The robotically welded two-piece structural frame design provides strong and rigid structures that absorb all the forces associated to penetration, loading and twisting.

The M Z Series articulating hitch system, joining the front and rear frames, provides increased bearing force capacity.

## Axles

The M Z Series axles are designed to handle extreme applications resulting in reliable performance and durable life. The rear axle can oscillate to  $\pm 13$  degrees helping to ensure all four wheels stay on the ground providing stability even in the roughest terrain, for excellent stability and traction.

# Productive

## Work Smart and Move More.



The right technologies fine-tuned for the right applications result in:

- **High Performance** across a variety of applications.
- **Enhanced Reliability** through commonality and simplicity of design.
- **Maximized Uptime and Reduced Cost** with world-class support from the Cat dealer network.
- **Minimized Impact of Emission Systems** – Designed to be transparent to the operator without requiring interaction.
- **Durable Designs** with long life to overhaul.
- **Delivering Better Fuel Economy** with minimized maintenance costs while providing the same great power and response.

### Hydraulics

The new ride control system now has two accumulators enabling it to be more effective over a greater payload range, increasing productivity and operator efficiency due to a better ride.

The next generation implement pump continuously and automatically balance hydraulic loads with the machine performance desired by the operator. Engine response is improved as is performance at higher altitudes.

### Transmission

The 950M Z and 962M Z power trains have been improved with the addition of a 5 speed transmission which includes a lock up clutch torque converter standard. These new torque converters have been matched with the engine power and hydraulics to improve performance and fuel efficiency. These rugged transmissions also have a new split-flow oil system which use new multi-viscosity oil to improve fuel economy.

### Axles

The new on-the-go disc-type differential locks will improve tractive ability in these applications thereby increasing productivity. These models come standard with front axle differential locks which are manually activated by a switch on the floor. Optional fully automatic front and rear axle differential locks operate by measuring differences in axle speeds and require no operator intervention to activate. These disc-type differential locks will reduce tire scuffing compared to other traction aids further reducing operating costs for customers.

The axles have new external caliper disc parking brakes mounted to the input shaft of the front axles. Since they are external, they do not have the inefficiencies of enclosed wet parking brakes due to brake discs running in oil nor is there any oil to change reducing fuel and maintenance costs. External caliper parking brakes are easily accessible for inspection and service.

# Fuel Efficient

## Engineered to Lower Your Operating Costs.

### Engine and Emissions

The Cat C7.1 ACERT engine is designed for maximum fuel efficiency and increased power density, while meeting Japan 2014 (Tier 4 Final) emission standards. This engine features innovative Cat electronics, fuel injection process, air-management systems, aftertreatment solution with Cat Selective Catalytic Reduction, and a fuel efficient regeneration system. The Cat Regeneration System automatically removes soot from the Diesel Particulate Filter without interrupting your machine's work cycle.

### Efficient Systems and Components

Innovative systems intelligently lower the average working engine speeds and reduce the overall system heat loads which result in significantly improved performance and fuel efficiency.

### Advanced Systems with Innovative Integration

The deep system integration of the new engine and emissions system, power train, hydraulic system and cooling system result in lower fuel consumption on average compared to the 950K and 962K.

### Productive Economy Mode

The productive economy mode automatically controls the engine torque and speed based on the machine's power train load and places engine speed and torque in the most efficient operating range. The result is improved fuel efficiency while delivering optimal performance.



### Next Generation Fuel Systems

Cat injection timing precisely controls the fuel injection process through a series of carefully timed microbursts, providing more control of combustion for the cleanest, most efficient fuel burn. On 950M Z and 962M Z the high pressure common rail fuel systems boost performance and reduce soot for the C7.1 ACERT engine.

### 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 drives down combustion temperatures and reduces NO<sub>x</sub> emissions.

### Aftertreatment Technologies

To meet the additional 80% reduction in NO<sub>x</sub> emissions required by Japan 2014 (Tier 4 Final) emission standards, one new system, the Selective Catalytic Reduction (SCR), has been added to the already proven Cat Japan 2011 (Tier 4 Interim) aftertreatment solution.



# Easy to Operate

Safe. Comfortable. Efficient.



Improving operator efficiency remains a key design goal for the 950M Z and 962M Z. Ensuring operators are safe, confident in the control of their machines, have a clean, comfortable and quiet operating environment with controls that are intuitive and low effort all contribute to lower operator fatigue and better performance.

## Cab Access

A switch has been added to the electronic service center which unlatches the door remotely (optional). The gas strut then swings the door open all while the operator is safely on the ground. The angle of the steps up to the cab have been increased to an optimal fifteen degrees enabling operators to walk up like stairs versus climbing more vertically like a ladder. Grab handles have been repositioned so a secure three points of contact can be maintained at all times.

## Visibility

Once in the cab, the new door securely seals against the new roll formed ROPS posts and the lower glass panel has been extended several inches to improve visibility to the left side of the machine. New larger convex mirrors improve visibility to the rear and integrated spot mirrors provide visibility close to both sides of the machine.



## Sound

Viscous cab mounts connect the cab to the frame of the machine, decreasing noise and vibration the operator is subjected to. The result is a sustainable work environment and well-rested operator, remaining efficient and productive.

## Central Display

The central display panel has a large text box, five analog gauges, and LED warning indicators. The large text box provides in-language information about machine operation, feature activation and system troubleshooting and calibration. With the five large analog gauges the operator can easily identify if key systems are within normal operating range.





## Touch Screen Display

A new multipurpose color touch screen display dramatically simplifies the operator interface; with machine controls, rear vision camera and new fully integrated Cat Production Measurement system. Intuitive navigation with in-language text enables operators to modify certain machine operating parameters and monitor machine conditions literally at the touch of their fingers.

## Control Panel

Sealed against moisture and dirt, the centralized switch panel with LEDs provides reliability and ready access to frequently required functions, even while wearing gloves. The ISO symbols located on each membrane switch are molded all the way through to ensure the image will not wear off over time.

The M Z Series maintains the “help” feature which explains the function of each membrane switch.

Focusing on operator efficiency, the control panel has been streamlined to include easy to reach highly utilized machine controls. The touch screen display enables the relocation of some expanded functions while eliminating the need for a second switch panel for further simplicity and easy machine operation.



## Conventional Steering

The conventional steering configuration on these machines offers a low-effort hand metering unit hydraulic steering system. Load sensing steering directs power through the steering system only when needed.



## Optional Electro-Hydraulic (EH) Joystick Steering with Force Feedback (Speed Sensitive)

Your operators will enjoy and quickly adopt the industry leading seat mounted EH joystick steering system, which provides precision control and dramatically decrease operator arm fatigue.

## Implement Controls (EH)

Seat mounted single axis implement control levers provide your operator with precise control of the work tool, all while moving with the seat for maximum comfort. In-cab programmable kick-outs and automatic cylinder snubbing are easy to set on-the-go for tilt, lower and lift, ideal for repeatable cycles.



## Ride Control

The next generation of ride control works as a shock absorber, improving ride quality and smoothness over rough terrain, increasing your operator confidence, comfort and efficiency, ensuring excellent material retention.

# Versatile

Linkage and Configuration Options to Meet Your Various Applications Needs.



## Z-bar Linkage

Development of the Z-bar linkage was done in conjunction with the Performance Series Buckets, Fusion coupler and Fusion family of work tools to ensure that all components function together to optimize visibility, performance and fuel efficiency. Visibility has been optimized by placing hydraulic hoses and structural components out of the operator's sight lines.

## 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.

## Snow Removal Package

The 950M Z Snow Removal Package makes snow removal safer with a heated windshield that improves visibility and a special rain cap that prevents snow from packing around the air inlet. Standard beacons and a tachograph meter ready add to safer snow removal operation.





# Versatile

## Do More Jobs with One Machine, Fusion Quick Coupler and Various Work Tools.

An extensive range of work tools and bucket styles are available to customize these machines for your operation. Work tools are available either with pin on or quick coupler interface.

