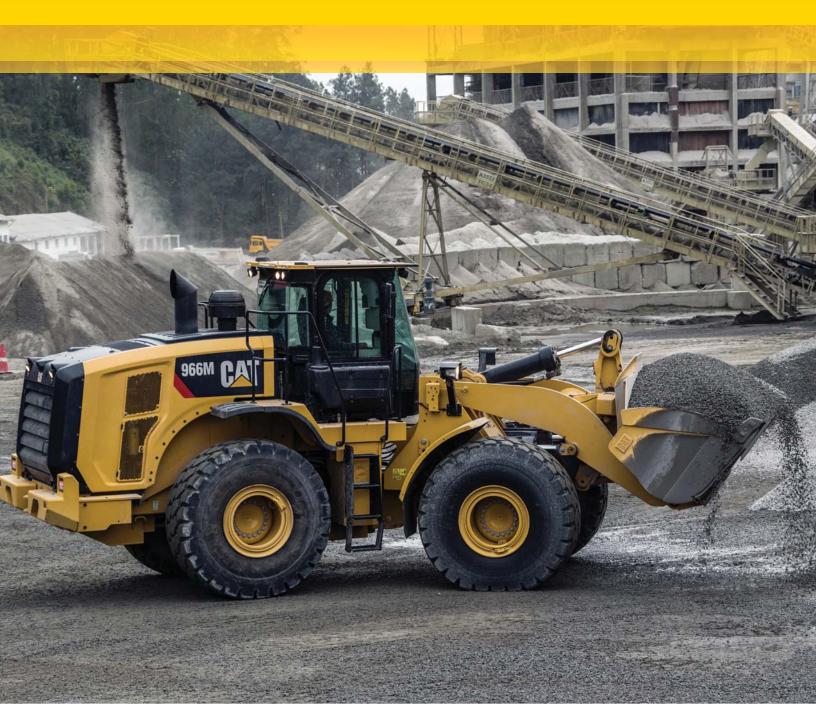
# **966M/972M** Wheel Loaders





| Engine                                   |           |        |  |
|--|-----------|--------|--|
| Engine Model                             | Cat® C9.3 | ACERT™ |  |
| U.S. EPA Tier 4 Final/EU Stage IV        |           |        |  |
| 966M – Maximum Gross Power – SAE J1995   | 232 kW    | 311 hp |  |
| 972M – Maximum Gross Power – SAE J1995   | 251 kW    | 337 hp |  |
| U.S. EPA Tier 3/EU Stage IIIA equivalent |           |        |  |
| 966M – Maximum Gross Power – SAE J1995   | 230 kW    | 308 hp |  |
| 972M – Maximum Gross Power – SAE J1995   | 246 kW    | 330 hp |  |
|  |           |        |  |

| Weights                 |                        |                           |
|-------------------------|------------------------|---------------------------|
| 966M Operating Weight*  | 23 220 kg              | 51,176 lb                 |
| 972M Operating Weight** | 24 897 kg              | 54,871 lb                 |
| Bucket Capacities       |                        |                           |
| 966M                    | 2.5-9.2 m <sup>3</sup> | 3.25-12.0 yd <sup>3</sup> |
| 972M                    | 2.9-9.9 m <sup>3</sup> | 3.75-13.0 yd <sup>3</sup> |
|                         |                        |                           |

\*For 4.2 m<sup>3</sup> (5.5 yd<sup>3</sup>) general purpose buckets with BOCE. \*\*For 4.8 m<sup>3</sup> (6.28 yd<sup>3</sup>) general purpose buckets with BOCE.

#### **RELIABLE, PRODUCTIVE AND FUEL EFFICIENT**

- 10% more fuel efficient than the industry leading K Series\*
- Up to 25% more fuel efficient than H Series\*
- **Performance Series buckets** are easy to load and improve material retention
- Cat Fusion<sup>™</sup> 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 Tier 3/Stage IIIA equivalent or Tier 4 Final/Stage IV emission standards and includes Cat Clean Emissions Module for continuous and efficient operation, if required
- 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**

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



\*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.

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The new 966M and 972M Wheel Loaders have a Tier 3/Stage IIIA equivalent or Tier 4 Final/Stage IV engine equipped with a combination of proven electronic, fuel, air and aftertreatment components, if required. Applying proven technologies systematically and strategically lets us meet our customer's high expectations for productivity and fuel efficiency. Deep system integration results in improved performance, improved fuel economy, and reduced emissions without interrupting machine performance making it seamless to operators. The reliability, durability, and versatility of both the 966M and 972M result in machines that are better built to meet your needs.



# **Reliable** Proven Components and Technology You Can Count On.

Every Tier 3/Stage IIIA equivalent or Tier 4 Final/Stage IV engine is equipped with a combination of proven electronic, fuel, air and aftertreatment components, if required.

### More Powerful, Reliable Engine Electronics

The electronics used in Cat Tier 3/Stage IIIA equivalent or Tier 4 Final/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 966M and 972M hydraulic systems have significant design changes and customer value improvements. The main hydraulic valve is now 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<sup>™</sup> and the online VisionLink<sup>®</sup> application enable you to monitor real-time machine data and manage machines health. Your Cat dealer offers expert advice and S·O·S<sup>™</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 Series articulating hitch system, joining the front and rear frames, provides increased 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  $\pm 13$  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:

- **Delivering Better Fuel Economy** with minimized maintenance costs while providing the same great power and response.
- 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.
- Durable Designs with long life to overhaul.

### **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 966M and 972M power trains have been improved with the addition of 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 planetary transmissions also have a new split-flow oil system which use new multi-viscosity oil to improve fuel economy.

### Axles

In addition to aggregates, sand and gravel and batch plants, these models are commonly used in heavy construction applications where poor underfoot conditions make traction difficult slowing production and challenging job deadlines. The new on-the-fly 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 C9.3 ACERT engine is designed for maximum fuel efficiency and increased power density, while meeting Tier 3/Stage IIIA equivalent or Tier 4 Final/ Stage IV emission standards. This engine features innovative Cat electronics, a fuel injection process, air-management systems; an aftertreatment solution with Cat Selective Catalytic Reduction, and a fuel efficient regeneration system, if required. For Tier 4 Final/Stage IV emissions solutions, the Tier 4 Final C9.3 is a fully passive engine without the Cat 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 new engine and emissions system, power train, hydraulic system and cooling system result in lower fuel consumption on average as compared to previous generation machines.

### **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.

### **Tier 4 Final/Stage IV Engines**

- 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 the 966M and 972M, the High-Pressure Common Rail Fuel Systems boost performance and reduce soot for the C9.3 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 Tier 4 Final/Stage IV emission standards, one new system, the Selective Catalytic Reduction (SCR), has been added to the already proven Cat Tier 4 Interim/Stage IIIB aftertreatment solution.

# Easy to Operate Safe. Comfortable. Efficient.



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.



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, 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 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 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.







# 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 provide precision control and dramatically decrease operator arm fatigue.

### **Implement Controls (EH)**

Seat mounted single axis implement control levers (joysticks, optional) 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 Guard Options to Meet Your Various Applications Needs.



### Standard Z-bar Linkage

The proven Z-bar linkage combines digging efficiency with excellent visibility to the tool resulting in excellent penetration into the pile, high breakout forces and superior production capabilities.

### **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.

### **Forestry Arrangement**

The 966M Forestry package includes a heavy duty linkage, a larger tilt cylinder and a heavier counterweight to safely handle the larger loads met in logging and millyard applications.

### **Steel Mill Arrangement**

The 972M Steel Mill package includes all the modifications required to allow the removal and handling of hot slag while providing additional protection for both machine and operator in these extreme 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 systembased 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.

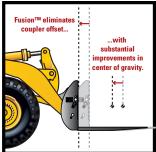
### **Increased Visibility**

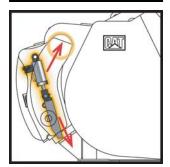
A new, open coupler frame design clears sight lines from the operator's seat, making it easier than ever before to engage and disengage attachments with certainty.

### **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 technologyequipped 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** – increase uptime and reduce operating costs.



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



PRODUCTIVITY

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

Featured Cat Connect technologies include:

### **Cat Connect 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** – 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** – 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 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.



# Save Time and Money by Working Smart.

Customer machine data shows Cat wheel loaders are the most fuel efficient machines in the industry with several features contributing to this excellent fuel efficiency:

- Deep system integration between engine, hydraulics, transmission and ride control results in reduced emissions, more productivity, and lower fuel consumption without interrupting machine performance.
- Manual/automatic differential locks increase traction and reduce tire scuffing lowering operating costs.
- **Productive economy mode** optimizes engine torque and speed further reducing fuel consumption.
- Adjustable automatic idle engine shutdown system significantly reduces idle time, overall operating hours and fuel consumption.
- External caliper disc parking brakes make maintenance easily accessible.

- Lock-up clutch torque converter and shift strategy increases driveline efficiency with reduced torque interruption conserving fuel. Auto 1-D transmission mode keeps engine speed 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 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 (1.0 in) 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 966M and 972M 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 Series product line. This new consistent layout makes it easier for service technicians who work on a variety of M Series models.







# **Sustainable** Conserving Resources.

The 966M and 972M 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.
- 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.

| Engine – 966M (Tier 3/Stage IIIA equivalent) |                |                     |
|--|----------------|---------------------|
| Engine Model                                 | Cat C9.3 ACERT |                     |
| Maximum Gross Power (1,800 rpm)              |                |                     |
| SAE J1995                                    | 230 kW         | 308 hp              |
| Maximum Net Power (1,700 rpm)                |                |                     |
| SAE J1349                                    | 207 kW         | 278 hp              |
| Peak Gross Torque (1,200 rpm)                |                |                     |
| SAE J1995                                    | 1600 N·m       | 1,180 lbf-ft        |
| Maximum Net Torque (1,000 rpm)               |                |                     |
| SAE J1349                                    | 1507 N·m       | 1,112 lbf-ft        |
| Bore   | 115 mm         | 4.53 in             |
| Stroke                                       | 149 mm         | 5.87 in             |
| Displacement                                 | 9.3 L          | 568 in <sup>3</sup> |

• Cat engine with ACERT Technology – meets Tier 3/Stage IIIA equivalent emission standards.

### Engine – 966M (Tier 4 Final/Stage IV)

| Engine Model                    | Cat C9.3 ACERT |                     |
|---------------------------------|----------------|---------------------|
| Maximum Gross Power (1,800 rpm) |                |                     |
| SAE J1995                       | 232 kW         | 311 hp              |
| Maximum Net Power (1,700 rpm)   |                |                     |
| SAE J1349                       | 206 kW         | 276 hp              |
| Peak Gross Torque (1,200 rpm)   |                |                     |
| SAE J1995                       | 1599 N·m       | 1,179 lbf-ft        |
| Maximum Net Torque (1,000 rpm)  |                |                     |
| SAE J1349                       | 1527 N·m       | 1,126 lbf-ft        |
| Bore                            | 115 mm         | 4.53 in             |
| Stroke                          | 149 mm         | 5.87 in             |
| Displacement                    | 9.3 L          | 568 in <sup>3</sup> |
|                                 |                |                     |

• Cat engine with ACERT Technology meets Tier 4 Final/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.

