950M/962M

Wheel Loaders

2017

	950M	962M
Engine Model	Cat® C7.1 ACERT™	Cat C7.1 ACERT
Maximum Power – ISO 14396	186 kW (253 hp metric)	201 kW (273 hp metric)
Maximum Net Power – ISO 9249	171 kW (232 hp metric)	186 kW (253 hp metric)
Bucket Capacities	2.5-9.2 m^3	2.5-9.9 m^3
Operating Weight	19 269 kg (3.3 m^3 MH BOCE bucket)	20 296 kg (3.6 m^3 MH BOCE bucket)

RELIABLE, PRODUCTIVE AND FUEL EFFICIENT

- *10% more fuel efficient than the industry-leading K Series**
- *Up to 25% more fuel efficient than H Series**
- ***Optimized 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** meets EU Stage IV 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 lock provides optimal traction in varying underfoot conditions for improved productivity*
- ***Next generation load-sensing hydraulic system** provides optimal control of machine functions*

EASE OF OPERATION

- ***Best-in-class operator environment** for unmatched comfort and efficiency*
- ***Advanced technology with Cat Connect** monitors, manages and enhances job site operations*

SERVICE ACCESS

- *One-piece tilting hood, centralized service centers, windshield cleaning platform and harness tie-off provides the best in class service access*

Contents

**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 950M and 962M Wheel Loaders have a 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 your 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 you. The reliability, durability, and versatility of both the 950M and 962M result in machines that are better built to meet your needs.

Reliable

Proven Components and Technology You Can Count On.

Every Stage IV ACERT engine is equipped with a combination of proven electronic, fuel, air and aftertreatment components.

More Powerful, Reliable Engine Electronics

The electronics used in Cat Stage IV 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 and 962M 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 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℠ Services to maintain equipment reliability and efficiency.

Cold Start Package

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

Axles

The M Series axles are designed to handle extreme applications resulting in reliable performance and durable life. The rear axle can oscillate to ±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.
- **Unsurpassed 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 you 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 dual accumulator ride-control system enables it to be more effective over a greater payload range, increasing productivity and your efficiency due to a better ride.

The next generation implement pump continuously and automatically balances hydraulic loads resulting in the machine performance you need. Engine response is improved as is performance at higher altitudes.

Transmission

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

Axles

The on-the-go disc-type differential locks will improve tractive ability in these applications thereby increasing productivity. These models come standard with a front axle differential lock which can be manually activated by a switch on the floor without having to stop the machine. Optional fully automatic front and rear axle differential locks require no operator intervention to activate: they automatically engage when the machine is digging or when a difference in wheel speeds is measured. These disc-type differential locks will reduce tire scuffing compared to other traction aids further reducing operating costs for customers.

The 950M and 962M feature an external caliper disc parking brake mounted to the input shaft of the front axles eliminating the inefficiencies posed by wet parking brakes. Additionally, the external caliper parking brake is easily accessible for inspection and service; there is no oil to change reducing fuel and maintenance costs.

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 Stage IV emission standards. This engine features innovative Cat electronics, fuel injection, air-management systems, aftertreatment solution with Cat Selective Catalytic Reduction, and a fuel efficient regeneration system.

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 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 fuel injection through a series of carefully timed microbursts, providing more control of combustion for the cleanest, most efficient fuel burn. On 950M and 962M, the high pressure common rail fuel system boosts performance and reduces soot for the C7.1 ACERT engine.

Cat NO_X Reduction System

The Cat NO_X 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_X emissions.

Aftertreatment Technologies

To meet the additional 80% reduction in NO_X emissions required by Stage IV emission standards, the Selective Catalytic Reduction (SCR) has been added to the already proven Cat Stage IIIB aftertreatment solution.

Easy to Operate
Safe. Comfortable. Efficient.

Improving your efficiency remains a key design goal for the 950M and 962M. By ensuring you are safe, confident in the control of your machine, have a clean, comfortable and quiet operating environment with controls that are intuitive and low effort, you will be less fatigued, more efficient and more productive.

Cab Access

An optional remote switch can be installed in the electronic service center which unlatches the door allowing the gas strut to swing the door open. The angle of the steps up to the cab is at an optimal 15 degrees enabling you to walk up like stairs versus climbing more vertically like a ladder. Grab handles have been repositioned so you can maintain three points of contact at all times.

Visibility

Once in the cab, the door securely seals against the roll-formed ROPS posts and the lower glass panel extends several inches down to improve visibility to the left side of the machine. Large 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 machine's frame, decreasing noise and vibration which means you will be able to be more efficient and productive all day long in a sustainable work environment.

Central Display

The central display panel has a large text box, six 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 six large analog gauges, you can easily identify if key systems are within normal operating range.

Touch Screen Display

A 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 you to modify certain machine operating parameters and monitor machine conditions literally at the touch of your 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 Series maintains the “help” feature which explains the function of each membrane switch.

Focusing on your 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.

Steering Control

The 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)

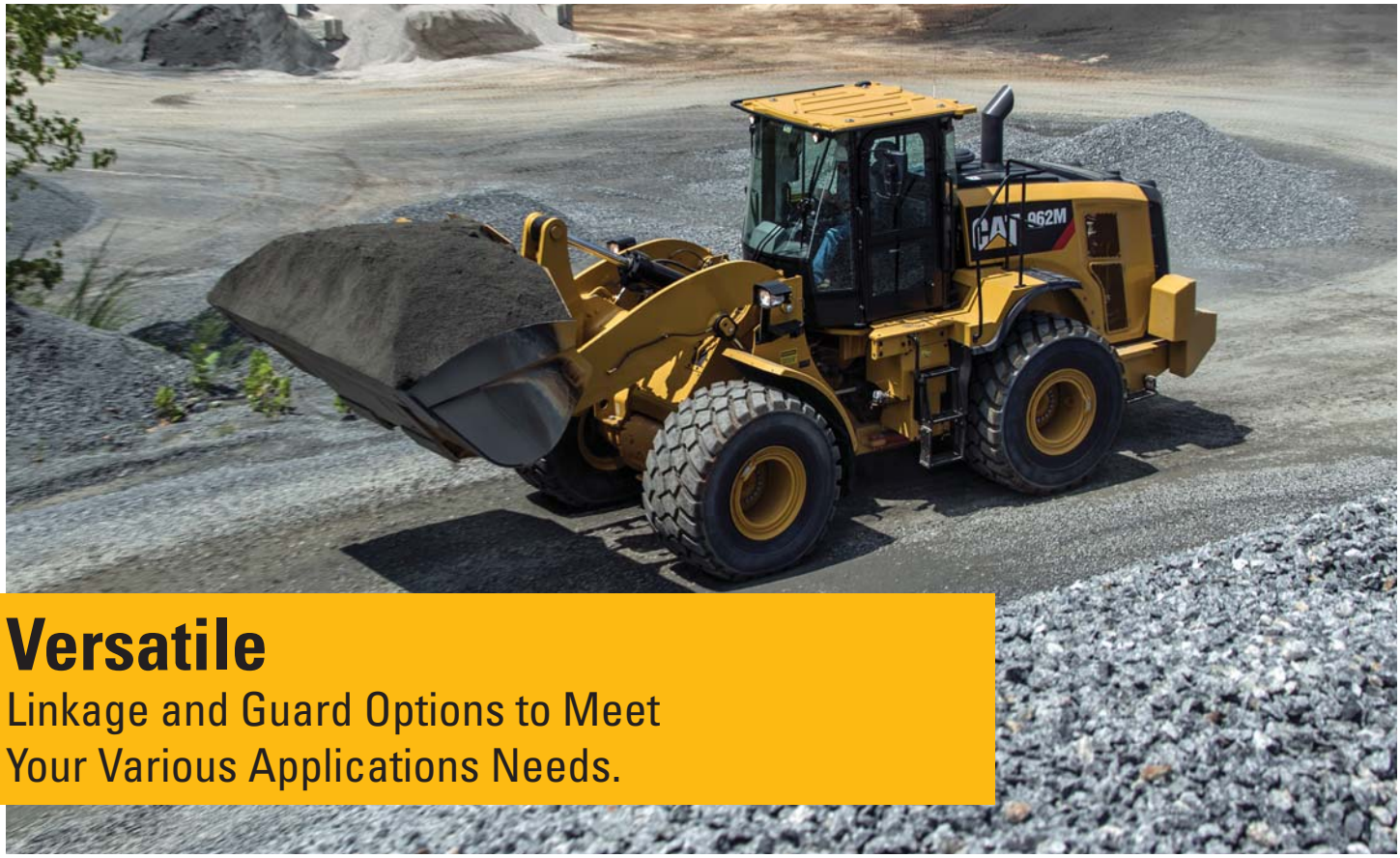
You will enjoy and quickly adopt the industry-leading, seat-mounted EH joystick steering system, which provides precision control and dramatically decreases your arm fatigue.