### Performance Series Buckets

- **Load Easy, Fuel Efficient, Carry More** – Performance Series Buckets utilize a system-based approach to balance bucket shape with the machine's linkage, weight, lift and tilt capacities. Operators benefit from reduced dig times and better material retention; ultimately translating into significant productivity and fuel efficiency improvements.
- **Lower Operating Costs** – Performance Series Buckets feature a longer floor that easily digs through the pile and provides excellent visibility for the operators to see when the bucket is full. Less time digging in the pile results in lower fuel consumption and improved tire life. A unique spill guard protects the cab and linkage components from material overflow.
- **Higher Productivity** – Performance Series Buckets achieve higher fill factors – ranging from 100% to 115% depending on the machine application and material type. The buckets feature a curved side profile to maximize material retention. The optimized design results in unsurpassed production capabilities.

## Fusion Quick Coupler

### Improved Machine Performance

Fusion is the patented wheel loader coupler system from Caterpillar. The Fusion Coupler System provides performance virtually identical to pin on – with all the flexibility of a quick coupler system. The Fusion Coupler sits back, close in to the loader arms – minimizing offset and increasing the machine's performance.

### No Loss of Performance

Fusion is designed to integrate the work tool and the machine by pulling the coupler and tool closer in to the loader. As a result, the center of gravity is moved inward, towards the machine. This translates to increased lifting ability when compared to machines equipped with other coupler systems.

### Unsurpassed Durability

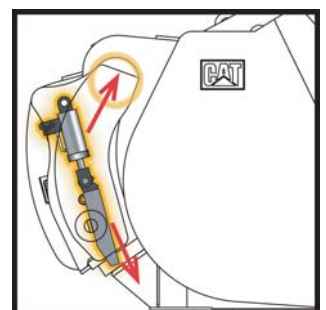
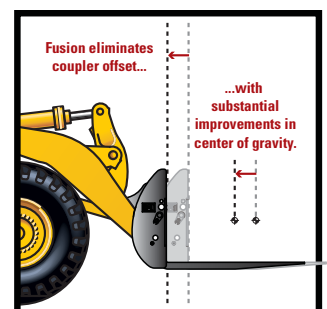
An advanced wedging mechanism creates a tight, rattle-free fit. This patented lock up system eliminates play and wear – resulting in a long service life.

### Increased Visibility

A new, open coupler frame design clears sight lines from the operator's seat, making it easier than ever before to engage and disengage attachments with certainty.

### Common Interface Compatibility

The Fusion Coupler System not only allows one machine to use a range of work tools, but also allows one work tool to be picked up by machines of many different sizes.





# Integrated Technologies

## Monitor, Manage, and Enhance Job Site Operations.

Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:



EQUIPMENT  
MANAGEMENT

**Equipment Management** – increase uptime and reduce operating costs.



PRODUCTIVITY

**Productivity** – monitor production and manage job site efficiency.



SAFETY

**Safety** – enhance job site awareness to keep your people and equipment safe.

### LINK Technologies

LINK technologies wirelessly connect you to your equipment giving you access to essential information you need to know to run your business. Link data can give you valuable insight into how your machine or fleet is performing so you can make timely, fact-based decisions that can boost job site efficiency and productivity.

### Product Link/VisionLink

Product Link is deeply integrated into your machine to take the guesswork out of equipment management. Easy access to timely information like machine location, hours, fuel usage, idle time and event codes via the online VisionLink user interface can help you effectively manage your fleet and lower operating cost.





## PAYLOAD Technologies

PAYLOAD technologies provide accurate weighing of materials being loaded and hauled. Payload data is displayed for loader operators in real-time to improve productivity, reduce overloading, and recorded to track material movement by shift.

- **Cat Production Measurement** – Cat Production Measurement brings payload weighing to the cab, enabling operators to weigh loads “on-the-go” during loading operations. Loads are weighed as the bucket is raised during the lift cycle – eliminating the need to interrupt the load cycle, improving loading efficiency. Operators can view load weights on the integrated multi-function display and know precisely how much material is in the bucket and when trucks are filled to target payload – before leaving the loading zone. Instant feedback gives operators the confidence to work more effectively, maximizing the potential of the entire fleet. An optional in-cab printer provides the driver a printed receipt of truck payloads.

Operators can track recorded weights and cycles using the display. Site managers can wirelessly access data via the VisionLink web portal to measure production and monitor efficiency.

## DETECT Technologies

DETECT technologies enhance operator awareness of the environment around working equipment and provide alerts to help keep people and assets safe.

- **Rear Vision Camera** – The standard rear vision camera enhances visibility behind the machine, helping the operator work confidently, at peak potential. A rear view and payload data is displayed on the multi-function monitor during reverse travel. An optional second display can be added to provide a dedicated rear view of the job site.

# Owning Costs

## Proven Best Investment.



### Customer Support Agreements

A Customer Support Agreement (CSA) is an arrangement between you and your Cat dealer that helps you lower your total cost per ton. CSAs are flexible, allowing them to be tailored to your business needs. They can range from simple Preventive Maintenance Kits to elaborate Total Cost Performance Guarantees. Having a CSA with your Cat dealer enables more time for you to do what you do best – run your business.

### Monitoring Systems

Monitoring product health is key to optimizing the life of an investment into a Cat Wheel Loader.

- **Cat Product Link** – Cat Product Link allows remote monitoring of equipment to improve overall fleet management effectiveness. Product Link is deeply integrated into machine systems. Events and diagnostic codes, as well as hours, fuel, idle time and other detailed information are transmitted to a secure web based application, VisionLink. VisionLink includes powerful tools to convey information to users and dealers, including mapping, working and idle time, fuel level and more.
- **S-O-S Services** – Helps manage component life and decrease machine downtime, increasing productivity and efficiency. Regular fluid sampling can help track what is going on inside your machine. Wear related problems are predictable and easily repairable. Maintenance can be done to accommodate your schedule, resulting in increased uptime and flexibility in maintenance repairs before failure.

### Parts Availability

Caterpillar provides an unsurpassed level of personalized service to help you work more cost effectively and efficiently. By utilizing a worldwide parts network Cat dealers help minimize machine downtime and save money by fast delivery of replacement parts.

### Resale Value

Owning quality equipment is an important factor in maintaining resale value. Caterpillar is not only known for machines that are better built, but provides product and dealer support to maintain the reliability and durability of your machine.





# Operating Costs

## Save Time and Money by Working Smart.

Machine configuration, operator technique, and job site layout can impact fuel consumption by as much as 30 percent. Data from customer machines show Cat wheel loaders are the most fuel efficient machines in the industry. Several features contribute to this excellent fuel efficiency:

- **New Engine, Hydraulics, Transmission and Ride Control** – Deep system integration results in reduced emissions, more productivity, lower fuel consumption, without interrupting machine performance – making it seamless to you and your operators.
- **New Manual/Automatic Differential Locks** – Increase traction, reduce tire scuffing compared to other traction aids, further reducing your operating costs.
- **New External Caliper Disc Parking Brakes** – Easily accessible for maintenance.
- **Lock-up-Clutch Torque Converter and Shift Strategy** – Reduced torque interruption increases driveline efficiency, conserving fuel. Auto 1-5 transmission mode keeps engine rpm low, reducing fuel consumption while delivering optimal machine performance.
- **Machine Configuration** – Select the correct linkage, guarding, work tool and tire type based on machine application. Radial tires are preferred; ensure proper inflation pressures. Heavier tires burn more fuel.
- **Performance Series Buckets** – Deliver faster fill times and better material retention, ultimately reducing cycle times while improving productivity and fuel efficiency.

### Enabling Application Efficiency

- **Loading Bucket** – Load in first gear and keep engine rpm low. Raise and tilt bucket smoother, with Caterpillar's multi-function capability, and do not use a "pumping" motion. Avoid lift lever detent and use of transmission neutralizer. Use programmable kick-outs and automatic cylinder snubbing during repeated cycles.
- **Loading Truck or Hopper** – Do not raise the work tool any higher than necessary. Keep engine rpm low and unload in controlled manner.
- **Idle** – Set the parking brake to engage Engine Idle Management System to conserve fuel.
- **Job Site Layout** – Spot loading targets in the right position. Avoid traveling more than twice the machine length during short cycle loading. Reduce transport distance for load and carry cycles by optimizing job site layout.

