

# 966M XE/972M XE



Wheel Loaders

2017



|                                     | 966M XE                                  | 972M XE                                  |
|-------------------------------------|--|--|
| <b>Engine Model</b>                 | Cat® C9.3 ACERT™                         | Cat C9.3 ACERT                           |
| <b>Maximum Net Power – ISO 9249</b> | 222 kW (302 hp metric)                   | 232 kW (315 hp metric)                   |
| <b>Bucket Capacities</b>            | 3.20 m <sup>3</sup> -7.40 m <sup>3</sup> | 3.20 m <sup>3</sup> -9.94 m <sup>3</sup> |
| <b>Operating Weight</b>             | 23 220 kg*                               | 24 897 kg**                              |

\*For 4.2 m<sup>3</sup> general purpose buckets with BOCE.  
\*\*For 4.8 m<sup>3</sup> general purpose buckets with BOCE.



## RELIABLE, PRODUCTIVE AND FUEL EFFICIENT

- Up to 25% more fuel efficient than the industry-leading M Series\*
- Up to 35% more fuel efficient than K Series\*
- **Cat continuously variable transmission** – Power is transmitted through a variator unit (hydraulic pump and motor) as well as a parallel mechanical gear path (highest efficiency) in order to maximize the transmission efficiency over a wide range of operating conditions
- **Performance Series buckets** are easy to load and improve material retention
- **Cat Fusion™ coupler system and work tools** provide a wide range of work tools and allow the same work tool on different sizes of wheel loaders
- **Cat engine with ACERT Technology** meets EU Stage IV emission standards and includes Cat Clean Emissions Module for continuous and efficient operation
- **Next generation axles** with standard on-the-go disc-type front manual differential locks provide optimal traction in varying underfoot conditions for improved productivity
- **Next generation load-sensing hydraulic system** provides optimal control of machine functions

## EASE OF OPERATION

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

## SERVICE ACCESS

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

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*\*Fuel efficiency is measured in mass of material moved per volume of fuel burned. Average efficiency improvement as tested and analyzed for an average composite cycle and standard configuration with variations per comparable model with and without Economy Mode active. Factors influence result variation such as, but not limited to, machine configuration, operator technique, machine application, climate, etc.*

*\*\*Optional configuration and equipment may vary from region to region. Consult your Caterpillar representative for further details.*





**The 966M XE and 972M XE Wheel Loaders have a Stage IV ACERT engine equipped with a combination of proven electronic, fuel, air and aftertreatment components. Applying proven technologies systematically and strategically helps meet your high expectations for productivity and fuel efficiency. Deep system integration results in reduced emissions, improved performance and improved fuel economy without interrupting machine performance making it seamless to you.**

**The 966M XE and 972M XE Wheel Loader, with an advanced power train, has been designed to deliver superior performance and fuel efficiency while simplifying the operator's interface and operating technique. These machines excel at truck loading and the 972M XE is a great 3-pass match for large on-highway trucks. Aggregate Handler and other optional configurations are available.\*\***





# Reliable

Proven Components and Technology You Can Count On.

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

## More Powerful, Reliable Engine Electronics

The electronics used in Stage IV ACERT 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 XE and 972M XE 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™ and the online VisionLink® application enable you to monitor real-time machine data and manage machines health. Your Cat dealer offers expert advice and S-O-S™ Services to maintain equipment reliability and efficiency.

## Cold Start Package

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



## Durable

Better Designed to Meet Your Needs.

### Frames

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

The M Series articulating hitch system, joining the front and rear frames, provides 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.
- **Unsurpassed Reliability** through commonality and simplicity of design.
- **Maximized Uptime and Reduced Cost** with world-class support from the Cat dealer network.
- **Minimized Impact of Emission Systems** – Designed to be transparent to you without requiring interaction.
- **Durable Designs** with long life to overhaul.

## Hydraulics

The dual accumulator ride-control system enables it to be more effective over a greater payload range, increasing productivity and your efficiency due to a better ride.

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

## Cat Continuously Variable Transmission

Power is transmitted through a variator unit (hydraulic pump and motor) as well as a parallel mechanical gear path (highest efficiency) in order to maximize the transmission efficiency over a wide range of operating conditions. The continuously variable gear ratio of the variator enables the ability to run the engine at a more efficient operating range independent of machine ground speed.