### Engine – 972M (Tier 3/Stage IIIA equivalent)

| •                               | -              |                     |
|---------------------------------|----------------|---------------------|
| Engine Model                    | Cat C9.3 ACERT |                     |
| Maximum Gross Power (1,800 rpm) |                |                     |
| SAE J1995                       | 246 kW         | 330 hp              |
| Maximum Net Power (1,700 rpm)   |                |                     |
| SAE J1349                       | 222 kW         | 298 hp              |
| Peak Gross Torque (1,200 rpm)   |                |                     |
| SAE J1995                       | 1728 N·m       | 1,275 lbf-ft        |
| Maximum Net Torque (1,000 rpm)  |                |                     |
| SAE J1349                       | 1632 N·m       | 1,204 lbf-ft        |
| Bore                            | 115 mm         | 4.53 in             |
| Stroke                          | 149 mm         | 5.87 in             |
| Displacement                    | 9.3 L          | 568 in <sup>3</sup> |
|                                 |                |                     |

• Cat engine with ACERT Technology – meets Tier 3/Stage IIIA equivalent emission standards.

### Engine – 972M (Tier 4 Final/Stage IV)

| Engine Model                    | Cat C9.3 ACERT |                     |
|---------------------------------|----------------|---------------------|
| Maximum Gross Power (1,800 rpm) |                |                     |
| SAE J1995                       | 251 kW         | 337 hp              |
| Maximum Net Power (1,700 rpm)   |                |                     |
| SAE J1349                       | 223 kW         | 299 hp              |
| Peak Gross Torque (1,200 rpm)   |                |                     |
| SAE J1995                       | 1728 N·m       | 1,275 lbf-ft        |
| Maximum Net Torque (1,100 rpm)  |                |                     |
| SAE J1349                       | 1654 N·m       | 1,220 lbf-ft        |
| Bore                            | 115 mm         | 4.53 in             |
| Stroke                          | 149 mm         | 5.87 in             |
| Displacement                    | 9.3 L          | 568 in <sup>3</sup> |
|                                 |                |                     |

• Cat engine with ACERT Technology meets Tier 4 Final/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.

| <b>Buckets</b> | - 966N |
|----------------|--------|
|----------------|--------|

Bucket Capacities

2.5-9.2 m<sup>3</sup> 3.25-12.0 yd<sup>3</sup>

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### Weight – 966M

Operating Weight

23 220 kg 51,176 lb

• Weight based on a machine configuration with Michelin 26.5R25 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 4.2 m<sup>3</sup> (5.5 yd<sup>3</sup>) general purpose bucket with BOCE.

### **Operating Specifications – 966M**

| Static Tipping Load – Full 37° Turn |           |            |
|-------------------------------------|-----------|------------|
| With Tire Deflection                | 14 668 kg | 32,329 lb  |
| No Tire Deflection                  | 15 822 kg | 34,873 lb  |
| Breakout Force                      | 173 kN    | 38,984 lbf |

• For a machine configuration as defined under "Weight."

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

### Transmission – 966M

| Forward 1 | 6.5 km/h  | 4.0 mph  |
|-----------|-----------|----------|
| Forward 2 | 13.0 km/h | 8.1 mph  |
| Forward 3 | 23.5 km/h | 14.6 mph |
| Forward 4 | 39.5 km/h | 24.5 mph |
| Reverse 1 | 7.1 km/h  | 4.4 mph  |
| Reverse 2 | 14.4 km/h | 8.9 mph  |
| Reverse 3 | 25.9 km/h | 16.1 mph |
| Reverse 4 | 39.5 km/h | 24.5 mph |

• Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm (32.5 in) roll radius.

### Buckets – 972M

Bucket Capacities

2.9-9.9 m<sup>3</sup>

3.75-13.0 yd3

Weight – 972M

Operating Weight 24 897 kg 54,871 lb

• Weight based on a machine configuration with Michelin 26.5R25 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 4.8 m<sup>3</sup> (6.28 yd<sup>3</sup>) general purpose bucket with BOCE.

### **Operating Specifications – 972M**

| Static Tipping Load – Full 37° Turn |           |            |
|-------------------------------------|-----------|------------|
| With Tire Deflection                | 16 164 kg | 35,626 lb  |
| No Tire Deflection                  | 17 421 kg | 38,396 lb  |
| Breakout Force                      | 196 kN    | 44.075 lbf |

• For a machine configuration as defined under "Weight."

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

### Transmission – 972M

| Forward 1 | 6.7 km/h  | 4.2 mph  |
|-----------|-----------|----------|
| Forward 2 | 13.1 km/h | 8.1 mph  |
| Forward 3 | 23.2 km/h | 14.4 mph |
| Forward 4 | 39.5 km/h | 24.5 mph |
| Reverse 1 | 7.6 km/h  | 4.7 mph  |
| Reverse 2 | 15.0 km/h | 9.3 mph  |
| Reverse 3 | 26.5 km/h | 16.5 mph |
| Reverse 4 | 39.5 km/h | 24.5 mph |

• Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm (32.5 in) roll radius.

| Brakes   | Brakes meet ISO 3450<br>standards |            |  |
|--|-----------------------------------|------------|--|
| Hydraulic System   |                                   |            |  |
| Implement Pump Type  | Variable Dis<br>Piston            | placement  |  |
| Implement System   |                                   |            |  |
| Maximum Pump Output (2,200 rpm)  | 360 L/min                         | 95 gal/min |  |
| Maximum Operating Pressure   | 31 000 kPa                        | 4,496 psi  |  |
| Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function<br>Maximum Flow     | 240 L/min                         | 63 gal/min |  |
| Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function<br>Maximum Pressure | 21 780 kPa                        | 3,159 psi  |  |
| Hydraulic Cycle Time<br>with Rated Payload                             | 966M                              | 972M       |  |
| Raise from Carry Position  | 6.1 Sec.                          | 6.1 Sec.   |  |
| Dump, at Maximum Raise   | 1.4 Sec.                          | 1.5 Sec.   |  |
| Lower, Empty, Float Down   | 2.6 Sec.                          | 3.1 Sec.   |  |
| Total  | 10.1 Sec.                         | 10.7 Sec.  |  |
| Axles  |                                   |            |  |
| Front  | Fixed                             |            |  |
| Rear   | Oscillating ±                     | 13 degrees |  |
| Maximum Single-Wheel Rise and Fall                                     | 502 mm                            | 19.5 in    |  |
| Cab  |                                   |            |  |

ROPS/FOPS

Drokoo

ROPS/FOPS meet ISO 3471 and ISO 3449 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.

### With Cooling Fan Speed at Maximum Value:

| Operator Sound Pressure Level (ISO 6396:2008) | 70 dB(A)  |
|---|-----------|
| Exterior Sound Power Level (ISO 6395:2008)    | 109 dB(A) |
| Exterior Sound Pressure Level (SAE J88:2013)  | 76 dB(A)* |

\*Distance of 15 m (49.2 ft), moving forward in second gear ratio.

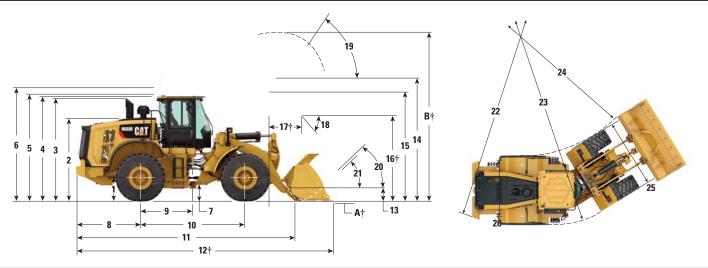
### **Service Refill Capacities**

| Fuel Tank                              | 313 L  | 82.7 gal |
|--|--------|----------|
| DEF Tank*                              | 16.8 L | 4.4 gal  |
| Cooling System                         | 71.6 L | 18.9 gal |
| Crankcase                              | 24.5 L | 6.5 gal  |
| Transmission                           | 58.5 L | 15.5 gal |
| Differentials and Final Drives – Front | 57 L   | 15.1 gal |
| Differentials and Final Drives – Rear  | 57 L   | 15.1 gal |
| Hydraulic Tank                         | 125 L  | 33 gal   |

\*Must meet the requirements outlined in ISO 22241-1 for Tier 4 Final/Stage IV models.

### 966M Dimensions

All dimensions are approximate.



|    |  | Standa    | rd Lift | High      | Lift   |
|----|--|-----------|---------|-----------|--------|
| 1  | Height to Axle Centerline                          | 799 mm    | 2'7"    | 799 mm    | 2'7"   |
| 2  | Height to Top of Hood                              | 2818 mm   | 9'3"    | 2818 mm   | 9'3"   |
| 3  | Height to Top of Exhaust Pipe                      | 3522 mm   | 11'7"   | 3522 mm   | 11'7"  |
| 4  | Height to Top of ROPS                              | 3587 mm   | 11'9"   | 3587 mm   | 11'9"  |
| 5  | Height to Top of Product Link Antenna              | 3636 mm   | 11'11"  | 3636 mm   | 11'11" |
| 6  | Height to Top of Warning Beacon                    | 3859 mm   | 12'8"   | 3859 mm   | 12'8"  |
| 7  | Ground Clearance                                   | 434 mm    | 1'5"    | 434 mm    | 1'5"   |
| 8  | Center Line of Rear Axle to Edge of Counterweight  | 2180 mm   | 7'2"    | 2500 mm   | 8'2"   |
| 9  | Center Line of Rear Axle to Hitch                  | 1775 mm   | 5'10"   | 1775 mm   | 5'10"  |
| 10 | Wheelbase  | 3550 mm   | 11'8"   | 3550 mm   | 11'8"  |
| 11 | Overall Length (without bucket)                    | 7289 mm   | 23'11"  | 8109 mm   | 26'8"  |
| 12 | Shipping Length (with bucket level on ground)*†    | 8750 mm   | 28'9"   | 9570 mm   | 31'5"  |
| 13 | Hinge Pin Height at Carry Height                   | 630 mm    | 2'1"    | 778 mm    | 2'7"   |
| 14 | Hinge Pin Height at Maximum Lift                   | 4235 mm   | 13'11"  | 4793 mm   | 15'9"  |
| 15 | Lift Arm Clearance at Maximum Lift                 | 3643 mm   | 11'11"  | 4140 mm   | 13'6"  |
| 16 | Dump Clearance at Maximum Lift and 45° Discharge*† | 2991 mm   | 9'9"    | 3549 mm   | 11'7"  |
| 17 | Reach at Maximum Lift and 45° Discharge*†          | 1353 mm   | 4'5"    | 1328 mm   | 4'4"   |
| 18 | Dump Angle at Maximum Lift and Dump (on stops)*    | 49 deg    | grees   | 48 deg    | rees   |
| 19 | Rack Back at Maximum Lift*                         | 62 deg    | rees    | 71 deg    | rees   |
| 20 | Rack Back at Carry Height*                         | 50 deg    | rees    | 49 deg    | rees   |
| 21 | Rack Back at Ground*                               | 42 deg    | grees   | 39 deg    | rees   |
| 22 | Clearance Circle (diameter) to Counterweight       | 13 608 mm | 44'8"   | 13 608 mm | 44'8"  |
| 23 | Clearance Circle (diameter) to Outside of Tires    | 13 522 mm | 44'5"   | 13 522 mm | 44'5"  |
| 24 | Clearance Circle (diameter) to Inside of Tires     | 7706 mm   | 25'4"   | 7706 mm   | 25'4"  |
| 25 | Width over Tires (unloaded)                        | 2991 mm   | 9'10"   | 2991 mm   | 9'10"  |
| 26 | Tread Width  | 2230 mm   | 7'4''   | 2230 mm   | 7'4''  |
|    |  |           |         |           |        |

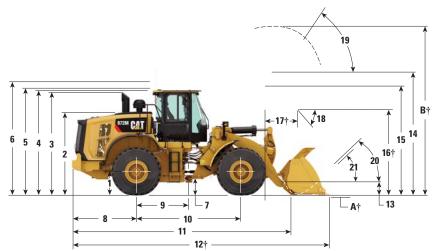
\*With 4.2 m<sup>3</sup> (5.5 yd<sup>3</sup>) general purpose pin on bucket with BOCE (see Operating Specifications for other buckets).