# Serviceable

Easy to Maintain. Easy to Service.

## Engine Access

The Cat sloped “one-piece” tilting hood provides industry leading access to the engine. Its design has further been improved on all M Series wheel loaders to provide the best-in-class service access to engine, oil levels and coolant sight gauge.

## Cooling System

The cooling system is readily accessible for clean out and maintenance. With nine cooling fins per 25.4 mm and a perforated grill, most airborne debris entering the system passes through the cooler cores. The hydraulic and A/C cooler cores swing out providing easy access to both sides for cleaning. An access panel on the left side of the cooling package swings down to provide access to the back side of the engine coolant and Air-to-Air After Cooler (ATAAC). An optional variable pitch fan can automatically purge the cooler cores by periodically reversing the airflow when needed.

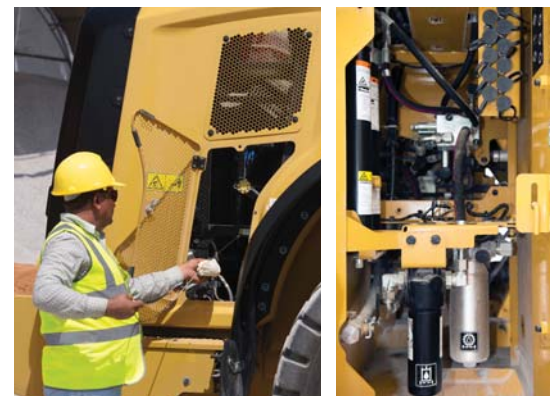
## Service Centers

The electrical and hydraulic service centers provide grouped ground level access to numerous features, enhancing safety and convenience for your operators and service technicians, while reducing service time.

The electrical service center, located beneath the left platform, contains the maintenance free batteries, a fuse relay panel, main disconnect switch, ground level engine shutdown switch, hood tilt switch, and the jump start receptacle.

Hydraulic system components on the 950M Z and 962M Z are protected by full flow and kidney-loop filtration. A filter in the hydraulic tank return line filters all of the oil returning to the tank. There is also a case drain screen for additional protection and finally, a separate kidney-loop filter with a finer micron rating continuously filters smaller particles out of the system. This multilevel design ensures the hydraulic oil is clean and thoroughly protects the rest of the hydraulic system from contamination. A new thermal bypass valve has been added to improve hydraulic system warm-up.

The hydraulic service centers are now virtually identical for the M Z Series product line. This new consistent layout makes it easier for service technicians who work on a variety of M Z Series models.





# Sustainable Conserving Resources.

The 950M Z and 962M Z are designed to compliment your business plan, reduce emissions and minimize the consumption of natural resources.

- Improved fuel efficiency – less fuel consumed results in lower emissions.
- Machines are built with a 97% recyclability rate (ISO 16714) to conserve valuable natural resources and further enhance machine end of life value.
- Improved operator efficiency through enhanced visibility and reduced noise levels.
- Link technologies enable you to collect and analyze equipment and job site data so you can maximize productivity and reduce costs.
- Major components are rebuildable, eliminating waste and saving money by giving the machine and/or major components a second life – and even a third life.



## Customer Support Unmatched Support Makes the Difference.



### Renowned Cat Dealer Support

- Your Cat dealer is ready to help you every step of the way. From new or used machine sales, to rental or rebuild options, your Cat dealer can provide an optimal solution to your business needs.
- Unsurpassed worldwide parts availability, trained technicians and customer support agreements maximize your machine uptime.
- Financing options are offered to meet a variety of customer needs.

# 950M Z/962M Z Wheel Loaders Specifications

## Engine – 950M Z

Engine Model	Cat C7.1 ACERT
Maximum Gross Power (2,100 rpm)	
SAE J1995	187 kW
Maximum Net Power (2,100 rpm)	
SAE J1349	171 kW
Peak Gross Torque (1,300 rpm)	
SAE J1995	1235 N·m
Maximum Net Torque (1,300 rpm)	
SAE J1349	1163 N·m
Bore	105 mm
Stroke	135 mm
Displacement	7.01 L

- Cat engine with ACERT Technology – meets Japan 2014 (Tier 4 Final) emission standards.
- The power ratings apply at the stated speed when tested under the reference conditions for the specified standards.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner and aftertreatment.
- The gross power advertised is with the fan at maximum speed.

## Buckets – 950M Z

Bucket Capacities	2.5-9.2 m <sup>3</sup>
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## Weight – 950M Z

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 m<sup>3</sup> general purpose bucket with BOCE.

## Operating Specifications – 950M Z

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

- Full compliance to ISO (2007) 143971 Sections 1 thru 6, which requires 2% verification between calculations and testing.

## Engine – 962M Z

Engine Model	Cat C7.1 ACERT
Maximum Gross Power (2,100 rpm)	
SAE J1995	202 kW
Maximum Net Power (2,100 rpm)	
SAE J1349	186 kW
Peak Gross Torque (1,350 rpm)	
SAE J1995	1249 N·m
Maximum Net Torque (1,350 rpm)	
SAE J1349	1172 N·m
Bore	105 mm
Stroke	135 mm
Displacement	7.01 L

- Cat engine with ACERT Technology – meets Japan 2014 (Tier 4 Final) emission standards.
- The power ratings apply at the stated speed when tested under the reference conditions for the specified standards.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner and aftertreatment.
- The gross power advertised is with the fan at maximum speed.

## Buckets – 962M Z

Bucket Capacities	2.5-9.2 m <sup>3</sup>
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## Weight – 962M Z

Operating Weight	19 211 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 3.6 m<sup>3</sup> general purpose bucket with BOCE.

## Operating Specifications – 962M Z

Static Tipping Load – Full 40° Turn	
With Tire Deflection	11 700 kg
No Tire Deflection	12 455 kg
Breakout Force	146 kN

- Full compliance to ISO (2007) 143971 Sections 1 thru 6, which requires 2% verification between calculations and testing.



# 950M Z/962M Z Wheel Loaders Specifications

## Transmission

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	38 km/h
Reverse 1	6.9 km/h
Reverse 2	12 km/h
Reverse 3	25 km/h

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

## Hydraulic System

Implement Pump Type	Variable axial piston
Implement System	
Maximum Pump Output (2,340 rpm)	322 L/min
Maximum Operating Pressure	27 900 kPa
Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function Maximum Flow	240 L/min
Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function Maximum Pressure	21 780 kPa
Hydraulic Cycle Time with Rated Payload	
Raise from Carry Position	5.3 Seconds
Dump, at Maximum Raise	1.4 Seconds
Lower, Empty, Float Down	2.8 Seconds
Total	9.5 Seconds

## Brakes

Brakes	Brakes meet ISO 3450 standards
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## Axles

Front	Fixed
Rear	Oscillating $\pm 13$ degrees
Maximum Single-Wheel Rise and Fall	496 mm

## Cab

ROPS/FOPS	ROPS/FOPS meet ISO 3471 and ISO 3449 Level II standards
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## Sound

- 950M Z and 962M Z are compliant to MLIT low sound standard.
- The sound values indicated below are for specific operating conditions only. Machine and operator sound levels will vary at different engine and/or cooling fan speeds. Hearing protection may be needed when the machine is operated with a cabin that is not properly maintained, or when the doors and/or windows are open for extended periods or in a noisy environment.

Operator Sound Pressure Level (ISO 6396:2008)	69 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	104 dB(A)*
Exterior Sound Pressure Level (SAE J88:2013)	75 dB(A)**

\*For a standard machine configuration, measured according to the procedures specified with the cooling fan speed set at 70% of maximum value.

\*\*For a standard machine configuration, measured according to the procedures specified. The measurement was conducted under the following conditions: distance of 15 m, moving forward in second gear ratio with the cooling fan speed set at maximum value.