Implement Controls (EH)

Seat mounted single axis implement control levers or joystick provide you 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 confidence, comfort and efficiency, ensuring excellent material retention.



Versatile

Linkage and Guard Options to Meet Your Various Applications Needs.

Work Tool Control System

The work tool control system facilitates the use of different work tools. You only have to select the desired tool and the machine automatically adapts the hydraulic and kick out settings defined for this tool.

Optimized Z-bar Linkage

Development of the optimized 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. Parallel lift capabilities, high breakout forces and high tilt forces at maximum lift enhance performance and versatility.

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.

Aggregate Handler

Aggregate packages are specialized offerings for specific loose aggregate rehandling applications, such as truck loading, hopper charging, stockpiling, and load and carry. Rehandling loose aggregate is less stressful on the machine, therefore payloads can be increased above other applications by installing larger buckets, counterweights.

To do so, the Cat aggregate packages require conformance to Caterpillar payload policy. Misapplication of Aggregate Handlers may result in significant reliability and durability risk.

Industrial and Waste Handler

The Industrial and Waste Packages offer integrated guards to preserve your machine from the harsh environment of a scrap or waste handling application. The machine guarding is purpose-built to protect your machine's major components and systems to ensure durability and reliability.

Forestry Arrangement

The Forestry package includes larger lift and tilt cylinders, and a heavier counterweight to safely handle the larger loads met in logging and millyard applications.

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. You will 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 you 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

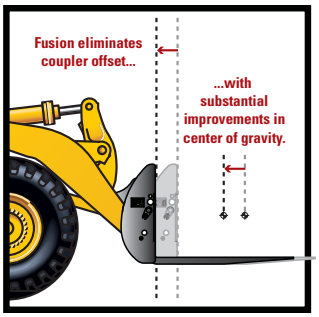
Fusion is designed to integrate the work tool and the machine by pulling the coupler and tool closer in to the loader. As a result, the center of gravity is moved inward, towards the machine. This translates to increased lifting ability when compared to machines equipped with other coupler systems.

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.

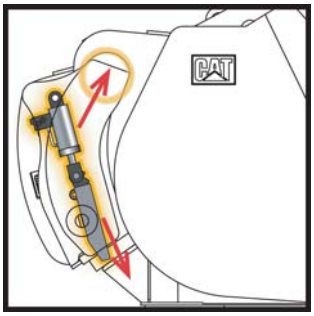
Increased Visibility

An open coupler frame design clears sight lines from the 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 services are also available from your dealership including:

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.

Consult your local dealer on the services available.

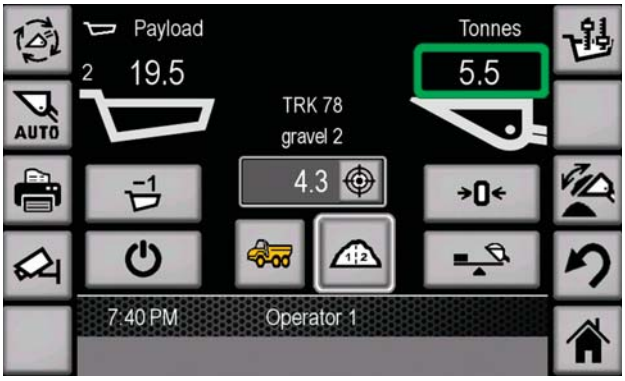
Featured Cat Connect technologies include:

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 2.0 (Optional)

- Brings payload weighing to the cab, enabling you to weigh loads "on-the-go" during loading operations.
- Integrated Cat multi-function touchscreen display with graphical user interface is easy to understand and adds no clutter to the cab.
- Easy calibration procedure requires no special tools and reduces operational complexity.
- Low Lift Weigh and Tip-off features enable faster loading of trucks to their maximum capacity.
- VisionLink common back-office interface provides you a quick summary of loader operations, including payload productivity and efficiency.
- Optional Advanced Productivity subscription provides comprehensive actionable information to help you manage and improve the productivity and profitability of your operations.

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

- Integrated into standard display, enhances visibility behind the machine helping you work confidently.
- Optional second display can be added to provide a dedicated rear view of the job site.

Rear Object Detection (Optional)

- Integrated into touchscreen display, the radar system warns you of an object in critical zone while going in reverse.
- Increased awareness of the working environment enhances site safety.

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.

Cat Autolube System
The optional, fully integrated Cat Autolube system provides full system monitoring and diagnostic test visibility by being integrated into the machine, display and VisionLink. Easy access to the refill pump and grease zerks means simple, fast servicing.

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 delivering replacement parts within 24 hours.

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.

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:

- **M Series Stage IV Engine, Hydraulics, Transmission and Ride Control** – Deep system integration results in reduced emissions, more productivity, lower fuel consumption, without interrupting machine performance.
- **Manual/Automatic Differential Locks** – Increase traction, reduce tire scuffing compared to other traction aids, further reducing your operating costs.
- **The intelligent ECO mode** optimizes engine torque and speed to further reduce fuel consumption.
- The adjustable **Automatic Idle Engine Shutdown System** significantly reduces idle time, overall operating hours and fuel consumption.
- **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.
- **Performance Series Buckets** – Deliver faster fill times and better material retention, ultimately reducing cycle times while improving productivity and fuel efficiency.

Machine configuration, operator technique and job site layout can impact fuel consumption by as much as 30 percent. Select the correct linkage, guarding, work tool and tire type based on machine application.

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 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 six 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 you and your 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, secondary engine shutdown switch, hood tilt switch, and the jump start receptacle.

Hydraulic system components on the 950M and 962M 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 thermal bypass valve improves hydraulic system warm-up.

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

Sustainable
Conserving Resources.

The 950M and 962M 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/962M Wheel Loaders Specifications

Engine – 950M

Engine Model	Cat C7.1 ACERT	
Maximum Power (2,100 rpm)		
SAE J1995	187 kW	254 hp (metric)
ISO 14396	186 kW	253 hp (metric)
Maximum Net Power (2,100 rpm)		
ISO 9249	171 kW	232 hp (metric)
Peak Gross Torque (1,300 rpm)		
ISO 14396	1231 N·m	
Maximum Net Torque (1,300 rpm)		
ISO 9249	1163 N·m	
Bore	105 mm	
Stroke	135 mm	
Displacement	7.01 L	

- Cat engine with ACERT Technology meets Stage IV 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

Bucket Capacities	2.5-9.2 m^3

Weight – 950M

Operating Weight	19 269 kg

- 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 3.3 m^3 material handling bucket with BOCE.

Engine – 962M

Engine Model	Cat C7.1 ACERT	
Maximum Power (2,100 rpm)		
SAE J1995	202 kW	275 hp (metric)
ISO 14396	201 kW	273 hp (metric)
Maximum Net Power (2,100 rpm)		
ISO 9249	186 kW	253 hp (metric)
Peak Gross Torque (1,350 rpm)		
ISO 14396	1245 N·m	
Maximum Net Torque (1,350 rpm)		
ISO 9249	1172 N·m	
Bore	105 mm	
Stroke	135 mm	
Displacement	7.01 L	

- Cat engine with ACERT Technology meets Stage IV 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

Bucket Capacities	2.5-9.9 m^3

Weight – 962M

Operating Weight	20 296 kg

- 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 3.6 m^3 material handling bucket with BOCE.

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	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.

Hydraulic System

Implement Pump Type	Variable axial piston	
Implement System		
Maximum Pump Output (2,150 rpm)	286 L/min	
Maximum Operating Pressure	29 300 kPa	
Optional 3rd/4th Function Maximum Flow	240 L/min	
Optional 3rd/4th Function Maximum Pressure	21 780 kPa	
Hydraulic Cycle Time with Rated Payload	**950M**	**962M**
Raise from Carry Position	5.1 Seconds	5.2 Seconds
Dump, at Maximum Raise	1.5 Seconds	1.5 Seconds
Lower, Empty, Float Down	2.3 Seconds	2.7 Seconds
Total	8.9 Seconds	9.4 Seconds

Brakes

Brakes	Brakes meet ISO 3450:2011 standards

Axles

Front	Fixed
Rear	Oscillating ±13 degrees
Maximum Single-Wheel Rise and Fall	496 mm

Cab

ROPS/FOPS	ROPS/FOPS meet ISO 3471:2008 and ISO 3449:2005 Level II standards

Sound

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

*DEF must meet the requirements outlined in ISO 22241-1.