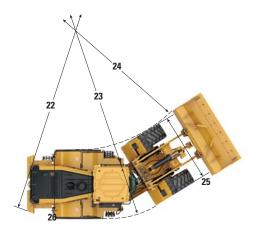
†Dimensions are listed in Operating Specification charts.

All height and tire related dimensions are with Michelin 26.5R25 XHA2 L3 tires (see Tire Option Chart for other tires).

### 972M Dimensions

All dimensions are approximate.





|    |  | Standa    | rd Lift | High      | Lift   | Extended ( | Capacity |
|----|--|-----------|---------|-----------|--------|------------|----------|
| 1  | Height to Axle Centerline                          | 799 mm    | 2'7"    | 2818 mm   | 9'3"   | 799 mm     | 2'7"     |
| 2  | Height to Top of Hood                              | 2818 mm   | 9'3"    | 2818 mm   | 9'3"   | 2818 mm    | 9'3"     |
| 3  | Height to Top of Exhaust Pipe                      | 3522 mm   | 11'7"   | 3522 mm   | 11'7"  | 3522 mm    | 11'7"    |
| 4  | Height to Top of ROPS                              | 3587 mm   | 11'9"   | 3587 mm   | 11'9"  | 3587 mm    | 11'9"    |
| 5  | Height to Top of Product Link Antenna              | 3636 mm   | 11'11"  | 3636 mm   | 11'11" | 3636 mm    | 11'11"   |
| 6  | Height to Top of Warning Beacon                    | 3859 mm   | 12'8"   | 3859 mm   | 12'8"  | 3859 mm    | 12'8"    |
| 7  | Ground Clearance                                   | 434 mm    | 1'5"    | 434 mm    | 1'5"   | 434 mm     | 1'5"     |
| 8  | Center Line of Rear Axle to Edge of Counterweight  | 2500 mm   | 8'2"    | 2500 mm   | 8'2"   | 2500 mm    | 8'2"     |
| 9  | Center Line of Rear Axle to Hitch                  | 1775 mm   | 5'10"   | 1775 mm   | 5'10"  | 1775 mm    | 5'10"    |
| 10 | Wheelbase  | 3550 mm   | 11'8"   | 3550 mm   | 11'8"  | 3550 mm    | 11'8"    |
| 11 | Overall Length (without bucket)                    | 7774 mm   | 25'7"   | 8109 mm   | 26'8"  | 7609 mm    | 25'0"    |
| 12 | Shipping Length (with bucket level on ground)*†    | 9315 mm   | 30'7"   | 9650 mm   | 31'8"  | 9164 mm    | 30'1"    |
| 13 | Hinge Pin Height at Carry Height                   | 680 mm    | 2'3"    | 778 mm    | 2'7"   | 631 mm     | 2'1"     |
| 14 | Hinge Pin Height at Maximum Lift                   | 4458 mm   | 14'8"   | 4793 mm   | 15'9"  | 4235 mm    | 13'11"   |
| 15 | Lift Arm Clearance at Maximum Lift                 | 3843 mm   | 12'7"   | 4140 mm   | 13'6"  | 3643 mm    | 11'11"   |
| 16 | Dump Clearance at Maximum Lift and 45° Discharge*† | 3154 mm   | 10'4"   | 3490 mm   | 11'5"  | 2920 mm    | 9'6"     |
| 17 | Reach at Maximum Lift and 45° Discharge*†          | 1357 mm   | 4'5"    | 1380 mm   | 4'6"   | 1413 mm    | 4'7"     |
| 18 | Dump Angle at Maximum Lift and Dump (on stops)*    | 48 deg    | grees   | 48 deg    | grees  | 48 deg     | rees     |
| 19 | Rack Back at Maximum Lift*                         | 56 deg    | grees   | 71 deg    | grees  | 62 deg     | rees     |
| 20 | Rack Back at Carry Height*                         | 50 deg    | grees   | 49 deg    | grees  | 50 deg     | rees     |
| 21 | Rack Back at Ground*                               | 41 deg    | grees   | 39 deg    | grees  | 42 deg     | rees     |
| 22 | Clearance Circle (diameter) to Counterweight       | 13 608 mm | 44'8"   | 13 608 mm | 44'8"  | 13 608 mm  | 44'8"    |
| 23 | Clearance Circle (diameter) to Outside of Tires    | 13 522 mm | 44'5"   | 13 522 mm | 44'5"  | 13 522 mm  | 44'5"    |
| 24 | Clearance Circle (diameter) to Inside of Tires     | 7706 mm   | 25'4"   | 7706 mm   | 25'4"  | 7706 mm    | 25'4"    |
| 25 | Width over Tires (unloaded)                        | 2991 mm   | 9'10"   | 2991 mm   | 9'10"  | 2991 mm    | 9'10"    |
| 26 | Tread Width  | 2230 mm   | 7'4''   | 2230 mm   | 7'4''  | 2230 mm    | 7'4''    |

\*Standard and High Lift are with 4.8 m<sup>3</sup> (6.3 yd<sup>3</sup>) general purpose pin on bucket with BOCE (see Operating Specifications for other buckets). Extended Capacity is with a 4.9 m<sup>3</sup> (6.4 yd<sup>3</sup>) 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 Michelin 26.5R25 XHA2 L3 tires (see Tire Option Chart for other tires).

### **Dimension Changes – Tires**

| Tire Brand  | Michelin | Michelin | Michelin | Bridgestone | Bridgestone | Bridgestone |
|---|----------|----------|----------|-------------|-------------|-------------|
| Tire Size   | 26.5R25  | 26.5R25  | 26.5R25  | 26.5R25     | 26.5R25     | 775/65R29   |
| Tread Type  | L-4      | L-5      | L-5      | L-3         | L-5         | L-3         |
| Tread Pattern   | XLDD1    | XLDD2    | XMINED2  | VJT         | VSDL        | VTS         |
| Width over Tires – Maximum (empty)*                     | 2987 mm  | 2986 mm  | 2970 mm  | 2982 mm     | 2874 mm     | 3080 mm     |
|   | 9'10"    | 9'10"    | 9'9"     | 9'9"        | 9'5"        | 10'1"       |
| Width over Tires – Maximum (loaded)*                    | 3019 mm  | 3011 mm  | 2994 mm  | 3016 mm     | 2900 mm     | 3101 mm     |
|   | 9'11"    | 9'11"    | 9'10"    | 9'11"       | 9'6"        | 10'2"       |
| Change in Vertical Dimensions                           | 44 mm    | 39 mm    | 53 mm    | 15 mm       | 50 mm       | 17 mm       |
| (average of front and rear)                             | 1.7"     | 1.5"     | 2.1"     | 0.6"        | 2"          | 0.7"        |
| Change in Horizontal Reach                              | -36 mm   | -34 mm   | -32 mm   | -3 mm       | -29 mm      | -5 mm       |
|   | -1.4"    | -1.3"    | -1.3"    | -0.1"       | -1.1"       | -0.2"       |
| Change in Clearance Circle (radius) to Outside of Tires | 5 mm     | 1 mm     | -7 mm    | 3 mm        | -54 mm      | 46 mm       |
|   | 0.2"     | 0"       | -0.3"    | 0.1"        | -2.1"       | 1.8"        |
| Change in Clearance Circle (radius) to Inside of Tires  | -5 mm    | -1 mm    | 7 mm     | -3 mm       | 54 mm       | -46 mm      |
|   | -0.2"    | 0"       | 0.3"     | -0.1"       | 2.1"        | -1.8"       |
| Change in Operating Weight (without Ballast)            | 420 kg   | 716 kg   | 1068 kg  | 164 kg      | 1136 kg     | 856 kg      |
|   | 926 lb   | 1,578 lb | 2,354 lb | 361 lb      | 2,504 lb    | 1,886 lb    |

\*Width over bulge and includes tire growth.

### **Changes Specific to the 966M**

| Tire Brand                                  | Michelin | Michelin | Michelin | Bridgestone | Bridgestone | Bridgestone |
|---|----------|----------|----------|-------------|-------------|-------------|
| Tire Size                                   |          | 26.5R25  | 26.5R25  | 26.5R25     | 26.5R25     | 775/65R29   |
| Tread Type                                  | L-4      | L-5      | L-5      | L-3         | L-5         | L-3         |
| Tread Pattern                               | XLDD1    | XLDD2    | XMINED2  | VJT         | VSDL        | VTS         |
| Change in Static Tipping Load – Straight    | 303 kg   | 517 kg   | 771 kg   | 118 kg      | 821 kg      | 618 kg      |
|   | 669 lb   | 1,140 lb | 1,700 lb | 261 lb      | 1,809 lb    | 1,362 lb    |
| Change in Static Tipping Load – Articulated | 271 kg   | 461 kg   | 688 kg   | 106 kg      | 732 kg      | 551 kg      |
|   | 596 lb   | 1,017 lb | 1,516 lb | 233 lb      | 1,613 lb    | 1,215 lb    |

### Changes Specific to the 972M

| Tire Brand                                  | Michelin | Michelin | Michelin | Bridgestone | Bridgestone | Bridgestone |
|---|----------|----------|----------|-------------|-------------|-------------|
| Tire Size                                   | 26.5R25  | 26.5R25  | 26.5R25  | 26.5R25     | 26.5R25     | 775/65R29   |
| Tread Type                                  |          | L-5      | L-5      | L-3         | L-5         | L-3         |
| Tread Pattern                               | XLDD1    | XLDD2    | XMINED2  | VJT         | VSDL        | VTS         |
| Change in Static Tipping Load – Straight    | 283 kg   | 482 kg   | 719 kg   | 110 kg      | 764 kg      | 576 kg      |
|   | 623 lb   | 1,062 lb | 1,584 lb | 243 lb      | 1,685 lb    | 1,269 lb    |
| Change in Static Tipping Load – Articulated | 252 kg   | 429 kg   | 640 kg   | 98 kg       | 680 kg      | 513 kg      |
|   | 555 lb   | 946 lb   | 1,411 lb | 216 lb      | 1,499 lb    | 1,131 lb    |