## Service Refill Capacities

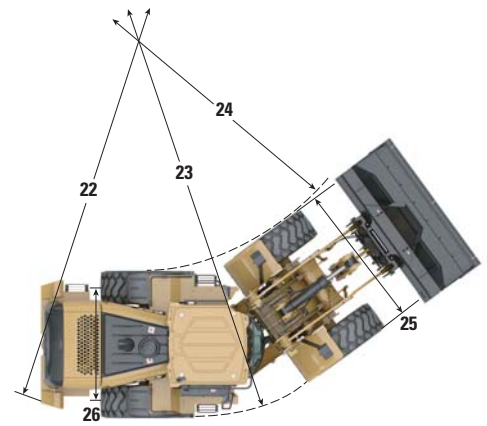
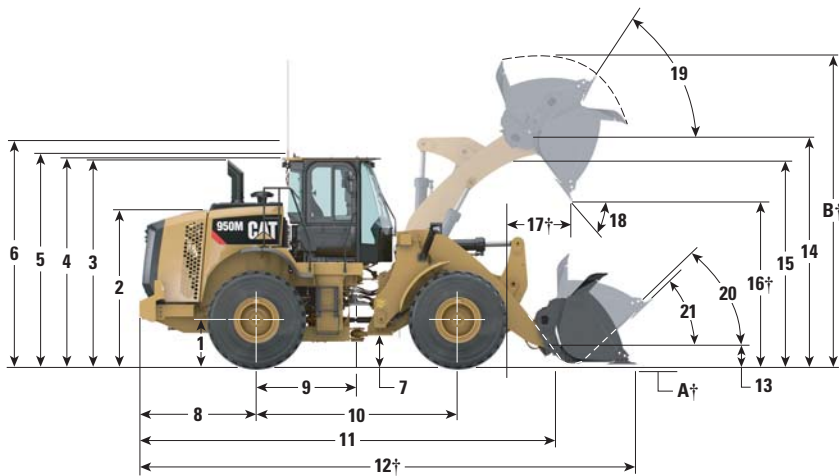
Fuel Tank	275 L
DEF Tank*	16 L
Cooling System	59 L
Crankcase	22 L
Transmission	43 L
Differentials and Final Drives – Front	43 L
Differentials and Final Drives – Rear	43 L
Hydraulic Tank	125 L

\*Must meet the requirements outlined in ISO 22241-1.

# 950M Z/962M Z Wheel Loaders Specifications

## 950M Z Dimensions

All dimensions are approximate.



	Standard Lift	High Lift
1 Height to Axle Centerline	747 mm	747 mm
2 Height to Top of Hood	2697 mm	2697 mm
3 Height to Top of Exhaust Pipe	3414 mm	3414 mm
4 Height to Top of ROPS	3445 mm	3445 mm
5 Height to Top of Product Link Antenna	3653 mm	3653 mm
6 Height to Top of Warning Beacon	3747 mm	3747 mm
7 Ground Clearance	368 mm	368 mm
8 Center Line of Rear Axle to Edge of Counterweight	1905 mm	2055 mm
9 Center Line of Rear Axle to Hitch	1675 mm	1675 mm
10 Wheelbase	3350 mm	3350 mm
11 Overall Length (without bucket)	6938 mm	7439 mm
12 Shipping Length (with bucket level on ground)*†	8069 mm	8721 mm
13 Hinge Pin Height at Carry Height	663 mm	765 mm
14 Hinge Pin Height at Maximum Lift	3995 mm	4490 mm
15 Lift Arm Clearance at Maximum Lift	3410 mm	3794 mm
16 Dump Clearance at Maximum Lift and 45° Discharge*†	2856 mm	3351 mm
17 Reach at Maximum Lift and 45° Discharge*†	1319 mm	1387 mm
18 Dump Angle at Maximum Lift and Dump (on stops)*	53 degrees	50 degrees
19 Rack Back at Maximum Lift*	60 degrees	66 degrees
20 Rack Back at Carry Height*	49 degrees	54 degrees
21 Rack Back at Ground*	41 degrees	45 degrees
22 Clearance Circle (radius) to Counterweight	6021 mm	6028 mm
23 Clearance Circle (radius) to Outside of Tires	6051 mm	6051 mm
24 Clearance Circle (radius) to Inside of Tires	3154 mm	3154 mm
25 Width over Tires (unloaded)	2814 mm	2814 mm
Width over Tires (loaded)	2822 mm	2822 mm
26 Tread Width	2140 mm	2140 mm

\*With 3.4 m³ general purpose pin on bucket with BOCE (see Operating Specifications for other Buckets).

†Dimensions are listed in Operating Specification charts.

All height and tire related dimensions are with Bridgestone 23.5R25 VJT L3 radial tires (see Tire Option Chart for other tires).

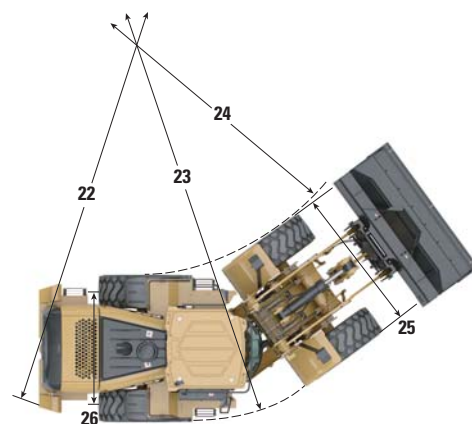
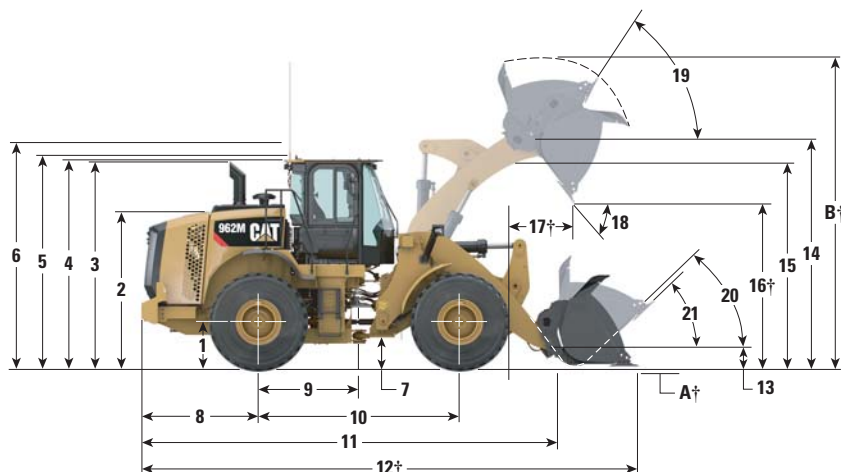
“Width Over Tires” dimensions are over the bulge and include growth.



# 950M Z/962M Z Wheel Loaders Specifications

## 962M Z Dimensions

All dimensions are approximate.



	Standard Lift	High Lift
1 Height to Axle Centerline	747 mm	744 mm
2 Height to Top of Hood	2694 mm	2691 mm
3 Height to Top of Exhaust Pipe	3411 mm	3408 mm
4 Height to Top of ROPS	3443 mm	3440 mm
5 Height to Top of Product Link Antenna	3653 mm	3650 mm
6 Height to Top of Warning Beacon	3747 mm	3744 mm
7 Ground Clearance	365 mm	362 mm
8 Center Line of Rear Axle to Edge of Counterweight	2055 mm	2055 mm
9 Center Line of Rear Axle to Hitch	1675 mm	1675 mm
10 Wheelbase	3350 mm	3350 mm
11 Overall Length (without bucket)	7037 mm	7411 mm
12 Shipping Length (with bucket level on ground)*†	8396 mm	8881 mm
13 Hinge Pin Height at Carry Height	642 mm	762 mm
14 Hinge Pin Height at Maximum Lift	4182 mm	4487 mm
15 Lift Arm Clearance at Maximum Lift	3624 mm	3791 mm
16 Dump Clearance at Maximum Lift and 45° Discharge*†	3007 mm	3312 mm
17 Reach at Maximum Lift and 45° Discharge*†	1299 mm	1416 mm
18 Dump Angle at Maximum Lift and Dump (on stops)*	52 degrees	49 degrees
19 Rack Back at Maximum Lift*	60 degrees	66 degrees
20 Rack Back at Carry Height*	49 degrees	54 degrees
21 Rack Back at Ground*	45 degrees	45 degrees
22 Clearance Circle (radius) to Counterweight	6028 mm	6028 mm
23 Clearance Circle (radius) to Outside of Tires	6051 mm	6051 mm
24 Clearance Circle (radius) to Inside of Tires	3154 mm	3154 mm
25 Width over Tires (unloaded)	2819 mm	2819 mm
Width over Tires (loaded)	2822 mm	2822 mm
26 Tread Width	2140 mm	2140 mm

\*With 3.6 m³ general purpose pin on bucket with BOCE (see Operating Specifications for other Buckets).