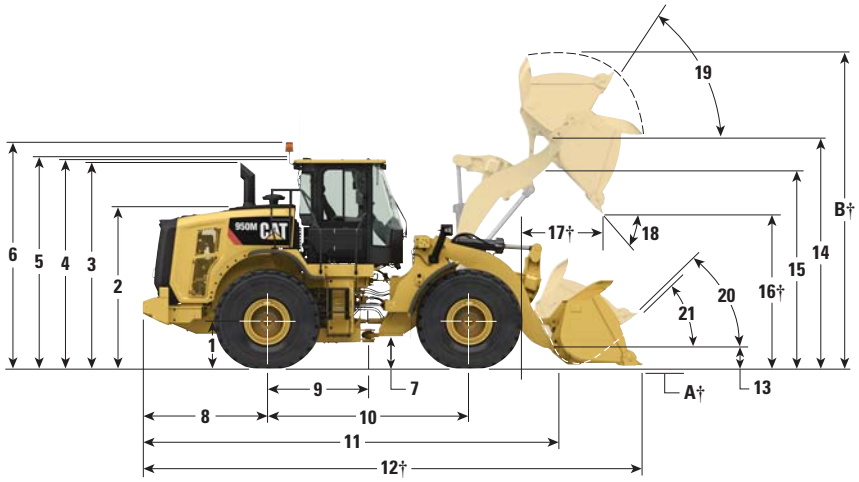
Air Conditioning System

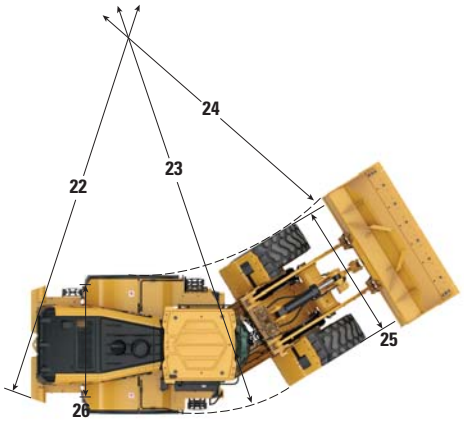
The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant with has a CO_2 equivalent of 2.288 metric tonnes.

950M/962M Wheel Loaders Specifications

Dimensions

All dimensions are approximate.





		950M		962M	
		Standard Lift with Auxiliary Counterweight	High Lift with Auxiliary Counterweight	Standard Lift with Aggregate Handler	High Lift with Auxiliary Counterweight
1	Height to Axle Centerline	747 mm	747 mm	747 mm	747 mm
2	Height to Top of Hood	2697 mm	2697 mm	2694 mm	2691 mm
3	Height to Top of Exhaust Pipe	3413 mm	3413 mm	3411 mm	3408 mm
4	Height to Top of ROPS	3451 mm	3451 mm	3447 mm	3444 mm
5	Height to Top of Product Link Antenna	3653 mm	3653 mm	3653 mm	3653 mm
6	Height to Top of Warning Beacon	3747 mm	3747 mm	3747 mm	3747 mm
7	Ground Clearance	367 mm	367 mm	364 mm	361 mm
8	Center Line of Rear Axle to Edge of Counterweight	2071 mm	2071 mm	2186 mm	2186 mm
9	Center Line of Rear Axle to Hitch	1675 mm	1675 mm	1675 mm	1675 mm
10	Wheelbase	3350 mm	3350 mm	3350 mm	3350 mm
11	Overall Length (without bucket)	7031 mm	7488 mm	7266 mm	7598 mm
12	Shipping Length (with bucket level on ground)*†	8371 mm	8824 mm	8692 mm	9025 mm
13	Hinge Pin Height at Carry Height	647 mm	782 mm	669 mm	779 mm
14	Hinge Pin Height at Max Lift	4027 mm	4527 mm	4235 mm	4524 mm
15	Lift Arm Clearance at Max Lift	3280 mm	3634 mm	3477 mm	3631 mm
16	Dump Clearance at Max Lift and 45° Discharge*†	2789 mm	3295 mm	2946 mm	3235 mm
17	Reach at Max Lift and 45° Discharge*†	1378 mm	1413 mm	1372 mm	1473 mm
18	Dump Angle at Max Lift and Dump (on stops)*	47 degrees	44 degrees	46 degrees	44 degrees
19	Rack Back at Max Lift*	59 degrees	59 degrees	59 degrees	59 degrees
20	Rack Back at Carry Height*	49 degrees	49 degrees	49 degrees	49 degrees
21	Rack Back at Ground*	36 degrees	40 degrees	37 degrees	37 degrees
22	Turning Radius to Counterweight	6023 mm	6023 mm	6022 mm	6064 mm
23	Turning Radius to Outside of Tires	5985 mm	6001 mm	5985 mm	5985 mm
24	Turning Radius to Inside of Tires	3219 mm	3219 mm	3219 mm	3219 mm
25	Width over Tires (unloaded)	2814 mm	2814 mm	2821 mm	2821 mm
	Width over Tires (loaded)	2822 mm	2822 mm	2824 mm	2824 mm
26	Tread Width	2140 mm	2140 mm	2140 mm	2140 mm

* 950M with 3.3 m³ pin-on MH bucket with BOCE (see Operating Specifications tables for other buckets).
962M with 3.6 m³ pin-on MH bucket with BOCE (see Operating Specifications tables for other buckets).

†Dimensions are listed in Operating Specification charts.

All height and tire related dimensions are with Michelin 23.5R25 XHA2 L3 radial tires (see Tire Option Chart for other tires). "Width Over Tires" dimensions are over the bulge and include growth.

950M Tire Options

Tire Brand	Michelin	Bridgestone	Goodyear	Bridgestone	Michelin	Michelin	Flexport™	Flexport
Tire Size	**23.5R25**	**23.5R25**	**23.5R25**	**23.5R25**	**750/65R25**	**23.5R25**	**23.5×25**	**23.5×25**
Tread Type	**L-3**	**L-3**	**L-3**	**L-3**	**L-3**	**L-5**	**—**	**—**
Tread Pattern	**XHA2**	**VMT**	**RT–3B**	**VJT**	**XLD**	**XLD D2**	**OTR**	**Smooth**
Width over Tires – Maximum (empty)*	2814 mm	2805 mm	2835 mm	2798 mm	2948 mm	2817 mm	2808 mm	2808 mm
Width over Tires – Maximum (loaded)*	2822 mm	2834 mm	2846 mm	2831 mm	2965 mm	2833 mm	2821 mm	2821 mm
Change in Vertical Dimensions (average of front and rear)	0 mm	–3 mm	–1 mm	–6 mm	–6 mm	28 mm	45 mm	45 mm
Change in Horizontal Reach	0 mm	6 mm	3 mm	6 mm	11 mm	–25 mm	–10 mm	–10 mm
Change in Clearance Circle to Outside of Tires	0 mm	12 mm	24 mm	9 mm	143 mm	5 mm	–1 mm	–1 mm
Change in Clearance Circle to Inside of Tires	0 mm	–12 mm	–24 mm	–9 mm	–143 mm	–5 mm	1 mm	1 mm
Change in Operating Weight (without Ballast)	0 kg	188 kg	127 kg	168 kg	801 kg	668 kg	3996 kg	4312 kg

*Width over bulge and includes tire growth.