### 966M 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> (2,528-2,865 lb/yd <sup>3</sup> ) | 115              |
| Sand and Gravel |                             | 1500-1700 kg/m <sup>3</sup> (2,528-2,865 lb/yd <sup>3</sup> ) | 115              |
| Aggregate:      | 25-76 mm (1 to 3 in)        | 1600-1700 kg/m <sup>3</sup> (2,696-2,865 lb/yd <sup>3</sup> ) | 110              |
|                 | 19 mm (0.75 in) and smaller | 1800 kg/m <sup>3</sup> (3,033 lb/yd <sup>3</sup> )            | 105              |
| Rock:           | 76 mm (3 in) and larger     | 1600 kg/m <sup>3</sup> (2,696 lb/yd <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.

|                           | Ma        | terial Density                       | kg/m³              | 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500                       |
|---------------------------|-----------|--------------------------------------|--------------------|---|
|                           |           |                                      | 3.80 m³ (5.00 yd³) | 4.37 m <sup>3</sup> (5.72 yd <sup>3</sup> )   |
|                           | Pin On    | General<br>Purpose                   | 4.00 m³ (5.25 yd³) | 4.60 m <sup>3</sup> (6.02 yd <sup>3</sup> ) 4.00 m <sup>3</sup> (5.25 yd <sup>3</sup> )                           |
| linkane                   | 5         |                                      | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> ) 4.20 m <sup>3</sup> (5.50 yd <sup>3</sup> )                           |
| Standard Linkane          | n OC      | General                              | 3.80 m³ (5.00 yd³) | 4.37 m <sup>3</sup> (5.72 yd <sup>3</sup> ) 3.80 m <sup>3</sup> (5.00 yd <sup>3</sup> )                           |
|                           | Fusion QC | Purpose                              | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> )   |
|                           | Pin On    | Material<br>Handling                 | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> )   |
|                           |           |                                      | 3.80 m³ (5.00 yd³) | 4.37 m <sup>3</sup> (5.72 yd <sup>3</sup> ) 3.80 m <sup>3</sup> (5.00 yd <sup>3</sup> )                           |
|                           | Pin On    | General<br>Purpose                   | 4.00 m³ (5.25 yd³) | 4.60 m <sup>3</sup> (6.02 yd <sup>3</sup> ) 4.00 m <sup>3</sup> (5.25 yd <sup>3</sup> )                           |
| Hinh I ift I inkane       | 5         |                                      | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> )   |
| Hinh Lift                 | Fusion QC | General                              | 3.80 m³ (5.00 yd³) | 4.37 m <sup>3</sup> (5.72 yd <sup>3</sup> )   |
|                           | Fusio     | Purpose                              | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> )   |
|                           | Pin On    | Material<br>Handling                 | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> )   |
|                           |           |                                      | 3.80 m³ (5.00 yd³) | 4.37 m <sup>3</sup> (5.72 yd <sup>3</sup> )   |
| kane                      | Pin On    | General<br>Purpose                   | 4.00 m³ (5.25 yd³) | 4.60 m <sup>3</sup> (6.02 yd <sup>3</sup> ) 4.00 m <sup>3</sup> (5.25 yd <sup>3</sup> )                           |
| ndler Pac                 |           |                                      | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> ) 4.20 m <sup>3</sup> (5.50 yd <sup>3</sup> )                           |
| Annrenate Handler Packane | , 00      | General                              | 3.80 m³ (5.00 yd³) | 4.37 m <sup>3</sup> (5.72 yd <sup>3</sup> )   |
| Annr                      | Fusion OC | Purpose                              | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> ) 4.20 m <sup>3</sup> (5.50 yd <sup>3</sup> )                           |
|                           | Pin On    | Material<br>Handling                 | 4.20 m³ (5.50 yd³) | 4.83 m <sup>3</sup> (6.32 yd <sup>3</sup> )   |
|                           | Ma        | terial Density                       | lb/yd³             | 1,180 1,348 1,517 1,685 1,854 2,022 2,191 2,359 2,528 2,696 2,865 3,033 3,202 3,370 3,539 3,707 3,876 4,044 4,213 |
| 11                        |           | ket Fill Factors<br>0% 105% 100% 95% |                    |   |

Note: All buckets are showing Bolt-On Edges.

| Linkage  | St              | andard Linka                | ge                    | St          | ge                          |                       |        |                                  |
|--|-----------------|-----------------------------|-----------------------|-------------|-----------------------------|-----------------------|--------|----------------------------------|
| Bucket Type  |                 |                             | G                     | eneral Purj | ose – Pin (                 |                       |        |                                  |
| Edge Type  |                 | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips        | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | High Lift<br>Linkage<br>Change** |
| Capacity – Rated   | m <sup>3</sup>  | 3.80                        | 3.80                  | 3.60        | 4.00                        | 4.00                  | 3.80   |                                  |
|  | yd <sup>3</sup> | 5.00                        | 5.00                  | 4.75        | 5.25                        | 5.25                  | 5.00   | _                                |
| Capacity – Rated at 110% Fill Factor                             | m <sup>3</sup>  | 4.18                        | 4.18                  | 3.96        | 4.40                        | 4.40                  | 4.18   | _                                |
|  | yd <sup>3</sup> | 5.47                        | 5.47                  | 5.18        | 5.75                        | 5.75                  | 5.47   |                                  |
| Width  | mm              | 3220                        | 3271                  | 3271        | 3220                        | 3271                  | 3271   | _                                |
|  | ft/in           | 10'6"                       | 10'8"                 | 10'8"       | 10'6"                       | 10'8"                 | 10'8"  | _                                |
| 16† Dump Clearance at Maximum Lift                               | mm              | 3067                        | 2915                  | 2915        | 3058                        | 2905                  | 2905   | 558                              |
| and 45° Discharge  | ft/in           | 10'0"                       | 9'6"                  | 9'6"        | 10'0"                       | 9'6"                  | 9'6"   | 1'10"                            |
| <b>17</b> † Reach at Maximum Lift and 45° Discharge              | mm              | 1292                        | 1432                  | 1432        | 1299                        | 1438                  | 1438   | -24                              |
|  | ft/in           | 4'2"                        | 4'8"                  | 4'8"        | 4'3"                        | 4'8"                  | 4'8"   | -0.9"                            |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 2704                        | 2908                  | 2908        | 2715                        | 2920                  | 2920   | 405                              |
|  | ft/in           | 8'10"                       | 9'6"                  | 9'6"        | 8'10"                       | 9'6"                  | 9'6"   | 1'4"                             |
| A† Digging Depth   | mm              | 124                         | 124                   | 94          | 124                         | 124                   | 94     | -25                              |
|  | in              | 4.9"                        | 4.9"                  | 3.7"        | 4.9"                        | 4.9"                  | 3.7"   | -1"                              |
| 12† Shipping Length (with Bucket)                                | mm              | 8651                        | 8876                  | 8876        | 8663                        | 8888                  | 8888   | 820                              |
|  | ft/in           | 28'5"                       | 29'2"                 | 29'2"       | 28'6"                       | 29'2"                 | 29'2"  | 2'8"                             |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 5788                        | 5788                  | 5788        | 5902                        | 5902                  | 5902   | 558                              |
|  | ft/in           | 19'0"                       | 19'0"                 | 19'0"       | 19'5"                       | 19'5"                 | 19'5"  | 1'10"                            |
| Loader Clearance Circle with Bucket                              | mm              | 14 973                      | 15 142                | 15 142      | 14 979                      | 15 148                | 15 148 | 479                              |
| at Carry Position  | ft/in           | 49'2"                       | 49'9"                 | 49'9"       | 49'2"                       | 49'9"                 | 49'9"  | 1'7"                             |
| Static Tipping Load, Straight                                    | kg              | 16 874                      | 16 693                | 16 891      | 16 856                      | 16 674                | 16 908 | 22                               |
| (With Tire Deflection)*  | lb              | 37,192                      | 36,791                | 37,229      | 37,152                      | 36,750                | 37,266 | 48                               |
| Static Tipping Load, Straight                                    | kg              | 18 045                      | 17 860                | 18 048      | 18 037                      | 17 851                | 18 088 | -75                              |
| (No Tire Deflection)*  | lb              | 39,772                      | 39,364                | 39,777      | 39,754                      | 39,344                | 39,867 | -165                             |
| Static Tipping Load, Articulated                                 | kg              | 14 876                      | 14 693                | 14 883      | 14 855                      | 14 671                | 14 890 | -163                             |
| (With Tire Deflection)*  | lb              | 32,788                      | 32,384                | 32,804      | 32,741                      | 32,335                | 32,818 | -359                             |
| Static Tipping Load, Articulated                                 | kg              | 16 029                      | 15 844                | 16 023      | 16 017                      | 15 831                | 16 052 | -225                             |
| (No Tire Deflection)*  | lb              | 35,329                      | 34,921                | 35,315      | 35,303                      | 34,893                | 35,379 | -496                             |
| Breakout Force   | kN              | 187                         | 185                   | 199         | 185                         | 183                   | 197    | -17                              |
|  | lbf             | 42,151                      | 41,781                | 44,901      | 41,695                      | 41,326                | 44,390 | -37                              |
| Operating Weight*  | kg              | 23 112                      | 23 250                | 23 087      | 23 164                      | 23 302                | 23 139 | 1612                             |
|  | lb              | 50,938                      | 51,242                | 50,883      | 51,053                      | 51,357                | 50,997 | 3,553                            |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

\*\*Maximum values.

(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.