†Dimensions are listed in Operating Specification charts.

All height and tire related dimensions are with Bridgestone 23.5R25 VJT L3 radial tires (see Tire Option Chart for other tires).

“Width Over Tires” dimensions are over the bulge and include growth.

# 950M Z/962M Z Wheel Loaders Specifications

## 950M Z Tire Options

Tire Brand	Michelin	Bridgestone	Bridgestone	Bridgestone	Michelin
Tire Size	23.5R25	23.5R25	23.5-25	23.5R25	23.5R25
Tread Type	L-3	L-3	L-3	L-5	L-5
Tread Pattern	XHA2	VJT	VL2	VSDL	XLD D2
Width over Tires – Maximum (empty)*	2814 mm	2798 mm	2769 mm	2784 mm	2817 mm
Width over Tires – Maximum (loaded)*	2822 mm	2831 mm	2782 mm	2802 mm	2833 mm
Change in Vertical Dimensions (average of front and rear)	0 mm	-6 mm	14 mm	53 mm	28 mm
Change in Horizontal Reach	0 mm	6 mm	3 mm	-30 mm	-25 mm
Change in Clearance Circle to Outside of Tires	0 mm	9 mm	-40 mm	-20 mm	5 mm
Change in Clearance Circle to Inside of Tires	0 mm	-9 mm	40 mm	20 mm	-5 mm
Change in Operating Weight (without Ballast)	0 kg	168 kg	-100 kg	868 kg	668 kg

\*Width over bulge and includes tire growth.

## Changes Specific to the 950M Z

Tire Brand	Michelin	Bridgestone	Bridgestone	Bridgestone	Michelin
Tire Size	23.5R25	23.5R25	23.5-25	23.5R25	23.5R25
Tread Type	L-3	L-3	L-3	L-5	L-5
Tread Pattern	XHA2	VJT	VL2	VSDL	XLD D2
Change in Static Tipping Load – Straight	0 kg	112 kg	-67 kg	579 kg	446 kg
Change in Static Tipping Load – Articulated	0 kg	98 kg	-58 kg	505 kg	389 kg



# 950M Z/962M Z Wheel Loaders Specifications

## 962M Z Tire Options

Tire Brand	Michelin	Bridgestone	Bridgestone	Bridgestone	Michelin
Tire Size	23.5R25	23.5R25	23.5-25	23.5R25	23.5R25
Tread Type	L-3	L-3	L-3	L-5	L-5
Tread Pattern	XHA2	VJT	VL2	VSDL	XLD D2
Width over Tires – Maximum (empty)*	2821 mm	2809 mm	2771 mm	2788 mm	2825 mm
Width over Tires – Maximum (loaded)*	2824 mm	2832 mm	2784 mm	2803 mm	2835 mm
Change in Vertical Dimensions (average of front and rear)	0 mm	-6 mm	16 mm	55 mm	28 mm
Change in Horizontal Reach	0 mm	6 mm	3 mm	-30 mm	-25 mm
Change in Clearance Circle to Outside of Tires	0 mm	9 mm	-40 mm	-21 mm	11 mm
Change in Clearance Circle to Inside of Tires	0 mm	-9 mm	40 mm	21 mm	-11 mm
Change in Operating Weight (without Ballast)	0 kg	168 kg	-100 kg	868 kg	668 kg

\*Width over bulge and includes tire growth.

## Changes Specific to the 962M Z

Tire Brand	Michelin	Bridgestone	Bridgestone	Bridgestone	Michelin
Tire Size	23.5R25	23.5R25	23.5-25	23.5R25	23.5R25
Tread Type	L-3	L-3	L-3	L-5	L-5
Tread Pattern	XHA2	VJT	VL2	VSDL	XLD D2
Change in Static Tipping Load – Straight	0 kg	106 kg	-63 kg	549 kg	446 kg
Change in Static Tipping Load – Articulated	0 kg	93 kg	-55 kg	479 kg	389 kg

# 950M Z/962M Z Wheel Loaders Specifications

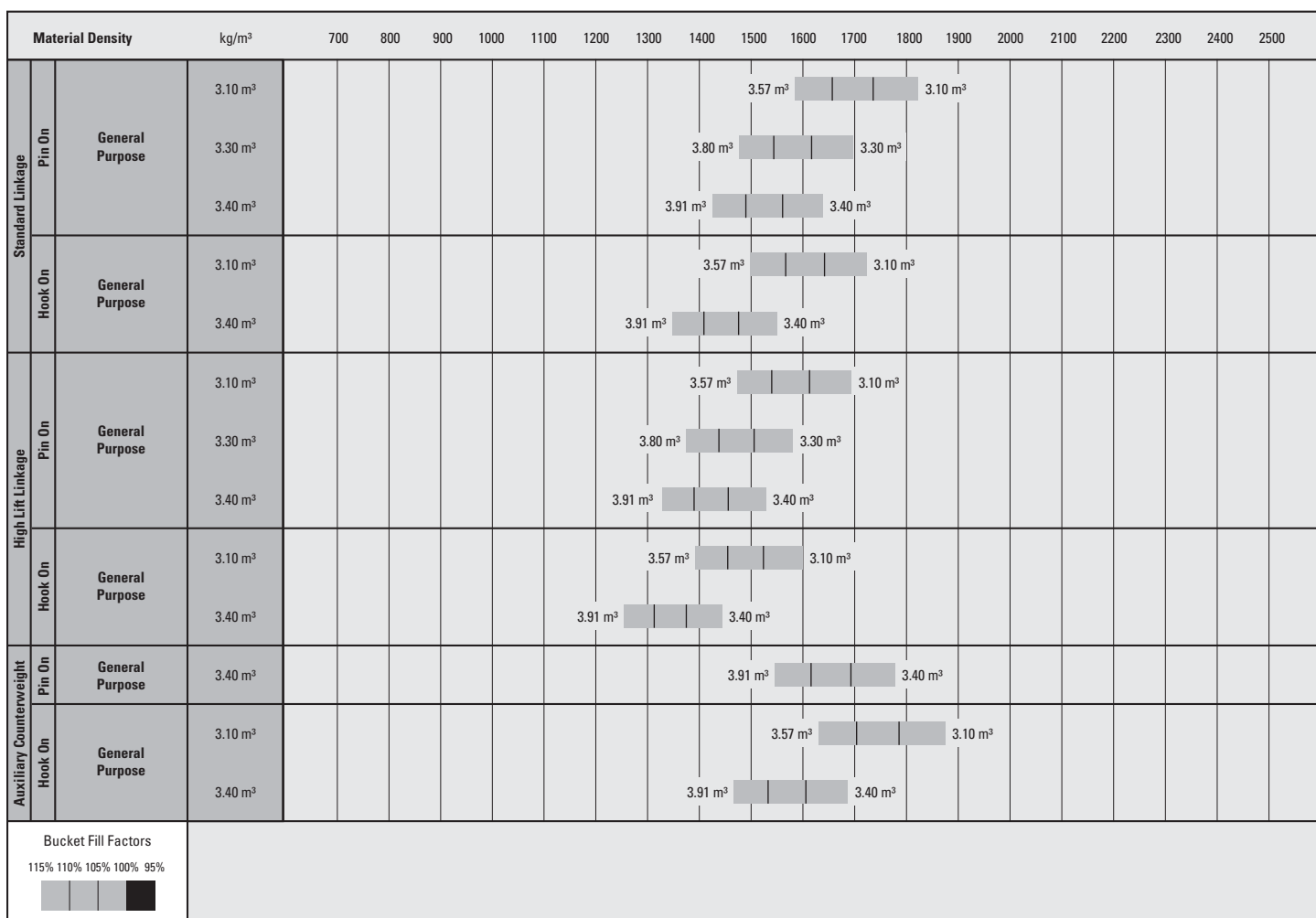
## 950M Z Bucket Fill Factors and Selection Chart

The bucket size must be chosen based on the density of the material and on the expected fill factor. The new Cat Performance Series Buckets with longer floor, larger bucket opening, increased repository angle, rounded side boards and integrated spill guard, demonstrate fill factors significantly higher than previous generation or non Cat buckets. The actual volume handled by the machine is thus often larger than the rated capacity.