Changes Specific to the 950M

Tire Brand	Michelin	Bridgestone	Goodyear	Bridgestone	Michelin	Michelin	Flexport	Flexport
Tire Size	**23.5R25**	**23.5R25**	**23.5R25**	**23.5R25**	**750/65R25**	**23.5R25**	**23.5×25**	**23.5×25**
Tread Type	**L-3**	**L-3**	**L-3**	**L-3**	**L-3**	**L-5**	**—**	**—**
Tread Pattern	**XHA2**	**VMT**	**RT–3B**	**VJT**	**XLD**	**XLD D2**	**OTR**	**Smooth**
Change in Static Tipping Load – Straight	0 kg	125 kg	85 kg	112 kg	534 kg	446 kg	2666 kg	2876 kg
Change in Static Tipping Load – Articulated	0 kg	109 kg	74 kg	98 kg	466 kg	389 kg	2324 kg	2508 kg

962M Tire Options

Tire Brand	Michelin	Bridgestone	Goodyear	Bridgestone	Michelin	Michelin	Flexport	Flexport
Tire Size	**23.5R25**	**23.5R25**	**23.5R25**	**23.5R25**	**750/65R25**	**23.5R25**	**23.5×25**	**23.5×25**
Tread Type	**L-3**	**L-3**	**L-3**	**L-3**	**L-3**	**L-5**	**—**	**—**
Tread Pattern	**XHA2**	**VMT**	**RT-3B**	**VJT**	**XLD**	**XLD D2**	**OTR**	**Smooth**
Width over Tires – Maximum (empty)*	2821 mm	2810 mm	2840 mm	2809 mm	2954 mm	2825 mm	2808 mm	2798 mm
Width over Tires – Maximum (loaded)*	2824 mm	2835 mm	2847 mm	2832 mm	2967 mm	2835 mm	2821 mm	2820 mm
Change in Vertical Dimensions (average of front and rear)	0 mm	–2 mm	1 mm	–6 mm	–6 mm	28 mm	47 mm	48 mm
Change in Horizontal Reach	0 mm	6 mm	3 mm	6 mm	11 mm	–25 mm	–10 mm	–10 mm
Change in Clearance Circle to Outside of Tires	0 mm	12 mm	23 mm	9 mm	143 mm	11 mm	–2 mm	–4 mm
Change in Clearance Circle to Inside of Tires	0 mm	–12 mm	–23 mm	–9 mm	–143 mm	–11 mm	2 mm	4 mm
Change in Operating Weight (without Ballast)	0 kg	188 kg	127 kg	168 kg	801 kg	668 kg	3996 kg	4312 kg

*Width over bulge and includes tire growth.

Changes Specific to the 962M

Tire Brand	Michelin	Bridgestone	Goodyear	Bridgestone	Michelin	Michelin	Flexport	Flexport
Tire Size	**23.5R25**	**23.5R25**	**23.5R25**	**23.5R25**	**750/65R25**	**23.5R25**	**23.5×25**	**23.5×25**
Tread Type	**L-3**	**L-3**	**L-3**	**L-3**	**L-3**	**L-5**	**—**	**—**
Tread Pattern	**XHA2**	**VMT**	**RT-3B**	**VJT**	**XLD**	**XLD D2**	**OTR**	**Smooth**
Change in Static Tipping Load – Straight	0 kg	119 kg	81 kg	106 kg	507 kg	446 kg	2529 kg	2729 kg
Change in Static Tipping Load – Articulated	0 kg	104 kg	70 kg	93 kg	442 kg	389 kg	2204 kg	2378 kg

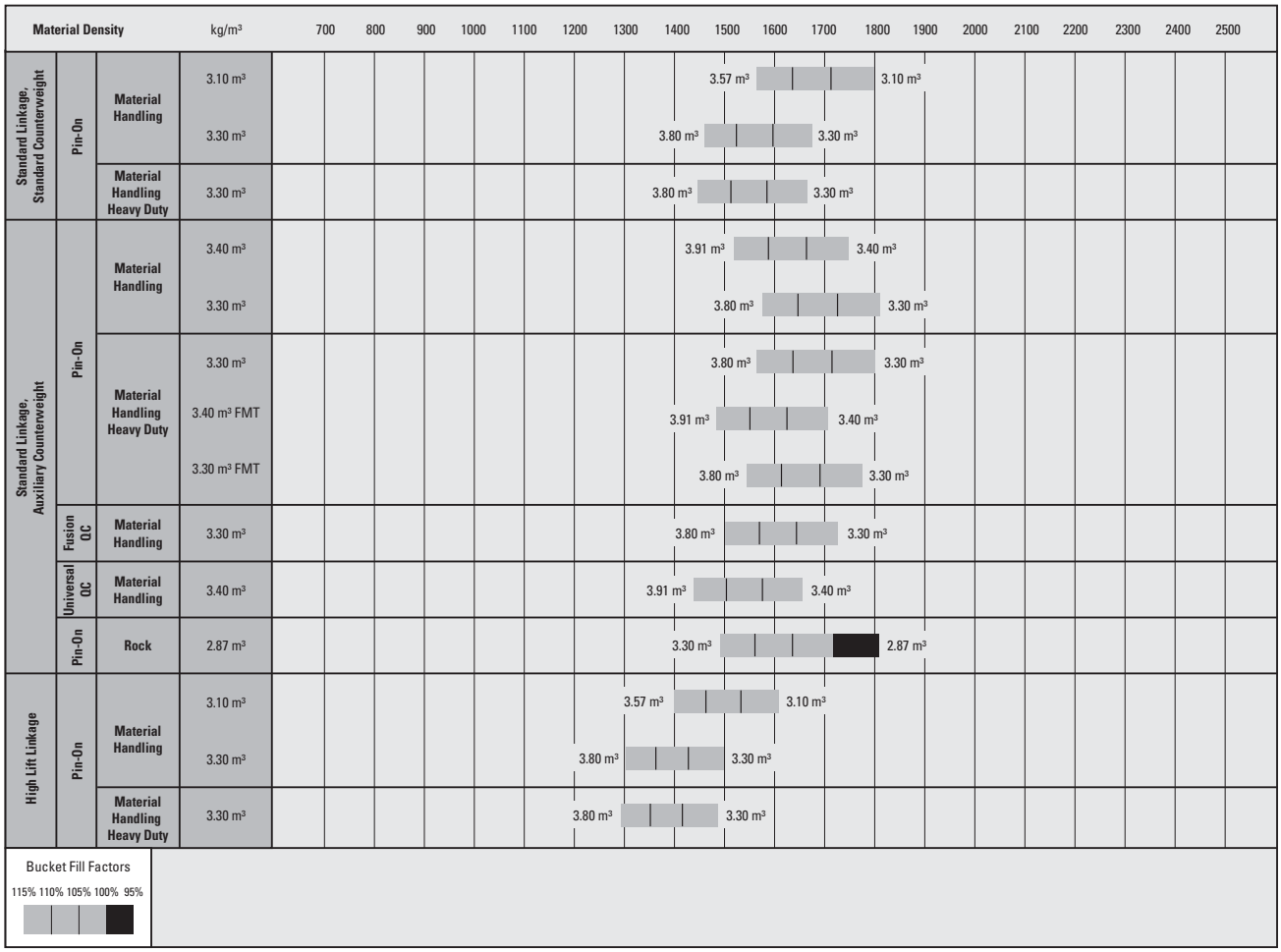
950M Bucket Fill Factors and Selection Chart

The bucket size must be chosen based on the density of the material and on the expected fill factor. The 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/m³	115
Sand and Gravel		1500-1700 kg/m³	115
Aggregate:	25-76 mm	1600-1700 kg/m³	110
	19 mm and smaller	1800 kg/m³	105
Rock:	76 mm and larger	1600 kg/m³	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 Operating Specifications with Buckets

Machine		Standard Linkage, Standard Counterweight						
Bucket Type		Material Handling – Pin-On				Material Handling Heavy Duty – Pin-On		
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments	High Lift Linkage Change
Capacity – Rated	m^3	3.1	3.1	3.3	3.3	3.3	3.3	
Capacity – Rated at 110% Fill Factor	m^3	3.41	3.41	3.63	3.63	3.63	3.63	
Width	mm	2927	2994	2927	2994	2927	2994	
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	2821	2696	2789	2664	2789	2664	505
17† Reach at Maximum Lift and 45° Discharge	mm	1346	1448	1378	1480	1378	1480	35
Reach at Level Lift Arm and Bucket Level	mm	2686	2847	2731	2892	2731	2892	374
A† Digging Depth	mm	90	90	90	90	90	90	4
12† Overall Length	mm	8197	8370	8242	8415	8242	8415	583
B† Overall Height with Bucket at Maximum Lift	mm	5483	5483	5527	5527	5536	5536	506
Loader Clearance Circle with Bucket at Carry Position	mm	13 761	13 930	13 787	13 957	13 787	13 957	393
Static Tipping Load, Straight (With Tire Deflection)*	kg	12 624	12 484	12 533	12 393	12 458	12 315	–1277
Static Tipping Load, Straight (No Tire Deflection)*	kg	13 345	13 204	13 256	13 114	13 181	13 037	–1436
Static Tipping Load, Articulated (With Tire Deflection)*	kg	10 878	10 738	10 791	10 651	10 716	10 574	–1184
Static Tipping Load, Articulated (No Tire Deflection)*	kg	11 613	11 472	11 528	11 387	11 454	11 310	–1333
Breakout Force	kN	181	180	174	173	174	172	–9
Operating Weight*	kg	19 221	19 329	19 269	19 377	19 340	19 448	603