| Linkage  |                 |                             | andard Linka          | ige    | St                          | andard Linka          | ge     |                                  |
|--|-----------------|-----------------------------|-----------------------|--------|-----------------------------|-----------------------|--------|----------------------------------|
| Bucket Type  |                 | Gener                       | al Purpose –          | Pin On | General Purpose – Fusion QC |                       |        |                                  |
| Edge Type  |                 | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | High Lift<br>Linkage<br>Change** |
| Capacity – Rated   | m <sup>3</sup>  | 4.20                        | 4.20                  | 4.00   | 3.80                        | 3.80                  | 3.60   |                                  |
|  | yd <sup>3</sup> | 5.50                        | 5.50                  | 5.25   | 5.00                        | 5.00                  | 4.75   |                                  |
| Capacity – Rated at 110% Fill Factor                             | m <sup>3</sup>  | 4.62                        | 4.62                  | 4.40   | 4.18                        | 4.18                  | 3.96   |                                  |
|  | yd <sup>3</sup> | 6.04                        | 6.04                  | 5.75   | 5.47                        | 5.47                  | 5.18   |                                  |
| Width  | mm              | 3220                        | 3271                  | 3271   | 3220                        | 3271                  | 3271   |                                  |
|  | ft/in           | 10'6"                       | 10'8"                 | 10'8"  | 10'6"                       | 10'8"                 | 10'8"  | _                                |
| <b>16</b> <sup>†</sup> Dump Clearance at Maximum Lift            | mm              | 2991                        | 2837                  | 2837   | 3038                        | 2886                  | 2886   | 558                              |
| and 45° Discharge  | ft/in           | 9'9"                        | 9'3"                  | 9'3"   | 9'11"                       | 9'5"                  | 9'5"   | 1'10"                            |
| <b>17</b> <sup>†</sup> Reach at Maximum Lift and 45° Discharge   | mm              | 1353                        | 1490                  | 1490   | 1327                        | 1466                  | 1466   | -25                              |
|  | ft/in           | 4'5"                        | 4'10"                 | 4'10"  | 4'4"                        | 4'9"                  | 4'9"   | -1"                              |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 2803                        | 3008                  | 3008   | 2748                        | 2953                  | 2953   | 404                              |
|  | ft/in           | 9'2"                        | 9'10"                 | 9'10"  | 9'0"                        | 9'8"                  | 9'8"   | 1'4"                             |
| A† Digging Depth   | mm              | 124                         | 124                   | 94     | 124                         | 124                   | 94     | -25                              |
|  | in              | 4.9"                        | 4.9"                  | 3.7"   | 4.9"                        | 4.9"                  | 3.7"   | -1"                              |
| 12† Shipping Length (with Bucket)                                | mm              | 8750                        | 8975                  | 8975   | 8696                        | 8921                  | 8921   | 820                              |
|  | ft/in           | 28'9"                       | 29'6"                 | 29'6"  | 28'7"                       | 29'4"                 | 29'4"  | 2'8"                             |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 5902                        | 5902                  | 5902   | 5803                        | 5803                  | 5803   | 558                              |
|  | ft/in           | 19'5"                       | 19'5"                 | 19'5"  | 19'1"                       | 19'1"                 | 19'1"  | 1'10"                            |
| Loader Clearance Circle with Bucket                              | mm              | 15 022                      | 15 193                | 15 193 | 14 988                      | 15 160                | 15 160 | 487                              |
| at Carry Position  | ft/in           | 49'4"                       | 49'11"                | 49'11" | 49'3"                       | 49'9"                 | 49'9"  | 1'7"                             |
| Static Tipping Load, Straight                                    | kg              | 16 656                      | 16 473                | 16 714 | 16 299                      | 16 118                | 16 461 | 51                               |
| (With Tire Deflection)*  | 1b              | 36,711                      | 36,307                | 36,839 | 35,923                      | 35,524                | 36,281 | 112                              |
| Static Tipping Load, Straight                                    | kg              | 17 828                      | 17 641                | 17 886 | 17 442                      | 17 258                | 17 617 | -44                              |
| (No Tire Deflection)*  | 1b              | 39,293                      | 38,881                | 39,421 | 38,444                      | 38,038                | 38,828 | -97                              |
| Static Tipping Load, Articulated                                 | kg              | 14 668                      | 14 483                | 14 709 | 14 323                      | 14 140                | 14 470 | -137                             |
| (With Tire Deflection)*  | lb              | 32,329                      | 31,921                | 32,420 | 31,568                      | 31,166                | 31,892 | -302                             |
| Static Tipping Load, Articulated                                 | kg              | 15 822                      | 15 636                | 15 864 | 15 453                      | 15 269                | 15 611 | -196                             |
| (No Tire Deflection)*  | lb              | 34,873                      | 34,461                | 34,964 | 34,059                      | 33,653                | 34,408 | -432                             |
| Breakout Force   | kN              | 173                         | 171                   | 184    | 180                         | 179                   | 192    | -16                              |
|  | lbf             | 38,984                      | 38,618                | 41,343 | 40,632                      | 40,264                | 43,192 | -35                              |
| Operating Weight*  | kg              | 23 220                      | 23 358                | 23 195 | 23 529                      | 23 667                | 23 504 | 1612                             |
|  | lb              | 51,176                      | 51,480                | 51,121 | 51,857                      | 52,161                | 51,802 | 3,553                            |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

\*\*Maximum values.

(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.

| Linkage  |                 |                             | Standard Linkage      |        |                             | Standard Linkage      |        |                                  |  |
|--|-----------------|-----------------------------|-----------------------|--------|-----------------------------|-----------------------|--------|----------------------------------|--|
| Bucket Type  |                 | General Purpose – Fusion QC |                       |        | Material Handling – Pin On  |                       |        | _                                |  |
| Edge Type  |                 | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | High Lift<br>Linkage<br>Change** |  |
| Capacity – Rated   | m <sup>3</sup>  | 4.20                        | 4.20                  | 4.00   | 4.20                        | 4.20                  | 4.04   |                                  |  |
|  | yd <sup>3</sup> | 5.50                        | 5.50                  | 5.25   | 5.50                        | 5.50                  | 5.30   | _                                |  |
| Capacity – Rated at 110% Fill Factor                             | m <sup>3</sup>  | 4.62                        | 4.62                  | 4.40   | 4.62                        | 4.62                  | 4.44   |                                  |  |
|  | yd <sup>3</sup> | 6.04                        | 6.04                  | 5.75   | 6.04                        | 6.04                  | 5.81   |                                  |  |
| Width  | mm              | 3220                        | 3271                  | 3271   | 3220                        | 3271                  | 3271   |                                  |  |
|  | ft/in           | 10'6"                       | 10'8"                 | 10'8"  | 10'6"                       | 10'8"                 | 10'8"  | _                                |  |
| <b>16</b> <sup>†</sup> Dump Clearance at Maximum Lift            | mm              | 2960                        | 2806                  | 2806   | 2949                        | 2787                  | 2787   | 559                              |  |
| and 45° Discharge  | ft/in           | 9'8"                        | 9'2"                  | 9'2"   | 9'8"                        | 9'1"                  | 9'1"   | 1'10"                            |  |
| <b>17</b> <sup>†</sup> Reach at Maximum Lift and 45° Discharge   | mm              | 1398                        | 1536                  | 1536   | 1245                        | 1372                  | 1372   | -24                              |  |
|  | ft/in           | 4'7"                        | 5'0"                  | 5'0"   | 4'1"                        | 4'6"                  | 4'6"   | -0.9"                            |  |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 2858                        | 3062                  | 3062   | 2774                        | 2978                  | 2978   | 405                              |  |
|  | ft/in           | 9'4"                        | 10'0"                 | 10'0"  | 9'1"                        | 9'9"                  | 9'9"   | 1'4"                             |  |
| A† Digging Depth   | mm              | 116                         | 116                   | 86     | 124                         | 124                   | 94     | -25                              |  |
|  | in              | 4.5"                        | 4.5"                  | 3.4"   | 4.9"                        | 4.9"                  | 3.7"   | -1"                              |  |
| 12† Shipping Length (with Bucket)                                | mm              | 8798                        | 9024                  | 9024   | 8721                        | 8946                  | 8946   | 822                              |  |
|  | ft/in           | 28'11"                      | 29'8"                 | 29'8"  | 28'8"                       | 29'5"                 | 29'5"  | 2'8"                             |  |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 5960                        | 5960                  | 5960   | 5901                        | 5901                  | 5901   | 558                              |  |
|  | ft/in           | 19'7"                       | 19'7"                 | 19'7"  | 19'5"                       | 19'5"                 | 19'5"  | 1'10"                            |  |
| Loader Clearance Circle with Bucket                              | mm              | 15 038                      | 15 212                | 15 212 | 15 008                      | 15 178                | 15 178 | 493                              |  |
| at Carry Position  | ft/in           | 49'5"                       | 49'11"                | 49'11" | 49'3"                       | 49'10"                | 49'10" | 1'7"                             |  |
| Static Tipping Load, Straight                                    | kg              | 16 031                      | 15 850                | 16 186 | 16 580                      | 16 398                | 16 729 | 95                               |  |
| (With Tire Deflection)*  | lb              | 35,334                      | 34,933                | 35,675 | 36,544                      | 36,143                | 36,871 | 209                              |  |
| Static Tipping Load, Straight                                    | kg              | 17 173                      | 16 988                | 17 339 | 17 731                      | 17 546                | 17 890 | 34                               |  |
| (No Tire Deflection)*  | lb              | 37,850                      | 37,442                | 38,216 | 39,080                      | 38,672                | 39,430 | 75                               |  |
| Static Tipping Load, Articulated                                 | kg              | 14 075                      | 13 892                | 14 216 | 14 605                      | 14 421                | 14 738 | -106                             |  |
| (With Tire Deflection)*  | lb              | 31,022                      | 30,618                | 31,332 | 32,190                      | 31,786                | 32,483 | -234                             |  |
| Static Tipping Load, Articulated                                 | kg              | 15 204                      | 15 019                | 15 355 | 15 740                      | 15 555                | 15 883 | -158                             |  |
| (No Tire Deflection)*  | lb              | 33,510                      | 33,102                | 33,843 | 34,691                      | 34,283                | 35,006 | -348                             |  |
| Breakout Force   | kN              | 166                         | 164                   | 176    | 177                         | 175                   | 188    | -15                              |  |
|  | lbf             | 37,382                      | 37,023                | 39,561 | 39,834                      | 39,468                | 42,297 | -33                              |  |
| Operating Weight*  | kg              | 23 592                      | 23 730                | 23 567 | 23 217                      | 23 355                | 23 192 | 1612                             |  |
|  | lb              | 51,997                      | 52,301                | 51,941 | 51,170                      | 51,474                | 51,114 | 3,553                            |  |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

\*\*Maximum values.

(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.