Loose Material		Material Density	Fill Factor (%)*
Earth/Clay		1500-1700 kg/m <sup>3</sup>	115
Sand and Gravel		1500-1700 kg/m <sup>3</sup>	115
Aggregate:	25-76 mm	1600-1700 kg/m <sup>3</sup>	110
	19 mm and smaller	1800 kg/m <sup>3</sup>	105
Rock:	76 mm and larger	1600 kg/m <sup>3</sup>	100

\*As a % of ISO rated capacity.

**Note:** Fill Factors achieved will also depend on whether the product is washed or not washed.



**Note:** All buckets are showing Bolt-On Edges.

# 950M Z/962M Z Wheel Loaders Specifications

## 950M Z Operating Specifications with Buckets

Linkage		Standard Linkage			High Lift Linkage Change**	Standard Linkage			High Lift Linkage Change**
Bucket Type		General Purpose – Pin On				General Purpose – Pin On			
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges
Capacity – Rated	m <sup>3</sup>	3.10	3.10	2.90	—	3.30	3.30	3.10	—
Capacity – 110%	m <sup>3</sup>	3.41	3.41	3.19	—	3.63	3.63	3.41	—
Width	mm	2927	2994	2994	—	2927	2994	2994	—
<b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge	mm	2856	2738	2738	495	2817	2699	2699	495
<b>17†</b> Reach at Maximum Lift and 45° Discharge	mm	1319	1430	1430	68	1349	1459	1459	67
Reach at Level Lift Arm and Bucket Level	mm	2627	2788	2788	406	2677	2838	2838	406
<b>A†</b> Digging Depth	mm	89	89	59	22	89	89	59	22
<b>12†</b> Overall Length	mm	8069	8243	8243	652	8119	8293	8293	652
<b>B†</b> Overall Height with Bucket at Maximum Lift	mm	5325	5325	5325	496	5500	5500	5500	495
Loader Clearance Circle Radius with Bucket at Carry Position	mm	6678	6760	6760	195	6692	6774	6774	195
Static Tipping Load, Straight (ISO)*	kg	12 621	12 481	12 746	–777	12 525	12 384	12 643	–742
Static Tipping Load, Straight (Rigid Tire)*	kg	13 314	13 173	13 443	–855	13 220	13 078	13 341	–817
Static Tipping Load, Articulated (ISO)*	kg	10 926	10 786	11 034	–780	10 835	10 694	10 937	–750
Static Tipping Load, Articulated (Rigid Tire)*	kg	11 624	11 483	11 735	–845	11 535	11 393	11 639	–812
Breakout Force	kN	152	151	165	–9	146	144	158	–9
Operating Weight*	kg	18 136	18 244	18 087	1137	18 181	18 289	18 132	1137

\*Static tipping loads and operating weights shown are 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 and sound suppression.

\*\*Maximum values.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

†Illustration shown with Dimension charts.

Other buckets are available and offerings vary by region. Consult your local Cat dealer for further details.



# 950M Z/962M Z Wheel Loaders Specifications

## 950M Z Operating Specifications with Buckets

Linkage		Standard Linkage			High Lift Linkage Change**	Standard Linkage			High Lift Linkage Change**
Bucket Type		General Purpose – Pin On				General Purpose – Hook On			
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges
Capacity – Rated	m <sup>3</sup>	3.40	3.40	3.20	—	3.10	3.10	2.90	—
Capacity – 110%	m <sup>3</sup>	3.74	3.74	3.52	—	3.41	3.41	3.19	—
Width	mm	2927	2994	2994	—	2927	2994	2994	—
<b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge	mm	2791	2672	2672	495	2814	2697	2697	495
<b>17†</b> Reach at Maximum Lift and 45° Discharge	mm	1371	1481	1481	68	1355	1467	1467	68
Reach at Level Lift Arm and Bucket Level	mm	2712	2873	2873	406	2682	2843	2843	406
<b>A†</b> Digging Depth	mm	89	89	59	22	97	97	67	22
<b>12†</b> Overall Length	mm	8154	8328	8328	652	8130	8304	8304	651
<b>B†</b> Overall Height with Bucket at Maximum Lift	mm	5529	5529	5529	495	5468	5468	5468	495
Loader Clearance Circle Radius with Bucket at Carry Position	mm	6702	6784	6784	195	6693	6776	6776	196
Static Tipping Load, Straight (ISO)*	kg	12 463	12 322	12 573	–720	12 009	11 870	12 196	–735
Static Tipping Load, Straight (Rigid Tire)*	kg	13 159	13 017	13 272	–793	12 689	12 548	12 884	–804
Static Tipping Load, Articulated (ISO)*	kg	10 776	10 635	10 871	–731	10 340	10 201	10 510	–747
Static Tipping Load, Articulated (Rigid Tire)*	kg	11 478	11 335	11 574	–791	11 026	10 885	11 204	–804
Breakout Force	kN	141	140	153	–8	145	143	157	–9
Operating Weight*	kg	18 211	18 319	18 162	1137	18 614	18 722	18 565	1137

\*Static tipping loads and operating weights shown are 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 and sound suppression.

\*\*Maximum values.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

†Illustration shown with Dimension charts.

Other buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

# 950M Z/962M Z Wheel Loaders Specifications

## 950M Z Operating Specifications with Buckets

Linkage/Package		Standard Linkage			High Lift Linkage Change**	Auxiliary Counterweight		
Bucket Type		General Purpose – Hook On				General Purpose – Pin On	General Purpose – Hook On	General Purpose – Hook On
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges
Capacity – Rated	m <sup>3</sup>	3.40	3.40	3.20	—	3.40	3.10	3.40
Capacity – 110%	m <sup>3</sup>	3.74	3.74	3.52	—	3.74	3.41	3.74
Width	mm	2927	2994	2994	—	2927	2927	2927
<b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge	mm	2749	2630	2630	495	2791	2814	2749
<b>17†</b> Reach at Maximum Lift and 45° Discharge	mm	1407	1517	1517	68	1371	1355	1407
Reach at Level Lift Arm and Bucket Level	mm	2767	2928	2928	406	2712	2682	2767
<b>A†</b> Digging Depth	mm	97	97	67	22	89	97	97
<b>12†</b> Overall Length	mm	8215	8389	8389	651	8304	8280	8365
<b>B†</b> Overall Height with Bucket at Maximum Lift	mm	5548	5548	5548	495	5529	5468	5548
Loader Clearance Circle Radius with Bucket at Carry Position	mm	6717	6800	6800	197	6702	6693	6717
Static Tipping Load, Straight (ISO)*	kg	11 858	11 717	12 035	–684	13 547	13 082	12 924
Static Tipping Load, Straight (Rigid Tire)*	kg	12 540	12 398	12 727	–747	14 319	13 836	13 682
Static Tipping Load, Articulated (ISO)*	kg	10 196	10 055	10 358	–702	11 672	11 227	11 078
Static Tipping Load, Articulated (Rigid Tire)*	kg	10 885	10 743	11 055	–754	12 454	11 991	11 846
Breakout Force	kN	135	134	146	–8	141	145	135
Operating Weight*	kg	18 690	18 798	18 641	1137	18 710	19 113	19 189

\*Static tipping loads and operating weights shown are 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 and sound suppression.