Machine		Standard Linkage, Auxiliary Counterweight					
Bucket Type		Material Handling – Pin-On				Material Handling – Fusion QC	Material Handling – Universal QC
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Bolt-On Cutting Edges
Capacity – Rated	m^3	3.40	3.40	3.30	3.30	3.30	3.40
Capacity – Rated at 110% Fill Factor	m^3	3.74	3.74	3.63	3.63	3.63	3.74
Width	mm	2927	2994	2927	2994	2927	2927
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	2761	2636	2789	2664	2747	2675
17† Reach at Maximum Lift and 45° Discharge	mm	1406	1508	1378	1480	1420	1492
Reach at Level Lift Arm and Bucket Level	mm	2771	2932	2731	2892	2791	2893
A† Digging Depth	mm	90	90	90	90	90	90
12† Overall Length	mm	8411	8584	8371	8544	8431	8533
B† Overall Height with Bucket at Maximum Lift	mm	5566	5566	5527	5527	5561	5627
Loader Clearance Circle with Bucket at Carry Position	mm	13 811	13 981	13 787	13 957	13 815	13 868
Static Tipping Load, Straight (With Tire Deflection)*	kg	13 482	13 341	13 563	13 423	12 994	12 822
Static Tipping Load, Straight (No Tire Deflection)*	kg	14 278	14 136	14 358	14 216	13 778	13 594
Static Tipping Load, Articulated (With Tire Deflection)*	kg	11 564	11 423	11 641	11 501	11 101	10 960
Static Tipping Load, Articulated (No Tire Deflection)*	kg	12 380	12 238	12 455	12 314	11 904	11 753
Breakout Force	kN	169	167	174	173	166	154
Operating Weight*	kg	19 809	19 917	19 769	19 877	20 218	20 076

*Static tipping loads and operating weights are based on a machine configuration with Michelin 23.5R25 XHA2 L3 radial tires, full fluids, operator, auxiliary counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering and sound suppression.

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

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

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

950M Operating Specifications with Buckets

Machine		Standard Linkage, Auxiliary Counterweight				
Bucket Type		Material Handling Heavy Duty – Pin-On				Rock – Pin-On
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Flush Mounted Teeth	Flush Mounted Teeth	Teeth and Segments
Capacity – Rated	m^3	3.30	3.30	3.40	3.30	2.87
Capacity – Rated at 110% Fill Factor	m^3	3.63	3.63	3.74	3.63	3.16
Width	mm	2927	2994	2994	2994	2969
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	2789	2664	2598	2633	2695
17† Reach at Maximum Lift and 45° Discharge	mm	1378	1480	1588	1552	1636
Reach at Level Lift Arm and Bucket Level	mm	2731	2892	3015	2965	2950
A† Digging Depth	mm	90	90	63	63	93
12† Overall Length	mm	8371	8544	8645	8595	8630
B† Overall Height with Bucket at Maximum Lift	mm	5536	5536	5621	5574	5442
Loader Clearance Circle with Bucket at Carry Position	mm	13 787	13 957	14 009	13 978	14 003
Static Tipping Load, Straight (With Tire Deflection)*	kg	13 488	13 345	13 230	13 344	14 059
Static Tipping Load, Straight (No Tire Deflection)*	kg	14 283	14 139	14 035	14 146	14 900
Static Tipping Load, Articulated (With Tire Deflection)*	kg	11 566	11 424	11 302	11 411	12 050
Static Tipping Load, Articulated (No Tire Deflection)*	kg	12 381	12 236	12 126	12 233	12 911
Breakout Force	kN	174	172	171	179	172
Operating Weight*	kg	19 840	19 948	20 109	20 049	20 517

*Static tipping loads and operating weights are based on a machine configuration with Michelin 23.5R25 XHA2 L3 radial tires, full fluids, operator, auxiliary counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering and sound suppression.

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

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

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

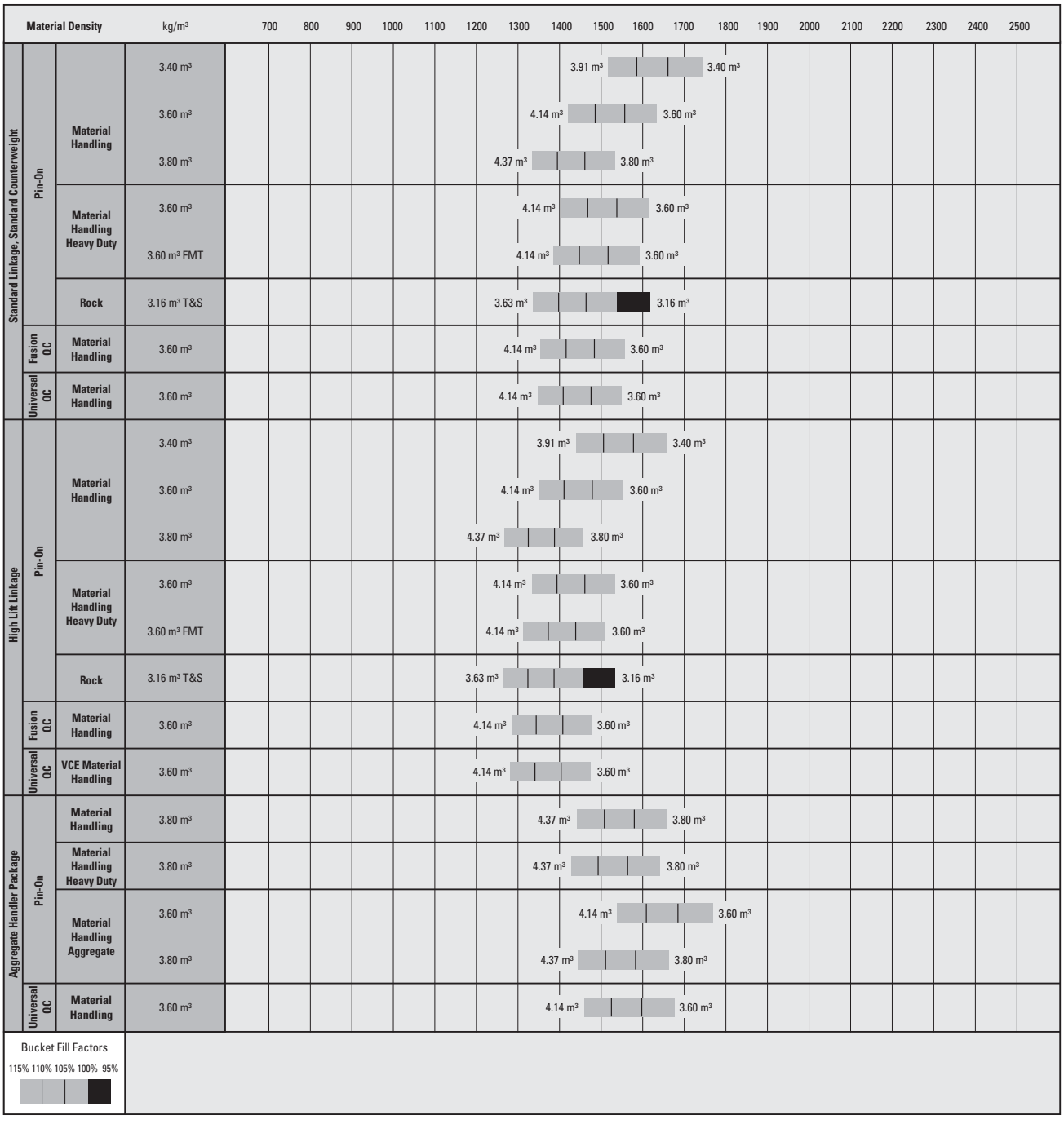
962M Bucket Fill Factors and Selection Chart

The bucket size must be chosen based on the density of the material and on the expected fill factor. The 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/m³	115
Sand and Gravel		1500-1700 kg/m³	115
Aggregate:	25-76 mm	1600-1700 kg/m³	110
	19 mm and smaller	1800 kg/m³	105
Rock:	76 mm and larger	1600 kg/m³	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.