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

The 966M XE and 972M XE feature an external caliper disc parking brake mounted to the input shaft of the front axles eliminating the inefficiencies posed by wet parking brakes. Additionally, the external caliper parking brake is easily accessible for inspection and service; there is no oil to change reducing fuel and maintenance costs.

# Fuel Efficient

## Engineered to Lower Your Operating Costs.

### Advanced Systems with Innovative Integration

- The deep system integration of the engine and emissions system, power train, hydraulic system and cooling system intelligently lower the average working engine speeds and reduce the overall system heat loads which result in significantly increased performance and fuel efficiency.
- The torque converter is eliminated and rated engine speed lowered.
- The machine speed can be controlled independently of the engine speed and engine retarding energy is transferred to the fan and implement pumps.
- The 966M XE and 972M XE are the class leaders in fuel efficiency.



### Engine and Emissions

The Cat C9.3 ACERT engine is designed for maximum fuel efficiency and increased power density, while meeting Stage IV emission standards. This engine features innovative Cat electronics, fuel injection, air-management systems, aftertreatment solution with Cat Selective Catalytic Reduction, and a fuel efficient regeneration system.

### Next Generation Fuel Systems

Cat injection timing precisely controls fuel injection through a series of carefully timed microbursts, providing more control of combustion for the cleanest, most efficient fuel burn. On 966M XE and 972M XE, the high pressure common rail fuel system boosts performance and reduces 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 Stage IV emission standards, the Selective Catalytic Reduction (SCR), has been added to the already proven Cat Stage IIIB aftertreatment solution.

# Easy to Operate

Safe. Comfortable. Efficient.



Improving your efficiency remains a key design goal for the 966M XE and 972M XE. By ensuring you are safe, confident in the control of your machine, have a clean, comfortable and quiet operating environment with controls that are intuitive and low effort, you will be less fatigued, more efficient and more productive.

## Cab Access

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

## Visibility

Once in the cab, the door securely seals against the roll-formed ROPS posts and the lower glass panel extends several inches down to improve visibility to the left side of the machine. Large convex mirrors improve visibility to the rear and integrated spot mirrors provide visibility close to both sides of the machine.

## Sound and Vibration

Viscous cab mounts connect the cab to the machine's frame, decreasing noise and vibration which means you will be able to be more efficient and productive all day long in a sustainable work environment.

## Central Display

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

## Touch Screen Display and Control Panel

A multipurpose color touch screen display dramatically simplifies the operator interface; with machine controls, rear vision camera and new fully integrated Cat Production Measurement system.

Sealed against moisture and dirt, the centralized switch panel with LEDs provides reliability and ready access to frequently required functions, even while wearing gloves.

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

You will enjoy and quickly adapt to the seat-mounted EH joystick steering system, which provides precision control and dramatically decreases arm fatigue.

## Faster Learning with Novice Operators

It is easier to become effective with the Cat continuous variable transmission. There is no need to shift gears which enables you to focus on loading the bucket.







### Simpler Operator Interface

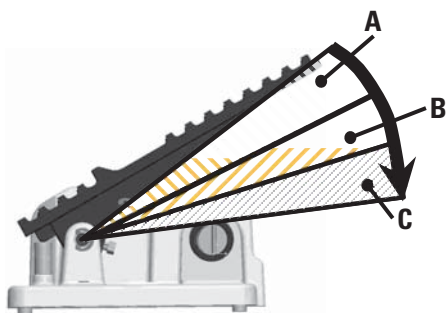
Reduced operator interface/operating mode complexity.

### Right Pedal Control – GO

The right pedal can be electronically set to provide the desired amount of propulsion without the need to keep the pedal depressed.

### Left Pedal Modulation – STOP

Provides smooth and continuous operation. Initial pedal travel acts as a modulated neutralizer, progressively reducing rimpull.



A – Modulated neutralizer  
 B – Continuous integrated retarding  
 C – Service brake application

### Maneuverability on Grade

Machine maneuvering on grade is made easy with smooth retarding and anti-rollback feature.

### Advanced Power Diagnostic

On-board diagnostic replaces single/double stall testing and offers additional information to help troubleshoot.