\*\*Maximum values.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

†Illustration shown with Dimension charts.

Other buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

# 950M Z/962M Z Wheel Loaders Specifications

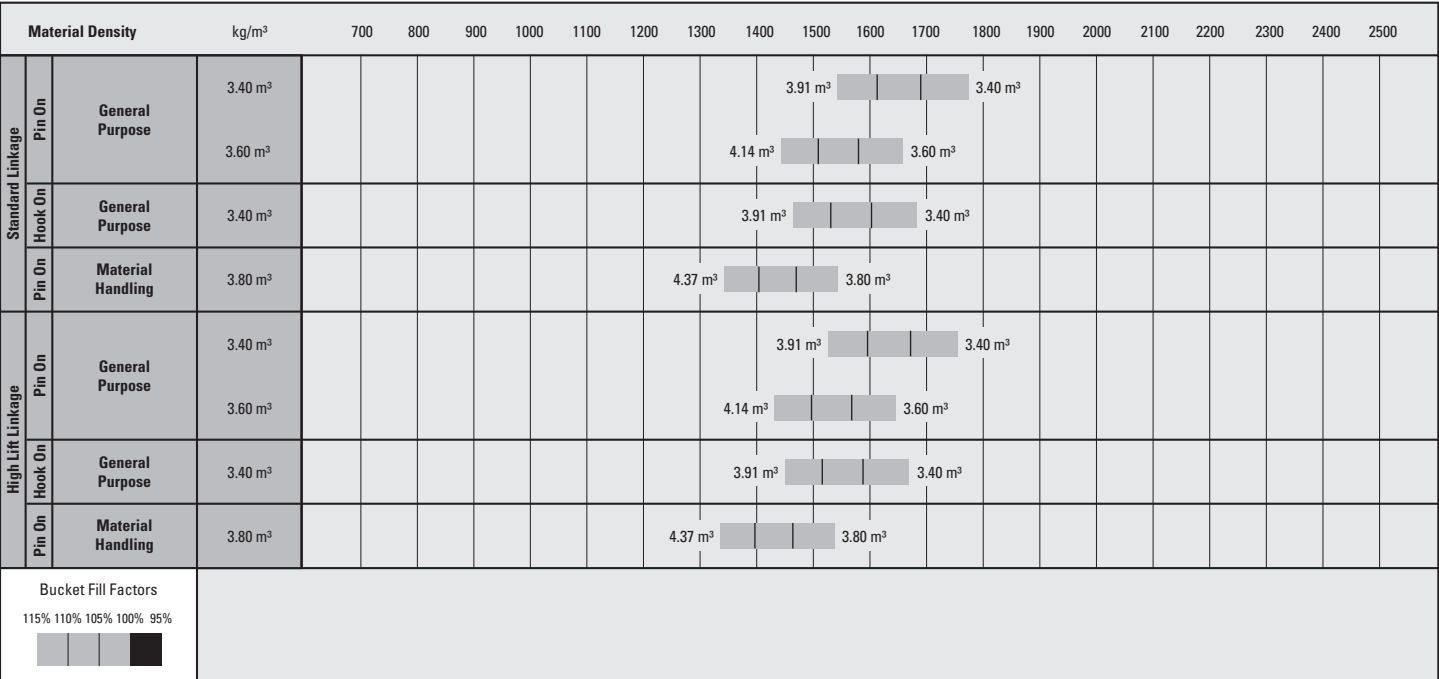
## 962M Z Bucket Fill Factors and Selection Chart

The bucket size must be chosen based on the density of the material and on the expected fill factor. The new Cat Performance Series Buckets with longer floor, larger bucket opening, increased repository angle, rounded side boards and integrated spill guard, demonstrate fill factors significantly higher than previous generation or non Cat buckets. The actual volume handled by the machine is thus often larger than the rated capacity.

Loose Material		Material Density	Fill Factor (%)*
Earth/Clay		1500-1700 kg/m <sup>3</sup>	115
Sand and Gravel		1500-1700 kg/m <sup>3</sup>	115
Aggregate:	25-76 mm	1600-1700 kg/m <sup>3</sup>	110
	19 mm and smaller	1800 kg/m <sup>3</sup>	105
Rock:	76 mm and larger	1600 kg/m <sup>3</sup>	100

\*As a % of ISO rated capacity.

**Note:** Fill Factors achieved will also depend on whether the product is washed or not washed.



**Note:** All buckets are showing Bolt-On Edges.



# 950M Z/962M Z Wheel Loaders Specifications

## 962M Z Operating Specifications with Buckets

Linkage		Standard Linkage			High Lift Linkage Change**	Standard Linkage			High Lift Linkage Change**
Bucket Type		General Purpose – Pin On				General Purpose – Pin On			
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges
Capacity – Rated	m <sup>3</sup>	3.40	3.40	3.20	—	3.60	3.60	3.40	—
Capacity – 110%	m <sup>3</sup>	3.74	3.74	3.52	—	3.96	3.96	3.74	—
Width	mm	2927	2994	2994	—	2927	2994	2994	—
<b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge	mm	2981	2862	2862	305	2935	2816	2816	305
<b>17†</b> Reach at Maximum Lift and 45° Discharge	mm	1321	1431	1431	118	1357	1467	1467	118
Reach at Level Lift Arm and Bucket Level	mm	2812	2973	2973	306	2872	3033	3033	306
<b>A†</b> Digging Depth	mm	90	90	60	21	90	90	60	21
<b>12†</b> Overall Length	mm	8431	8604	8604	485	8491	8664	8664	485
<b>B†</b> Overall Height with Bucket at Maximum Lift	mm	5719	5719	5719	305	5777	5777	5777	306
Loader Clearance Circle Radius with Bucket at Carry Position	mm	6764	6848	6848	0	6781	6866	6866	2
Static Tipping Load, Straight (ISO)*	kg	13 550	13 410	13 669	–42	13 430	13 289	13 547	–2
Static Tipping Load, Straight (Rigid Tire)*	kg	14 301	14 160	14 423	–60	14 183	14 041	14 303	–15
Static Tipping Load, Articulated (ISO)*	kg	11 640	11 500	11 742	–132	11 527	11 386	11 626	–97
Static Tipping Load, Articulated (Rigid Tire)*	kg	12 397	12 255	12 501	–136	12 286	12 144	12 387	–96
Breakout Force	kN	142	141	154	–9	136	135	146	–9
Operating Weight*	kg	19 153	19 261	19 104	1071	19 211	19 319	19 162	1071

\*Static tipping loads and operating weights shown are 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 and sound suppression.

\*\*Maximum values.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

†Illustration shown with Dimension charts.

Other buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

# 950M Z/962M Z Wheel Loaders Specifications

## 962M Z Operating Specifications with Buckets

Linkage		Standard Linkage			High Lift Linkage Change**	Standard Linkage			High Lift Linkage Change**
Bucket Type		General Purpose – Hook On				Material Handler – Pin On			
Edge Type		BOCE	T&S	Tips	BOCE	BOCE	T&S	Tips	BOCE
Capacity – Rated	m <sup>3</sup>	3.40	3.40	3.20	—	3.80	3.80	3.60	—
Capacity – 110%	m <sup>3</sup>	3.74	3.74	3.52	—	4.18	4.18	3.96	—
Width	mm	2927	2994	2994	—	2927	2994	2994	—
<b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge	mm	2939	2820	2820	305	2833	2707	2707	305
<b>17†</b> Reach at Maximum Lift and 45° Discharge	mm	1357	1467	1467	118	1319	1421	1421	118
Reach at Level Lift Arm and Bucket Level	mm	2867	3028	3028	306	2933	3094	3094	306
<b>A†</b> Digging Depth	mm	98	98	68	21	98	98	68	21
<b>12†</b> Overall Length	mm	8492	8665	8665	484	8558	8731	8731	484
<b>B†</b> Overall Height with Bucket at Maximum Lift	mm	5738	5738	5738	305	5828	5828	5828	305
Loader Clearance Circle Radius with Bucket at Carry Position	mm	6780	6866	6866	21	6803	6888	6888	0
Static Tipping Load, Straight (ISO)*	kg	12 933	12 794	13 116	–13	13 202	13 062	13 306	40
Static Tipping Load, Straight (Rigid Tire)*	kg	13 670	13 529	13 862	–21	13 944	13 802	14 049	33
Static Tipping Load, Articulated (ISO)*	kg	11 051	10 911	11 217	–110	11 322	11 181	11 409	–60
Static Tipping Load, Articulated (Rigid Tire)*	kg	11 794	11 654	11 968	–105	12 070	11 928	12 158	–53
Breakout Force	kN	136	135	147	–9	129	128	139	–8
Operating Weight*	kg	19 632	19 740	19 583	1071	19 260	19 368	19 211	1071

\*Static tipping loads and operating weights shown are 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 and sound suppression.