### 966M Operating Specifications with Buckets – Aggregate Handler

| Package  |                 |                             | Aggregate Handler           |                             |                             | e Handler                   | Aggregate Handler             |  |
|--|-----------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-------------------------------|--|
| Bucket Type  |                 |                             | General Purpose –<br>Pin On |                             |                             | Purpose –<br>on QC          | Material Handling –<br>Pin On |  |
| Edge Type  |                 | Bolt-On<br>Cutting<br>Edges | Bolt-On<br>Cutting<br>Edges | Bolt-On<br>Cutting<br>Edges | Bolt-On<br>Cutting<br>Edges | Bolt-On<br>Cutting<br>Edges | Bolt-On<br>Cutting<br>Edges   |  |
| Capacity – Rated   | m <sup>3</sup>  | 3.80                        | 4.00                        | 4.20                        | 3.80                        | 4.20                        | 4.20                          |  |
|  | yd <sup>3</sup> | 5.00                        | 5.25                        | 5.50                        | 5.00                        | 5.50                        | 5.50                          |  |
| Capacity – Rated at 110% Fill Factor                             | m <sup>3</sup>  | 4.18                        | 4.40                        | 4.62                        | 4.18                        | 4.62                        | 4.62                          |  |
|  | yd <sup>3</sup> | 5.47                        | 5.75                        | 6.04                        | 5.47                        | 6.04                        | 6.04                          |  |
| Width  | mm              | 3220                        | 3220                        | 3220                        | 3220                        | 3220                        | 3220                          |  |
|  | ft/in           | 10'6"                       | 10'6"                       | 10'6"                       | 10'6"                       | 10'6"                       | 10'6"                         |  |
| 16† Dump Clearance at Maximum Lift                               | mm              | 3067                        | 3058                        | 2991                        | 3038                        | 2960                        | 2967                          |  |
| and 45° Discharge  | ft/in           | 10'0"                       | 10'0"                       | 9'9"                        | 9'11"                       | 9'8"                        | 9'8"                          |  |
| 17† Reach at Maximum Lift and 45° Discharge                      | mm              | 1292                        | 1299                        | 1353                        | 1327                        | 1398                        | 1228                          |  |
|  | ft/in           | 4'2"                        | 4'3"                        | 4'5"                        | 4'4"                        | 4'7"                        | 4'0"                          |  |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 2704                        | 2715                        | 2803                        | 2748                        | 2858                        | 2749                          |  |
|  | ft/in           | 8'10"                       | 8'10"                       | 9'2"                        | 9'0"                        | 9'4"                        | 9'0"                          |  |
| A† Digging Depth   | mm              | 124                         | 124                         | 124                         | 124                         | 116                         | 124                           |  |
|  | in              | 4.9"                        | 4.9"                        | 4.9"                        | 4.9"                        | 4.5"                        | 4.9"                          |  |
| 12 <sup>†</sup> Shipping Length (with Bucket)                    | mm              | 8657                        | 8669                        | 8756                        | 8702                        | 8804                        | 8702                          |  |
|  | ft/in           | 28'5"                       | 28'6"                       | 28'9"                       | 28'7"                       | 28'11"                      | 28'7"                         |  |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 5788                        | 5902                        | 5902                        | 5803                        | 5960                        | 5874                          |  |
|  | ft/in           | 19'0"                       | 19'5"                       | 19'5"                       | 19'1"                       | 19'7"                       | 19'4"                         |  |
| Loader Clearance Circle with Bucket                              | mm              | 14 973                      | 14 979                      | 15 022                      | 14 988                      | 15 038                      | 14 995                        |  |
| at Carry Position  | ft/in           | 49'2"                       | 49'2"                       | 49'4"                       | 49'3"                       | 49'5"                       | 49'3"                         |  |
| Static Tipping Load, Straight                                    | kg              | 18 475                      | 18 459                      | 18 247                      | 17 880                      | 17 595                      | 18 199                        |  |
| (With Tire Deflection)*  | lb              | 40,719                      | 40,684                      | 40,217                      | 39,408                      | 38,780                      | 40,111                        |  |
| Static Tipping Load, Straight                                    | kg              | 19 797                      | 19 792                      | 19 570                      | 19 171                      | 18 884                      | 19 496                        |  |
| (No Tire Deflection)*  | lb              | 43,634                      | 43,623                      | 43,134                      | 42,254                      | 41,622                      | 42,969                        |  |
| Static Tipping Load, Articulated                                 | kg              | 16 232                      | 16 212                      | 16 015                      | 15 662                      | 15 399                      | 15 982                        |  |
| (With Tire Deflection)*  | lb              | 35,777                      | 35,732                      | 35,299                      | 34,519                      | 33,940                      | 35,225                        |  |
| Static Tipping Load, Articulated                                 | kg              | 17 540                      | 17 531                      | 17 325                      | 16 944                      | 16 680                      | 17 266                        |  |
| (No Tire Deflection)*  | lb              | 38,658                      | 38,638                      | 38,185                      | 37,345                      | 36,762                      | 38,056                        |  |
| Breakout Force   | kN              | 187                         | 185                         | 173                         | 180                         | 166                         | 180                           |  |
|  | lbf             | 42,151                      | 41,695                      | 38,984                      | 40,632                      | 37,382                      | 40,629                        |  |
| Operating Weight*  | kg              | 23 807                      | 23 859                      | 23 915                      | 24 224                      | 24 287                      | 23 869                        |  |
|  | lb              | 52,470                      | 52,584                      | 52,708                      | 53,389                      | 53,528                      | 52,606                        |  |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 XHA2 L3 radial tires, full fluids, operator, aggregate counterweight, cold start, roading fenders, Product Link, manual diff lock/open axles (front/rear), power train guard, secondary steering and sound suppression. If a rock bucket is added, those values are with Michelin 26.5R25 XLDD2 L5 tires.

(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.

### 972M 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> (2,528-2,865 lb/yd <sup>3</sup> ) | 115              |
| Sand and Gravel |                             | 1500-1700 kg/m <sup>3</sup> (2,528-2,865 lb/yd <sup>3</sup> ) | 115              |
| Aggregate:      | 25-76 mm (1 to 3 in)        | 1600-1700 kg/m <sup>3</sup> (2,696-2,865 lb/yd <sup>3</sup> ) | 110              |
|                 | 19 mm (0.75 in) and smaller | 1800 kg/m <sup>3</sup> (3,033 lb/yd <sup>3</sup> )            | 105              |
| Rock:           | 76 mm (3 in) and larger     | 1600 kg/m <sup>3</sup> (2,696 lb/yd <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.

|                           | Materia      | al Density                   | kg/m³                                       | 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500                       |
|---------------------------|--------------|------------------------------|---|---|
|                           |              |                              | 4.60 m <sup>3</sup> (6.00 yd <sup>3</sup> ) | 5.29 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.60 m <sup>3</sup> (6.00 yd <sup>3</sup> )                           |
| nkage                     | Pin On       | General<br>Purpose           | 4.80 m³ (6.25 yd³)                          | 5.52 m <sup>3</sup> (7.22 yd <sup>3</sup> )   |
| Standard Linkage          |              |                              | 5.00 m <sup>3</sup> (6.50 yd <sup>3</sup> ) | 5.75 m <sup>3</sup> (7.52 yd <sup>3</sup> ) 5.00 m <sup>3</sup> (6.50 yd <sup>3</sup> )                           |
| Star                      | Fusion<br>QC | General<br>Purpose           | 4.40 m³ (5.75 yd³)                          | 5.06 m <sup>3</sup> (6.62 yd <sup>3</sup> ) 4.40 m <sup>3</sup> (5.75 yd <sup>3</sup> )                           |
|                           | Pin On       | Material<br>Handling         | 4.60 m³ (6.00 yd³)                          | 5.29 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.60 m <sup>3</sup> (6.00 yd <sup>3</sup> )                           |
|                           |              |                              | 4.60 m <sup>3</sup> (6.00 yd <sup>3</sup> ) | 5.29 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.60 m <sup>3</sup> (6.00 yd <sup>3</sup> )                           |
| kage                      | Pin On       | General<br>Purpose           | 4.80 m³ (6.25 yd³)                          | 5.52 m <sup>3</sup> (7.22 yd <sup>3</sup> ) 4.80 m <sup>3</sup> (6.25 yd <sup>3</sup> )                           |
| High Lift Linkage         |              |                              | 5.00 m³ (6.50 yd³)                          | 5.75 m <sup>3</sup> (7.52 yd <sup>3</sup> ) 5.00 m <sup>3</sup> (6.50 yd <sup>3</sup> )                           |
| High                      | Fusion<br>QC | General<br>Purpose           | 4.40 m³ (5.75 yd³)                          | 5.06 m <sup>3</sup> (6.62 yd <sup>3</sup> )   |
|                           | Pin On       | Material<br>Handling         | 4.60 m³ (6.00 yd³)                          | 5.29 m <sup>3</sup> (6.92 yd <sup>3</sup> ) 4.60 m <sup>3</sup> (6.00 yd <sup>3</sup> )                           |
| Extended Linkage          | Fusion QC    | General<br>Purpose           | 4.90 m³ (6.41 yd³)                          | 5.64 m <sup>3</sup> (7.38 yd <sup>3</sup> )   |
| Package                   |              |                              | 5.10 m³ (6.67 yd³)                          | 5.87 m <sup>3</sup> (7.68 yd <sup>3</sup> ) 5.10 m <sup>3</sup> (6.67 yd <sup>3</sup> )                           |
| Aggregate Handler Package | Pin On       | General<br>Purpose           | 5.30 m³ (6.93 yd³)                          | 6.10 m <sup>3</sup> (7.98 yd <sup>3</sup> )   |
| Aggregat                  |              |                              | 5.50 m³ (7.19 yd³)                          | 6.33 m <sup>3</sup> (8.28 yd <sup>3</sup> ) 5.50 m <sup>3</sup> (7.19 yd <sup>3</sup> )                           |
|                           | Materia      | al Density                   | lb/yd³                                      | 1,180 1,348 1,517 1,685 1,854 2,022 2,191 2,359 2,528 2,696 2,865 3,033 3,202 3,370 3,539 3,707 3,876 4,044 4,213 |
|                           |              | Fill Factors<br>05% 100% 95% |   |   |

Note: All buckets are showing Bolt-On Edges.

| Linkage  |                 |                             | Standard Linkage      |             |                             | Standard Linkage      |        |                                  |
|--|-----------------|-----------------------------|-----------------------|-------------|-----------------------------|-----------------------|--------|----------------------------------|
| Bucket Type  |                 |                             | G                     | eneral Purj | oose – Pin (                | Dn                    |        |                                  |
| Edge Type  |                 | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips        | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | High Lift<br>Linkage<br>Change** |
| Capacity – Rated   | m <sup>3</sup>  | 4.60                        | 4.60                  | 4.40        | 4.80                        | 4.80                  | 4.60   | _                                |
|  | yd <sup>3</sup> | 6.00                        | 6.00                  | 5.75        | 6.25                        | 6.25                  | 6.00   | _                                |
| Capacity – Rated at 110% Fill Factor                             | m <sup>3</sup>  | 5.06                        | 5.06                  | 4.84        | 5.28                        | 5.28                  | 5.06   | _                                |
|  | yd <sup>3</sup> | 6.62                        | 6.62                  | 6.33        | 6.91                        | 6.91                  | 6.62   |                                  |
| Width  | mm              | 3220                        | 3271                  | 3271        | 3220                        | 3271                  | 3271   | _                                |
|  | ft/in           | 10'6"                       | 10'8"                 | 10'8"       | 10'6"                       | 10'8"                 | 10'8"  |                                  |
| 16† Dump Clearance at Maximum Lift                               | mm              | 3187                        | 3033                  | 3033        | 3154                        | 2999                  | 2999   | 336                              |
| and 45° Discharge  | ft/in           | 10'5"                       | 9'11"                 | 9'11"       | 10'4"                       | 9'10"                 | 9'10"  | 1'1"                             |
| 17† Reach at Maximum Lift and 45° Discharge                      | mm              | 1328                        | 1465                  | 1465        | 1357                        | 1493                  | 1493   | 23                               |
|  | ft/in           | 4'4"                        | 4'9"                  | 4'9"        | 4'5"                        | 4'10"                 | 4'10"  | 0.9"                             |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 2969                        | 3174                  | 3174        | 3014                        | 3219                  | 3219   | 274                              |
|  | ft/in           | 9'8"                        | 10'4"                 | 10'4"       | 9'10"                       | 10'6"                 | 10'6"  | 11"                              |
| A† Digging Depth   | mm              | 103                         | 103                   | 73          | 103                         | 103                   | 73     | -5                               |
|  | in              | 4"                          | 4"                    | 2.8"        | 4"                          | 4"                    | 2.8"   | -0.2"                            |
| 12† Shipping Length (with Bucket)                                | mm              | 9270                        | 9494                  | 9494        | 9315                        | 9539                  | 9539   | 335                              |
|  | ft/in           | 30'5"                       | 31'2"                 | 31'2"       | 30'7"                       | 31'4"                 | 31'4"  | 1'1"                             |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 6195                        | 6195                  | 6195        | 6031                        | 6031                  | 6031   | 336                              |
|  | ft/in           | 20'4"                       | 20'4"                 | 20'4"       | 19'10"                      | 19'10"                | 19'10" | 1'1"                             |
| Loader Clearance Circle with Bucket                              | mm              | 15 192                      | 15 369                | 15 369      | 15 216                      | 15 394                | 15 394 | 323                              |
| at Carry Position  | ft/in           | 49'11"                      | 50'6"                 | 50'6"       | 50'0"                       | 50'7"                 | 50'7"  | 1'0.7"                           |
| Static Tipping Load, Straight                                    | kg              | 18 477                      | 18 293                | 18 550      | 18 502                      | 18 318                | 20 545 | -1592                            |
| (With Tire Deflection)*  | lb              | 40,723                      | 40,319                | 40,884      | 40,779                      | 40,372                | 45,281 | -3,508                           |
| Static Tipping Load, Straight                                    | kg              | 19 724                      | 19 537                | 19 796      | 19 755                      | 19 567                | 22 192 | -1752                            |
| (No Tire Deflection)*  | lb              | 43,473                      | 43,061                | 43,631      | 43,542                      | 43,127                | 48,912 | -3,863                           |
| Static Tipping Load, Articulated                                 | kg              | 16 135                      | 15 950                | 16 188      | 16 164                      | 15 978                | 17 927 | -1423                            |
| (With Tire Deflection)*  | lb              | 35,563                      | 35,155                | 35,680      | 35,626                      | 35,215                | 39,512 | -3,137                           |
| Static Tipping Load, Articulated                                 | kg              | 17 387                      | 17 200                | 17 439      | 17 421                      | 17 233                | 19 558 | -1598                            |
| (No Tire Deflection)*  | lb              | 38,322                      | 37,910                | 38,437      | 38,396                      | 37,982                | 43,107 | -3,521                           |
| Breakout Force   | kN              | 202                         | 201                   | 214         | 196                         | 194                   | 207    | -6                               |
|  | lbf             | 45,482                      | 45,173                | 48,227      | 44,075                      | 43,766                | 46,655 | -1,368                           |
| Operating Weight*  | kg              | 24 969                      | 25 106                | 24 943      | 24 897                      | 25 034                | 24 871 | 84                               |
|  | lb              | 55,030                      | 55,334                | 54,974      | 54,871                      | 55,175                | 54,816 | 186                              |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