962M Operating Specifications with Buckets

Machine			Standard Linkage, Standard Counterweight						
Bucket Type			Material Handling – Pin-On				Material Handling – Fusion QC	Material Handling – Universal QC	
Edge Type			Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Teeth and Segments	Bolt-On Cutting Edges	Bolt-On Cutting Edges	High Lift Linkage Change
	Capacity – Rated	m^3	3.40	3.40	3.60	3.60	3.60	3.60	
	Capacity – Rated at 110% Fill Factor	m^3	3.74	3.74	3.96	3.96	3.96	3.96	
	Width	mm	2927	2994	2927	2994	2927	2927	
16†	Dump Clearance at Maximum Lift and 45° Discharge	mm	2978	2852	2946	2821	2904	2860	288
17†	Reach at Maximum Lift and 45° Discharge	mm	1340	1442	1372	1474	1414	1458	101
	Reach at Level Lift Arm and Bucket Level	mm	2869	3030	2914	3075	2974	3036	277
A†	Digging Depth	mm	88	88	88	88	88	89	5
12†	Overall Length	mm	8608	8780	8653	8825	8713	8775	372
B†	Overall Height with Bucket at Maximum Lift	mm	5783	5783	5831	5831	5860	5888	289
	Loader Clearance Circle with Bucket at Carry Position	mm	13 909	14 080	13 936	14 108	13 966	13 997	308
	Static Tipping Load, Straight (With Tire Deflection)*	kg	13 477	13 337	13 383	13 243	12 828	12 741	–630
	Static Tipping Load, Straight (No Tire Deflection)*	kg	14 201	14 060	14 109	13 967	13 544	13 445	–722
	Static Tipping Load, Articulated (With Tire Deflection)*	kg	11 533	11 393	11 445	11 304	10 917	10 859	–611
	Static Tipping Load, Articulated (No Tire Deflection)*	kg	12 278	12 137	12 192	12 050	11 655	11 585	–694
	Breakout Force	kN	183	182	177	176	169	162	–1
	Operating Weight*	kg	20 252	20 360	20 296	20 404	20 739	20 551	593

Machine			Standard Linkage, Standard Counterweight					
Bucket Type			Material Handling Heavy Duty – Pin-On			Material Handling – Pin-On	Rock – Pin-On	
Edge Type			Bolt-On Cutting Edges	Teeth and Segments	Flush Mounted Teeth	Bolt-On Cutting Edges	Teeth and Segments	High Lift Linkage Change
	Capacity – Rated	m^3	3.60	3.60	3.60	3.80	3.16	
	Capacity – Rated at 110% Fill Factor	m^3	3.96	3.96	3.96	4.18	3.48	
	Width	mm	2927	2994	2994	2927	2969	
16†	Dump Clearance at Maximum Lift and 45° Discharge	mm	2943	2817	2783	2910	2853	288
17†	Reach at Maximum Lift and 45° Discharge	mm	1375	1477	1554	1408	1604	101
	Reach at Level Lift Arm and Bucket Level	mm	2919	3080	3158	2965	3117	277
A†	Digging Depth	mm	88	88	61	88	91	5
12†	Overall Length	mm	8658	8830	8888	8704	8894	372
B†	Overall Height with Bucket at Maximum Lift	mm	5837	5837	5884	5879	5730	289
	Loader Clearance Circle with Bucket at Carry Position	mm	13 939	14 111	14 137	13 967	14 145	308
	Static Tipping Load, Straight (With Tire Deflection)*	kg	13 251	13 108	13 112	13 275	13 881	–630
	Static Tipping Load, Straight (No Tire Deflection)*	kg	13 976	13 832	13 844	14 002	14 650	–722
	Static Tipping Load, Articulated (With Tire Deflection)*	kg	11 313	11 170	11 164	11 342	11 855	–611
	Static Tipping Load, Articulated (No Tire Deflection)*	kg	12 060	11 916	11 918	12 091	12 646	–694
	Breakout Force	kN	176	175	180	170	177	–1
	Operating Weight*	kg	20 412	20 520	20 607	20 350	21 039	593

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

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

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

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

962M Operating Specifications with Buckets – Aggregate Handler

Machine		Standard Linkage, Aggregate Handler**				
Bucket Type		Material Handling – Pin-On	Material Handling Heavy Duty – Pin-On	Material Handling Aggregate – Pin-On		Material Handling – Universal QC
Edge Type		Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges
Capacity – Rated	m^3	3.80	3.80	3.60	3.80	3.60
Capacity – Rated at 110% Fill Factor	m^3	4.18	4.18	3.96	4.18	3.96
Width	mm	2927	2927	2914	2914	2927
16† Dump Clearance at Maximum Lift and 45° Discharge	mm	2910	2910	2964	2928	2860
17† Reach at Maximum Lift and 45° Discharge	mm	1408	1408	1354	1390	1458
Reach at Level Lift Arm and Bucket Level	mm	2965	2965	2889	2940	3036
A† Digging Depth	mm	88	88	88	88	89
12† Overall Length	mm	8743	8743	8667	8718	8814
B† Overall Height with Bucket at Maximum Lift	mm	5879	5866	5816	5868	5888
Loader Clearance Circle with Bucket at Carry Position	mm	13 967	13 967	13 909	13 940	13 997
Static Tipping Load, Straight (With Tire Deflection)*	kg	14 362	14 240	14 497	14 385	13 800
Static Tipping Load, Straight (No Tire Deflection)*	kg	15 165	15 042	15 297	15 188	14 576
Static Tipping Load, Articulated (With Tire Deflection)*	kg	12 239	12 116	12 367	12 262	11 732
Static Tipping Load, Articulated (No Tire Deflection)*	kg	13 070	12 947	13 196	13 093	12 537
Breakout Force	kN	170	170	181	174	162
Operating Weight*	kg	20 919	21 030	20 848	20 901	21 120

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

**Aggregate Handler Configurations are NOT compatible with L5 Tires, Teeth, Teeth and Segments, and Spade Nose Rock Bucket.

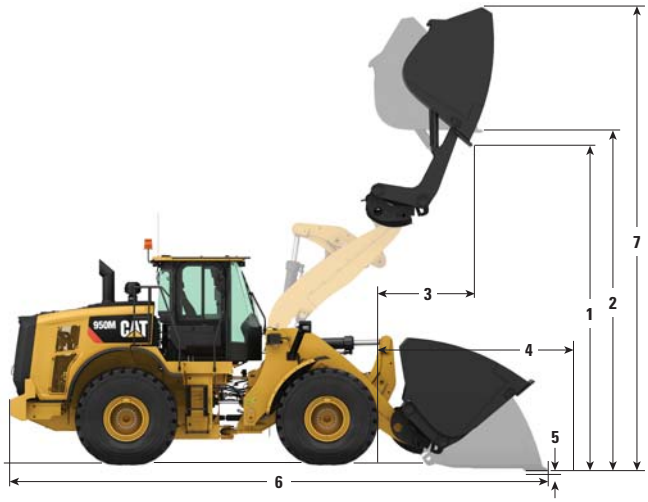
(With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

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

950M/962M Operating Specifications with High Dump Buckets



Machine		950M with Auxiliary Counterweight			962M Aggregate Handler		
Bucket Type		Pin-On	Fusion QC	Universal QC	Pin-On	Fusion QC	Universal QC
Edge Type		Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Bolt-On Cutting Edges
Capacity – Rated	m^3	7.60	7.60	7.60	9.20	9.20	9.20
Capacity – Rated at 110% Fill Factor	m^3	8.40	8.40	8.40	10.10	10.10	10.10
Width	mm	3350	3350	3350	3350	3350	3350
Nominal Material Density 100% Fill Factor	kg/m^3	650	610	610	560	530	530
1 Dump Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge	mm	4473	4528	4541	4487	4540	4553
2 Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to Level	mm	4969	5025	5038	5130	5183	5190
3 Reach at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge	mm	1899	1933	1940	2033	2070	2078
4 Reach at Level Lift Arm and Bucket Level	mm	3472	3537	3552	3770	3835	3850
5 Digging Depth	mm	59	59	59	57	57	58
6 Overall Length	mm	9111	9176	9191	9547	9612	9627
7 Overall Height with Bucket at Maximum Height and Maximum Rack	mm	6882	6937	6950	7196	7249	7261
Loader Clearance Circle with Bucket at Carry Position	mm	7171	7192	7197	7289	7313	7319
Static Tipping Load, Straight (With Tire Deflection)*	kg	11 463	10 811	10 913	12 092	11 438	11 537
Static Tipping Load, Straight (No Tire Deflection)*	kg	12 296	11 627	11 725	12 928	12 256	12 352
Static Tipping Load, Articulated (With Tire Deflection)*	kg	9633	9009	9117	10 084	9460	9566
Static Tipping Load, Articulated (No Tire Deflection)*	kg	10 478	9836	9941	10 940	10 299	10 401
Breakout Force	kN	108	104	103	106	102	101
Operating Weight*	kg	21 122	21 689	21 468	22 307	22 873	22 653

*Static tipping loads and operating weights are based on a machine configuration with Michelin 23.5R25 XHA2 L3 radial tires, full fluids, operator, auxiliary counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering and sound suppression.