\*\*Maximum values.

(ISO) Full compliance to ISO 14397-1 (2007) Sections 1 thru 6, which requires 2% verification between calculations and testing.

(Rigid Tire) Compliance to ISO 14397-1 (2007) Sections 1 thru 5.

†Illustration shown with Dimension charts.

Other buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

## Standard Equipment

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

### OPERATOR ENVIRONMENT

- Cab, pressurized and sound suppressed (ROPS/FOPS)
- Viscous mounts
- Multi-function 18 cm color LCD touch-screen display for rear vision camera image display (reverse travel activated) and machine status, setting and health parameters
- EH controls, SAL (single axis lever) lift and tilt function
- Steering, steering wheel
- Radio ready (entertainment) includes antenna, speakers and converter (12V, 10-amp)
- Air conditioner, heater, and defroster (auto temp and fan)
- EH parking brake
- Beverage holders (2) with storage compartment for cell phone/MP3 player
- Bucket/work tool function lockout
- Coat hook (2)
- Cab air filter
- Ergonomic cab access ladders and handrails
- Horn, electric
- Light, two dome (cab)
- Mirrors, rearview external with integrated spot mirrors
- Post mounted membrane 16 switch keypad
- 2 receptacles, 12V
- Seat, Cat Comfort (cloth) air suspension
- Seat belt, 51 mm retractable, with indicator
- Sun visor, front
- Wet-arm wipers/washers front and rear, intermittent front wiper
- Window, sliding (left and right sides)
- Cab tie-off

### COMPUTERIZED MONITORING SYSTEM

- With following gauges:
  - Speedometer/tachometer
  - Digital gear range indicator
  - Diesel Exhaust Fluid (DEF) level
  - Temperature: engine coolant, hydraulic oil, transmission oil
  - Fuel level

- With following warning indicators:
  - Regeneration
  - Temperature: axle oil, engine intake manifold
  - Pressure: engine oil, fuel pressure hi/low, primary steering oil, service brake oil
  - Battery voltage hi/low
  - Engine air filter restriction
  - Hydraulic oil filter restriction
  - Hydraulic oil low
  - Parking brake
  - DEF low level
  - Transmission filter bypass

### ELECTRICAL AND LIGHTING

- Batteries (2), maintenance free 1,400 CCA
- Ignition key; start/stop switch
- Starter, electric, heavy duty
- Starting and charging system (24V)
- Lighting system:
  - Four halogen work lights (cab mounted)
  - Two stop, turn, tail lights
  - Two halogen roading lights (with signals)
  - Two halogen rear vision lights (hood mounted)
- Alarm, back-up
- Alternator, 145-amp brushed
- Main disconnect switch
- Receptacle start (cables not included)

### CAT CONNECT TECHNOLOGIES

- Link technologies: Product Link
- Detect technologies: rear vision camera

### POWER TRAIN

- Engine, Cat C7.1 ACERT – meets Japan 2014 (Tier 4 Final) emission standards
- Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF) and remote Diesel Exhaust Fluid (DEF) tank and pump
- Fuel priming pump (electric)
- Fuel/water separator
- Precleaner, engine air intake
- Economy Mode (selectable)
- Transmission, automatic countershaft power shift (5F/3R)
- Torque converter, locking clutch with free wheel stator
- Switch, transmission neutralizer lockout
- Axles, manually actuated differential lock front axle, open differential rear axle
- Axles, ecology drains

- Brakes, full hydraulic enclosed wet-disc with Integrated Braking System (IBS)
- Brake wear indicators
- Parking brake, disc and caliper
- Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand

### LINKAGE

- Linkage, Z-bar, cast crosstube/tilt lever
- Kickout, lift and tilt, automatic (adjustable in cab)

### HYDRAULICS

- Hydraulic system, load sensing
- Steering, load sensing
- Ride control, 2V
- Remote diagnostic pressure taps
- Hoses, Cat XT™
- Couplings, Cat O-ring face seal
- Hydraulic oil cooler (swing out)
- Oil sampling valves

### FLUIDS

- Premixed extended life coolant with freeze protection to –34° C

### OTHER STANDARD EQUIPMENT

- Hood, non-metallic power tilting
- Service centers (electrical and hydraulic)
- Auto idle shutdown
- Fenders, with mud-flap/rear with extension
- Ecology drains for engine, transmission, and hydraulics
- Grill, airborne debris
- Filters: fuel, engine air, engine oil, hydraulic oil, transmission
- Fuel cooler
- Grease zerks
- Hitch, drawbar with pin
- Precleaner rain cap
- Sight gauges: engine coolant, hydraulic oil, and transmission oil level
- Toolbox
- Vandalism protection caplocks



# 950M Z/962M Z Optional Equipment

## Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

### OPERATOR ENVIRONMENT

- Door, remote opening system
- Cover, HVAC metallic
- EH controls, SAL 3<sup>rd</sup> function
  - Additional roller switch for 4<sup>th</sup> function
- EH controls, joystick lift and tilt
  - Additional integrated roller switches for 3<sup>rd</sup> and 4<sup>th</sup> functions
- Mirrors, heated rearview external with integrated spot mirrors
- Precleaner, HVAC
- Radio, AM/FM/CD/USB/MP3 Bluetooth
- Seat, heated air suspension
- Seat belt, 76 mm retractable, with indicator
- Steering, EH joystick, speed sensing with force feedback
- Roof, metallic
- Steering, secondary
- Sun visor, rear
- Windows, rubber mounted
- Windows, with front guard
- Windows, with full guards front, rear and sides
- Full time rear vision display Work Area Vision System (WAVS)

### ELECTRICAL AND LIGHTING

- Four additional halogen cab mounted work lights or;
- Four additional LED cab mounted work lights
- Warning amber strobe beacon

### STARTERS, BATTERIES, AND ALTERNATORS

- Cold start – 120V

### CAT CONNECT TECHNOLOGIES

- Link technologies: VIMS™
- Payload technologies:
  - Aggregate Autodig
  - Cat Production Measurement
  - Printer, Cat Production Measurement
- Detect technologies: dedicated display for rear vision camera, full-time activation
- Machine Security System

### POWER TRAIN

- Axles
  - Automatic front/rear differential locks
  - Axle oil cooler
  - Extreme temperature seals
  - Seal guards
- Fan, VPF (variable pitch fan), automatic and manual control
- Radiator, ambient with 9FPI cooling cores

### LINKAGE

- High lift
- Quick coupler ready
- Autolube

### WORK TOOLS

- Performance Series buckets
- Fusion quick coupler

### HYDRAULICS

- 3<sup>rd</sup> function with Ride Control
  - Standard linkage
  - High lift linkage
- 4<sup>th</sup> function with Ride Control
  - Standard linkage
  - High lift linkage

### OTHER OPTIONAL EQUIPMENT

- Fenders, roading
- Guard, power train
- Precleaner, turbine
- Precleaner, trash
- Platform, window washing
- Cold weather package
  - Transmission filter bypass
  - Fan pump bypass
  - Jacket water or engine block heater
  - Ether aid ready

### OTHER OPTIONAL CONFIGURATIONS

- Snow Removal (950M Z only)









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)

AEHQ7798 (04-2016)  
(Japan)

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