\*\*Maximum values.

(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.

| Linkage  |                 |                             | Standard Linkage      |        |                             | Standard Linkage      |        |                                  |  |
|--|-----------------|-----------------------------|-----------------------|--------|-----------------------------|-----------------------|--------|----------------------------------|--|
| Bucket Type  |                 | Gener                       | al Purpose –          | Pin On | General Purpose – Fusion QC |                       |        | 1                                |  |
| Edge Type  |                 | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | High Lift<br>Linkage<br>Change** |  |
| Capacity – Rated   | m <sup>3</sup>  | 5.00                        | 5.00                  | 4.80   | 4.40                        | 4.40                  | 4.20   |                                  |  |
|  | yd <sup>3</sup> | 6.50                        | 6.50                  | 6.25   | 5.75                        | 5.75                  | 5.50   | _                                |  |
| Capacity – Rated at 110% Fill Factor                             | m <sup>3</sup>  | 5.50                        | 5.50                  | 5.28   | 4.84                        | 4.84                  | 4.62   |                                  |  |
|  | yd <sup>3</sup> | 7.19                        | 7.19                  | 6.91   | 6.33                        | 6.33                  | 6.04   |                                  |  |
| Width  | mm              | 3220                        | 3271                  | 3271   | 3220                        | 3271                  | 3271   | _                                |  |
|  | ft/in           | 10'6"                       | 10'8"                 | 10'8"  | 10'6"                       | 10'8"                 | 10'8"  | _                                |  |
| <b>16</b> † Dump Clearance at Maximum Lift                       | mm              | 3137                        | 2982                  | 2982   | 3200                        | 3047                  | 3047   | 336                              |  |
| and 45° Discharge  | ft/in           | 10'3"                       | 9'9"                  | 9'9"   | 10'6"                       | 9'11"                 | 9'11"  | 1'1"                             |  |
| 17† Reach at Maximum Lift and 45° Discharge                      | mm              | 1372                        | 1508                  | 1508   | 1327                        | 1465                  | 1465   | 23                               |  |
|  | ft/in           | 4'6"                        | 4'11"                 | 4'11"  | 4'4"                        | 4'9"                  | 4'9"   | 0.9"                             |  |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 3037                        | 3242                  | 3242   | 2958                        | 3163                  | 3163   | 274                              |  |
|  | ft/in           | 9'11"                       | 10'7"                 | 10'7"  | 9'8"                        | 10'4"                 | 10'4"  | 11"                              |  |
| A† Digging Depth   | mm              | 103                         | 103                   | 73     | 103                         | 103                   | 73     | -5                               |  |
|  | in              | 4"                          | 4"                    | 2.8"   | 4"                          | 4"                    | 2.8"   | -0.2"                            |  |
| 12† Shipping Length (with Bucket)                                | mm              | 9338                        | 9562                  | 9562   | 9259                        | 9483                  | 9483   | 335                              |  |
|  | ft/in           | 30'8"                       | 31'5"                 | 31'5"  | 30'5"                       | 31'2"                 | 31'2"  | 1'1"                             |  |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 6284                        | 6284                  | 6284   | 6205                        | 6205                  | 6205   | 336                              |  |
|  | ft/in           | 20'8"                       | 20'8"                 | 20'8"  | 20'5"                       | 20'5"                 | 20'5"  | 1'1"                             |  |
| Loader Clearance Circle with Bucket                              | mm              | 15 229                      | 15 407                | 15 407 | 15 180                      | 15 359                | 15 359 | 324                              |  |
| at Carry Position  | ft/in           | 50'0"                       | 50'7"                 | 50'7"  | 49'10"                      | 50'5"                 | 50'5"  | 1'0.8"                           |  |
| Static Tipping Load, Straight                                    | kg              | 18 600                      | 18 415                | 18 651 | 18 081                      | 17 899                | 18 257 | -1608                            |  |
| (With Tire Deflection)*  | 1b              | 40,996                      | 40,588                | 41,108 | 39,851                      | 39,450                | 40,240 | -3,545                           |  |
| Static Tipping Load, Straight                                    | kg              | 19 856                      | 19 668                | 19 906 | 19 317                      | 19 131                | 19 507 | -1771                            |  |
| (No Tire Deflection)*  | lb              | 43,764                      | 43,348                | 43,873 | 42,576                      | 42,166                | 42,993 | -3,903                           |  |
| Static Tipping Load, Articulated                                 | kg              | 16 264                      | 16 076                | 16 297 | 15 749                      | 15 565                | 15 907 | -1444                            |  |
| (With Tire Deflection)*  | lb              | 35,845                      | 35,433                | 35,919 | 34,712                      | 34,307                | 35,060 | -3,181                           |  |
| Static Tipping Load, Articulated                                 | kg              | 17 521                      | 17 332                | 17 553 | 16 992                      | 16 807                | 17 163 | -1620                            |  |
| (No Tire Deflection)*  | lb              | 38,617                      | 38,200                | 38,687 | 37,452                      | 37,043                | 37,828 | -3,570                           |  |
| Breakout Force   | kN              | 198                         | 197                   | 210    | 203                         | 202                   | 216    | -6                               |  |
|  | lbf             | 44,634                      | 44,325                | 47,205 | 45,788                      | 45,479                | 48,572 | -1,378                           |  |
| Operating Weight*  | kg              | 25 010                      | 25 147                | 24 984 | 25 327                      | 25 464                | 25 301 | 84                               |  |
|  | lb              | 55,120                      | 55,424                | 55,065 | 55,819                      | 56,123                | 55,763 | 186                              |  |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

\*\*Maximum values.

(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.

| Linkage  |                 |                             | Standard Linkage      |        |                                  | Extended Linkage            |                       |          |  |
|--|-----------------|-----------------------------|-----------------------|--------|----------------------------------|-----------------------------|-----------------------|----------|--|
| Bucket Type  |                 | Material Handling – Pin On  |                       |        | 1                                | General                     | Purpose – Fu          | ision QC |  |
| Edge Type  |                 | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips   | High Lift<br>Linkage<br>Change** | Bolt-On<br>Cutting<br>Edges | Teeth and<br>Segments | Tips     |  |
| Capacity – Rated   | m <sup>3</sup>  | 4.60                        | 4.60                  | 4.40   |                                  | 4.90                        | 4.90                  | 4.70     |  |
|  | yd <sup>3</sup> | 6.00                        | 6.00                  | 5.75   | _                                | 6.41                        | 6.41                  | 6.15     |  |
| Capacity - Rated at 110% Fill Factor                             | m <sup>3</sup>  | 5.06                        | 5.06                  | 4.84   | _                                | 5.39                        | 5.39                  | 5.17     |  |
|  | yd <sup>3</sup> | 6.62                        | 6.62                  | 6.33   | _                                | 7.05                        | 7.05                  | 6.76     |  |
| Width  | mm              | 3220                        | 3271                  | 3271   | _                                | 3220                        | 3271                  | 3271     |  |
|  | ft/in           | 10'6"                       | 10'8"                 | 10'8"  | _                                | 10'6"                       | 10'8"                 | 10'8"    |  |
| 16† Dump Clearance at Maximum Lift                               | mm              | 3120                        | 2957                  | 2957   | 336                              | 2899                        | 2744                  | 2744     |  |
| and 45° Discharge  | ft/in           | 10'2"                       | 9'8"                  | 9'8"   | 1'1"                             | 9'6"                        | 9'0"                  | 9'0"     |  |
| <b>17</b> <sup>†</sup> Reach at Maximum Lift and 45° Discharge   | mm              | 1251                        | 1378                  | 1378   | 23                               | 1449                        | 1586                  | 1586     |  |
|  | ft/in           | 4'1"                        | 4'6"                  | 4'6"   | 0.9"                             | 4'9"                        | 5'2"                  | 5'2"     |  |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 2979                        | 3184                  | 3184   | 274                              | 2940                        | 3145                  | 3145     |  |
|  | ft/in           | 9'9"                        | 10'5"                 | 10'5"  | 11"                              | 9'7"                        | 10'3"                 | 10'3"    |  |
| A† Digging Depth   | mm              | 103                         | 103                   | 73     | -5                               | 115                         | 115                   | 85       |  |
|  | in              | 4"                          | 4"                    | 2.8"   | -0.2"                            | 4.5"                        | 4.5"                  | 3.3"     |  |
| 12† Shipping Length (with Bucket)                                | mm              | 9280                        | 9504                  | 9504   | 335                              | 9200                        | 9425                  | 9425     |  |
|  | ft/in           | 30'6"                       | 31'3"                 | 31'3"  | 1'1"                             | 30'3"                       | 31'0"                 | 31'0"    |  |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 6162                        | 6162                  | 6162   | 336                              | 6126                        | 6126                  | 6126     |  |
|  | ft/in           | 20'3"                       | 20'3"                 | 20'3"  | 1'1"                             | 20'2"                       | 20'2"                 | 20'2"    |  |
| Loader Clearance Circle with Bucket                              | mm              | 15 197                      | 15 375                | 15 375 | 334                              | 15 081                      | 15 255                | 15 255   |  |
| at Carry Position  | ft/in           | 49'11"                      | 50'6"                 | 50' 6" | 1'1"                             | 49'6"                       | 50'1"                 | 50'1"    |  |
| Static Tipping Load, Straight                                    | kg              | 18 412                      | 18 229                | 18 468 | -1598                            | 19 411                      | 19 225                | 19 590   |  |
| (With Tire Deflection)*  | lb              | 40,580                      | 40,177                | 40,704 | -3,521                           | 42,781                      | 42,372                | 43,177   |  |
| Static Tipping Load, Straight                                    | kg              | 19 640                      | 19 453                | 19 695 | -1757                            | 20 885                      | 20 695                | 21 079   |  |
| (No Tire Deflection)*  | lb              | 43,286                      | 42,875                | 43,409 | -3,871                           | 46,032                      | 45,612                | 46,460   |  |
| Static Tipping Load, Articulated                                 | kg              | 16 081                      | 15 896                | 16 119 | -1429                            | 16 920                      | 16 732                | 17 082   |  |
| (With Tire Deflection)*  | lb              | 35,442                      | 35,035                | 35,526 | -3,149                           | 37,293                      | 36,878                | 37,649   |  |
| Static Tipping Load, Articulated                                 | kg              | 17 313                      | 17 127                | 17 351 | -1601                            | 18 387                      | 18 197                | 18 562   |  |
| (No Tire Deflection)*  | lb              | 38,159                      | 37,749                | 38,242 | -3,528                           | 40,526                      | 40,106                | 40,912   |  |
| Breakout Force   | kN              | 201                         | 199                   | 213    | -7                               | 198                         | 196                   | 209      |  |
|  | lbf             | 45,174                      | 44,865                | 47,882 | -1,647                           | 44,570                      | 44,204                | 47,022   |  |
| Operating Weight*  | kg              | 24 964                      | 25 101                | 24 938 | 85                               | 25 283                      | 25 421                | 25 258   |  |
|  | lb              | 55,019                      | 55,323                | 54,963 | 186                              | 55,724                      | 56,028                | 55,668   |  |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