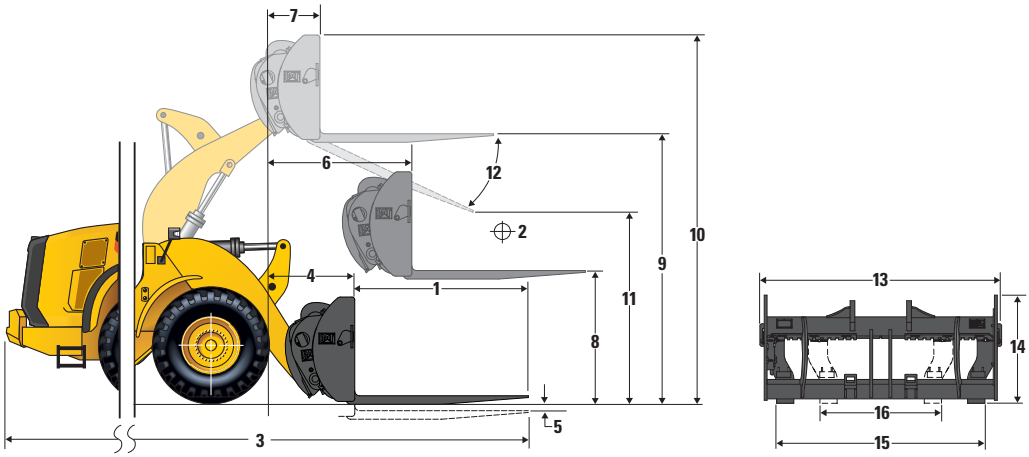
(With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

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

950M/962M Operating Specifications with Pallet Fork

All dimensions are approximate.



Machine		950M	962M
		Auxiliary Counterweight	Standard Counterweight
Interface		Fusion QC	Fusion QC
1 Tine Length	mm	1524	1524
2 Load Center	mm	762	762
3 Maximum Overall Length	mm	8949	9144
4 Reach with Forks at Ground Level	mm	1198	1317
5 Ground to Top of Tine at Minimum Height and Fork Level	mm	23	24
6 Reach with Arms Horizontal and Forks Level	mm	1738	1836
7 Reach with Fork at Maximum Height	mm	1023	957
8 Ground to Top of Tine with Arms Horizontal and Fork Level	mm	1889	1889
9 Ground to Top of Tine at Maximum Height and Fork Level	mm	3824	4041
10 Overall Height of Fork at Full Lift (top of carriage to ground)	mm	4865	5081
11 Clearance at Full Lift and Maximum Dump	mm	2284	2515
12 Maximum Discharge Angle from Horizontal	degrees	53	52
13 Overall Carriage Width	mm	2528	2528
14 Overall Carriage Height	mm	1130	1130
15 Outside Tine Width (maximum spread)	mm	2178	2178
16 Outside Tine Width (minimum spread)	mm	576	576
Tine Width (single tine)	mm	180.0	180.0
Tine Thickness	mm	90.0	90.0
Tine Capacity	kg	17 800	17 800
Static Tipping Load – Straight (Forks Level)*	kg	9955	10 165
Static Tipping Load – Articulated (Forks Level)*	kg	8558	8716
Rated Load (SAE J1197 – 50% FTSTL)**	kg	4279	4358
Rated Load (CEN EN 474-3 Rough Terrain – 60% FTSTL)**	kg	5135	5230
Rated Load (CEN EN 474-3 Firm and Level Ground – 80% FTSTL)**	kg	6846	6973
Operating Weight*	kg	19 777	20 221

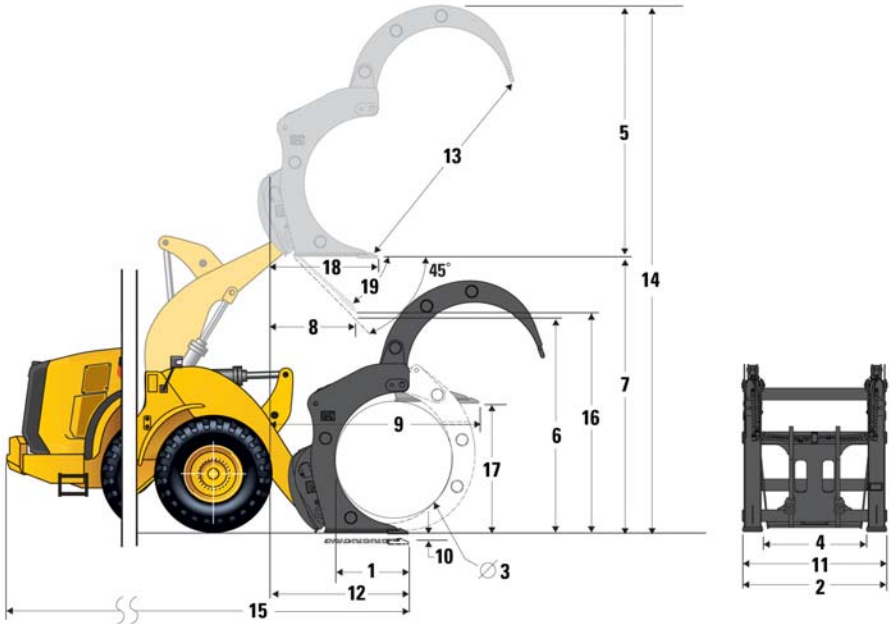
*Static tipping loads and operating weights are based on L3 Michelin XHA tires, air conditioning, ride control, power train guard, full fluids, fuel tank, coolant, lubricants, and operator.

**The rated operating load for a loader equipped with a pallet fork is determined by: SAE J1197: 50% of full turn static tipping load or hydraulic limit. CEN EN 474-3: 60% of full turn static tipping load on rough terrain or hydraulic limit. CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit. SAE – Society of Automotive Engineers. CEN – European Committee for Standardization

Refer to the Forks Product Bulletins for capacity load charts.