\*\*Maximum values.

(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.

### 972M Operating Specifications with Buckets – Aggregate Handler

| Linkage  |                 | Aggregate Handler        |                       |                       |  |  |  |  |  |
|--|-----------------|--------------------------|-----------------------|-----------------------|--|--|--|--|--|
| Bucket Type  |                 | General Purpose – Pin On |                       |                       |  |  |  |  |  |
| Edge Type  |                 | Bolt-On Cutting Edges    | Bolt-On Cutting Edges | Bolt-On Cutting Edges |  |  |  |  |  |
| Capacity – Rated   | m <sup>3</sup>  | 5.10                     | 5.30                  | 5.50                  |  |  |  |  |  |
|  | yd <sup>3</sup> | 6.67                     | 6.93                  | 7.19                  |  |  |  |  |  |
| Capacity – Rated at 110% Fill Factor                             | m <sup>3</sup>  | 5.61                     | 5.83                  | 6.05                  |  |  |  |  |  |
|  | yd <sup>3</sup> | 7.34                     | 7.63                  | 7.91                  |  |  |  |  |  |
| Width  | mm              | 3357                     | 3357                  | 3357                  |  |  |  |  |  |
|  | ft/in           | 11'0"                    | 11'0"                 | 11'0"                 |  |  |  |  |  |
| 16† Dump Clearance at Maximum Lift                               | mm              | 3127                     | 3100                  | 3072                  |  |  |  |  |  |
| and 45° Discharge  | ft/in           | 10'3"                    | 10'2"                 | 10'0"                 |  |  |  |  |  |
| <b>17</b> <sup>†</sup> Reach at Maximum Lift and 45° Discharge   | mm              | 1375                     | 1399                  | 1424                  |  |  |  |  |  |
|  | ft/in           | 4'6"                     | 4'7"                  | 4'8"                  |  |  |  |  |  |
| Reach at Level Lift Arm and Bucket Level                         | mm              | 3046                     | 3083                  | 3121                  |  |  |  |  |  |
|  | ft/in           | 9'11"                    | 10'1"                 | 10'2"                 |  |  |  |  |  |
| A <sup>†</sup> Digging Depth                                     | mm              | 108                      | 108                   | 108                   |  |  |  |  |  |
|  | in              | 4.2"                     | 4.2"                  | 4.2"                  |  |  |  |  |  |
| <b>12</b> <sup>+</sup> Shipping Length (with Bucket)             | mm              | 9037                     | 9074                  | 9112                  |  |  |  |  |  |
|  | ft/in           | 29'8"                    | 29'10"                | 29'11"                |  |  |  |  |  |
| <b>B</b> <sup>†</sup> Overall Height with Bucket at Maximum Lift | mm              | 6235                     | 6272                  | 6293                  |  |  |  |  |  |
|  | ft/in           | 20'6"                    | 20'7"                 | 20'8"                 |  |  |  |  |  |
| Loader Clearance Circle with Bucket                              | mm              | 15 362                   | 15 382                | 15 403                |  |  |  |  |  |
| at Carry Position  | ft/in           | 50'5"                    | 50'6"                 | 50'7"                 |  |  |  |  |  |
| Static Tipping Load, Straight                                    | kg              | 19 316                   | 19 242                | 19 172                |  |  |  |  |  |
| (With Tire Deflection)*  | lb              | 42,574                   | 42,409                | 42,255                |  |  |  |  |  |
| Static Tipping Load, Straight                                    | kg              | 20 669                   | 20 600                | 20 537                |  |  |  |  |  |
| (No Tire Deflection)*  | lb              | 45,556                   | 45,403                | 45,263                |  |  |  |  |  |
| Static Tipping Load, Articulated                                 | kg              | 16 799                   | 16 726                | 16 658                |  |  |  |  |  |
| (With Tire Deflection)*  | lb              | 37,026                   | 36,865                | 36,716                |  |  |  |  |  |
| Static Tipping Load, Articulated                                 | kg              | 18 165                   | 18 098                | 18 036                |  |  |  |  |  |
| (No Tire Deflection)*  | lb              | 40,036                   | 39,888                | 39,753                |  |  |  |  |  |
| Breakout Force   | kN              | 190                      | 185                   | 180                   |  |  |  |  |  |
|  | lbf             | 42,755                   | 41,650                | 40,573                |  |  |  |  |  |
| Operating Weight*  | kg              | 25 790                   | 25 832                | 25 870                |  |  |  |  |  |
|  | lb              | 56,840                   | 56,933                | 57,016                |  |  |  |  |  |

\*Static tipping loads and operating weights shown are based on a machine configuration with Michelin 26.5R25 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.

\*\*Maximum values.

(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.

### **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 (7 in) color touchscreen display for rear vision camera, clock and machine parameters
- EH controls, SAL (single axis lever) lift and tilt function
- Steering, EH joystick, speed sensing with force feedback
- 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 (2 in) 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 (Tier 4 Final/Stage IV models)
- Temperature: engine coolant, hydraulic oil, transmission oil
- -Fuel level

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- 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 (Tier 4 Final/ Stage IV models)
- 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 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 C9.3 ACERT meets Tier 3/ Stage IIIA equivalent or Tier 4 Final/ Stage IV emission standards
- Cat Clean Emissions Module (CEM) with Diesel Particulate Filter (DPF) and remote Diesel Exhaust Fluid (DEF) tank and pump (Tier 4 Final/Stage IV models)
- Fuel priming pump (electric)
- Fuel/water separator
- Precleaner, engine air intake
- Economy Mode (selectable)
- Transmission, automatic planetary power shift (4F/4R)
- 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, on demand

### LINKAGE

- Linkage, Z-bar, cast crosstube/tilt lever
- Kickout, lift and tilt, automatic

### HYDRAULICS

- Hydraulic system, load sensing
- Steering, load sensing
- Ride control, 2V
- Remote diagnostic pressure taps
- Hoses, Cat XT™
- · Oil sampling valves

### FLUIDS

- Premixed extended life coolant with freeze protection to  $-34^{\circ}$  C (-29° F)

### **OTHER STANDARD EQUIPMENT**

- Hood, non-metallic power tilting
- Service centers (electrical and hydraulic)
- Platform, window washing
- Auto idle shutdown
- Fenders, front with mud-flap/rear with extension

• Filters: fuel, engine air, engine oil,

hydraulic oil, transmission

• Hitch, drawbar with pin

and transmission oil level

· Vandalism protection caplocks

• Precleaner rain cap

• Ecology drains for engine, transmission, and hydraulics

• Sight gauges: engine coolant, hydraulic oil,

• Ether aid ready

• Fuel cooler

Toolbox

• Grease zerks

• Grill, airborne debris

### **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
- Filter, carbon fresh air
- Mirrors, heated rearview external with integrated spot mirrors
- Precleaner, HVAC
- Precleaner, HVAC (RESPA)
- Radio, AM/FM/USB/MP3 Bluetooth
- Radio, AM/FM/CD/USB/MP3 Bluetooth • Radio, AM/FM/CD/USB/MP3 Bluetooth
- with Satellite Sirius and XM
- Radio, CB ready
- Seat, heated air suspension
- Seat belt, 76 mm (3 in) retractable, with indicator
- Steering, EH wheel with directional FNR shifter and gear selector
- $-\operatorname{Additional} \operatorname{FNR}$  with implement controls
- Roof, metallic
- Steering, secondary
- Sun visor, rear
- Windows, rubber mounted
- Windows, with front guard
- Windows, with heavy duty front guard
- Windows, with full guards front, rear and sides

### **ELECTRICAL AND LIGHTING**

- Four additional auxiliary halogen cab mounted work lights or
- Two additional auxiliary front HI LED and two additional auxiliary rear LED cab mounted work lights with 2 LED work lights in the radiator grill and LED front turn signals also includes replacement of the standard four halogen cab mounted work lights with four LED work lights (the standard offering and only roading light available is the halogen roading light)
- Warning amber strobe beacon
- Reversing strobes
- External seat belt indicator light
- Speed limiter 20 km/h (Europe only)

### STARTERS, BATTERIES, AND ALTERNATORS

- Cold start 120V
- Cold start 240V

### **CAT CONNECT TECHNOLOGIES**

- Link technologies: VIMS<sup>™</sup>
- 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
- Cat Object Detection

### **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, high debris with wider fin spacing

### LINKAGE

- High lift
- Forestry (966 only)
- Extended capacity (972 only)
- Quick coupler ready

### WORK TOOLS

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

### HYDRAULICS

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

### FLUIDS

• Premixed extended life coolant with freeze protection to -50° C (-58° F)

### **OTHER OPTIONAL EQUIPMENT**

- Fenders, roading
- · Guard, power train
- Oil change, high speed engine
- Precleaner, turbine
- Precleaner, trash
- Wheel chocks

### **OTHER OPTIONAL CONFIGURATIONS**

- Aggregate Handler
- Industrial and Waste Handler
- Forestry (966 only)
- Steel Mill (972 only)

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