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

950M Operating Specifications with Logging Sorting Grapple

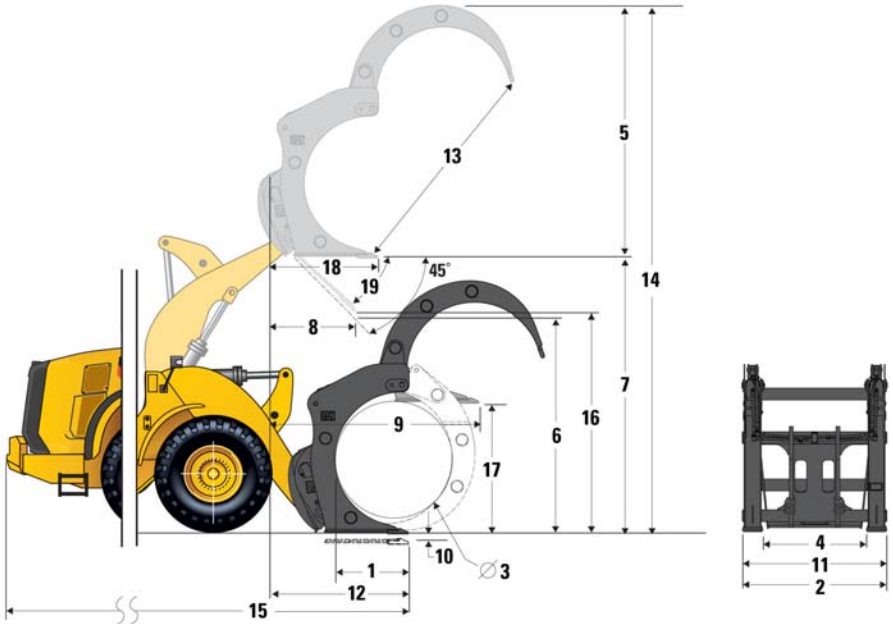


Machine			950M Logger		
Interface			Pin-On	Fusion QC	Universal QC
End Area			2.5 m²	2.5 m²	2.5 m²
1	Tine Length	mm	1230	1230	1230
2	Fork Width	mm	1837	1837	1837
3	Minimum Opening	mm	1382	1382	1382
4	Distance Inside of Tine Tips	mm	1284	1284	1284
5	Max Height of Fork (with Clamp Open if Applicable)	mm	3133	3132	3133
6	Clearance with Full Lift, 45° Dump (If Max Dump <> 45)	mm	2817	2818	2709
7	Clearance at Full Lift Fork Level	mm	3701	3702	3701
8	Reach with Full Lift, 45° Dump (If Max Dump <> 45)	mm	1304	1304	1412
9	Reach with Lift Arm Horizontal and Fork Level	mm	2695	2694	2848
10	Digging Depth	mm	–126	–125	–126
11	Width Over Tines	mm	1744	1744	1744
12	Reach at Ground Level	mm	2133	2132	2286
13	Max Opening Across Tine and Clamp	mm	2933	2933	2933
14	Overall Height of Fork at Full Lift and Clamp Open	mm	6834	6834	6834
15	Overall Length (Tip of Tine to Rear of Machine)	mm	8360	8359	8513
16	Clearance at Full Lift and Max Dump Discharge (If <> 45)	mm	2805	2693	2565
17	Clearance with Horizontal Lift Arms and Fork Level	mm	1740	1740.9	1740.9
18	Reach at Full Lift and Fork Level	mm	1957.3	1957.3	2110.8
19	Max Discharge Angle From Horizontal	degrees	46	57	57
	Rated Payload	kg	6500	6300	6000
	Static Tipping Load, Articulated Fork Level	kg	8207	7864	7501
	Static Tipping Load, Straight Fork Level	kg	9635	9292	8865
	Operating Weight	kg	20 054	20 568	20 435

Static tipping loads and operating weights are based on the following loader configuration: L3 Michelin XHA tires, air conditioning, ride control, power train guard, full fluids, fuel tank, coolant, lubricants, and operator. The rated operating load for a loader equipped with a logging fork is determined by: CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit. Refer to the Forks Product Bulletins for capacity load charts.

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

962M Operating Specifications with Logging Sorting Grapple



Machine			962M Logger					
Interface			Pin-On		Fusion QC		Universal QC	
End Area			2.5 m²	2.8 m²	2.5 m²	2.8 m²	2.5 m²	2.8 m²
1	Tine Length	mm	1230	1308	1230	1308	1230	1308
2	Fork Width	mm	1837	1909	1837	1909	1837	1909
3	Minimum Opening	mm	1382	1344	1382	1344	1382	1344
4	Distance Inside of Tine Tips	mm	1284	1376	1284	1376	1284	1376
5	Max Height of Fork (with Clamp Open if Applicable)	mm	3133	3488	3132	3487	3133	3488
6	Clearance with Full Lift, 45° Dump (If Max Dump <> 45)	mm	3008	2941	3009	2992	2900	2857
7	Clearance at Full Lift Fork Level	mm	3892	3892	3893	3941	3892	3896
8	Reach with Full Lift, 45° Dump (If Max Dump <> 45)	mm	1260	1327	1260	1345	1369	1416
9	Reach with Lift Arm Horizontal and Fork Level	mm	2792	2887	2792	2864	2946	3010
10	Digging Depth	mm	–125	–125	–124	–79	–125	–121
11	Width Over Tines	mm	1744	1816	1744	1816	1744	1816
12	Reach at Ground Level	mm	2252	2347	2251	2290	2406	2467
13	Max Opening Across Tine and Clamp	mm	2933	3257	2933	3257	2933	3257
14	Overall Height of Fork at Full Lift and Clamp Open	mm	7025	7380	7025	7428	7025	7384
15	Overall Length (Tip of Tine to Rear of Machine)	mm	8594	8689	8593	8593	8748	8809
16	Clearance at Full Lift and Max Dump Discharge (If <> 45)	mm	2998	2930	2885	2761	2757	2655
17	Clearance with Horizontal Lift Arms and Fork Level	mm	1740.9	1740.9	1740.9	1789	1740.4	1743.9
18	Reach at Full Lift and Fork Level	mm	1913.4	2008.4	1913.4	1985.2	2066.9	2131.1
19	Max Discharge Angle From Horizontal	degrees	46	46	57	70	57	62
	Rated Payload	kg	7260	7008	6980	6240	6673	6525
	Static Tipping Load, Articulated Fork Level	kg	9075	8761	8728	7802	8342	8156
	Static Tipping Load, Straight Fork Level	kg	10 700	10 377	10 352	9284	9896	9716
	Operating Weight	kg	21 067	21 331	21 581	21 286	21 448	21 684

Static tipping loads and operating weights are based on the following loader configuration: L3 Michelin XHA tires, air conditioning, ride control, power train guard, full fluids, fuel tank, coolant, lubricants, and operator. The rated operating load for a loader equipped with a logging fork is determined by: CEN EN 474-3: 80% of full turn static tipping load on firm and level ground or hydraulic limit. Refer to the Forks Product Bulletins for capacity load charts.

Additional forks 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:
  - 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 LED 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)
- Secondary steering

CAT CONNECT TECHNOLOGIES

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

POWER TRAIN

- Engine, Cat C7.1 ACERT meets Stage IV emission standards
- Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF) and 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
- Radiator, high debris with wide fin spacing

LINKAGE

- Linkage, optimized 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

Optional Equipment

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

OPERATOR ENVIRONMENT

- Door, remote opening system
- Cover, HVAC metallic
- EH controls, SAL 3rd function
  - Additional roller switch for 4th function
- EH controls, joystick lift and tilt
  - Additional integrated roller switches for 3rd and 4th functions
- Filter, carbon fresh air
- Mirrors, heated rearview external with integrated spot mirrors
- Precleaner, HVAC
- Precleaner, HVAC (RESPA)
- Radio, AM/FM/CD/USB/MP3 Bluetooth
- Radio, CB ready
- Seat, heated air suspension
- Seat belt, 4 point harness, with indicator
- Steering, EH joystick, speed sensing with force feedback
- Roof, metallic
- 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)
- Cat seat cover, removable

ELECTRICAL AND LIGHTING

- Four additional halogen cab mounted work lights or;
- Two additional auxiliary front HI LED and two additional auxiliary rear LED cab mounted work lights, two LED work lights in the radiator grill, LED front turn signals, replacement of the standard four halogen cab mounted work lights with four LED work lights, LED roading lights
- Warning amber strobe beacon
- Reversing strobes
- Speed limiter 20 km/h
- External seat belt indicator light

STARTERS, BATTERIES, AND ALTERNATORS

- Cold start – 240V

CAT CONNECT TECHNOLOGIES

- Link technologies: VIMS™
- Payload technologies:
  - Cat Production Measurement 2.0 (CPM)
  - Printer, Cat Production Measurement
  - Aggregate Autodig
- Advanced Productivity subscription
- Detect technologies:
  - Cat Rear Object Detection
- Machine Security System

POWER TRAIN

- Axles
  - Automatic front/rear differential locks
  - Axle oil cooler
  - Seal guards
- Fan, VPF (variable pitch fan), automatic and manual control
- Radiator, high debris with wider fin spacing

LINKAGE

- High lift
- Forestry
- Quick coupler ready

WORK TOOLS

- Performance Series buckets
- Fusion quick coupler, ISO coupler
- Forks, pallet
- Forks, logging

HYDRAULICS

- 3rd function with Ride Control
  - Standard linkage
  - High lift linkage
  - Forestry linkage
- 4th function with Ride Control
  - Standard linkage
  - High lift linkage
  - Forestry linkage

FLUIDS

- Premixed extended life coolant with freeze protection to –50° C
- Bio-degradable oil, Cat HYDO™

OTHER OPTIONAL EQUIPMENT

- Cat Autolube System
- 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

- Aggregate Handler (962M only; 950M offers an auxiliary counterweight but is not restricted as outlined for an aggregate handler)
- Industrial and Waste Handler
- Forestry

Notes

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

AEHQ7960
(EU)

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.