### Simplified Shifting Strategy

#### • Full Automatic Transmission

You can choose to put machine in 4F and go without need for further shifting.

#### • Programmable Virtual Gears

Provide familiar, conventional speed range limiting with added flexibility of selecting virtual gears in-between (0.5F, 0.6F, 0.7F...1F, etc...) for desired applications.

#### • Integrated Flexibility

Separate and settable forward and reverse maximum speed virtual gears make operating the machine simple.

#### • Smooth and Continuous Deceleration under Load without Manual Downshifting

Allows you to engage the pile from 2nd gear run out speeds without having to manually downshift. Intuitively changes from roading to dozing without any input from you.

### Simpler Directional Shift Operation

Offers smooth and efficient directional changes without the need to modulate brakes/throttle, or coast in neutral, resulting in increased tire life and operator comfort.

# 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 to the machine, therefore payloads can be increased above other applications by installing larger buckets and 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.





# Versatile

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

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

### Performance Series Buckets

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

## Fusion Quick Coupler

### Improved Machine Performance

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

### No Loss of Performance

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

### Unsurpassed Durability

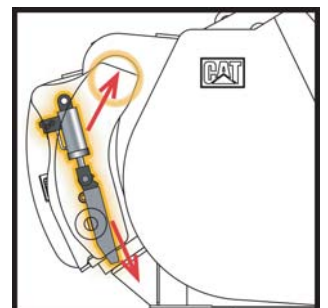
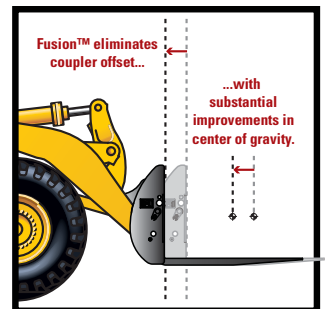
An advanced wedging mechanism creates a tight, rattle-free fit. This patented lock up system eliminates play and wear – resulting in a long service life.

### Increased Visibility

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

### Common Interface Compatibility

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





# Integrated Technologies

Monitor, Manage, and Enhance Job Site Operations.

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

Cat Connect services are also available from your dealership including:



EQUIPMENT  
MANAGEMENT

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



PRODUCTIVITY

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



SAFETY

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

Consult your local dealer on the services available.

Featured Cat Connect technologies include:



## LINK Technologies

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

### Product Link/VisionLink

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





### PAYLOAD Technologies

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

#### Cat Production Measurement 2.0 (Optional)

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



### DETECT Technologies

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

#### Rear Vision Camera

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

#### Rear Object Detection (Optional)

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

# Owning Costs

## Proven Best Investment.

### Customer Support Agreements

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

### Monitoring Systems

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

- **Cat Product Link** – Cat Product Link allows remote monitoring of equipment to improve overall fleet management effectiveness. Product Link is deeply integrated into machine systems. Events and diagnostic codes, as well as hours, fuel, idle time and other detailed information are transmitted to a secure web based application, VisionLink. VisionLink includes powerful tools to convey information to users and dealers, including mapping, working and idle time, fuel level and more.



- **S-O-S Services** – Helps manage component life and decrease machine downtime, increasing productivity and efficiency. Regular fluid sampling can help track what is going on inside your machine. Wear-related problems are predictable and easily repairable. Maintenance can be done to accommodate your schedule, resulting in increased uptime and flexibility in maintenance repairs before failure.

### Cat Autolube System

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

### Parts Availability

Caterpillar provides an unsurpassed level of personalized service to help you work more cost effectively and efficiently. By utilizing a worldwide parts network Cat dealers help minimize machine downtime and save money by delivering replacement parts within 24 hours.

### Resale Value

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





# Operating Costs

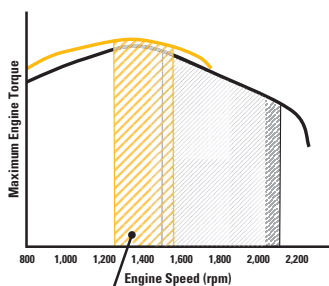
## Save Time and Money by Working Smart.

Data from customer machines show Cat wheel loaders are the most fuel efficient machines in the industry. Several features contribute to this excellent fuel efficiency:

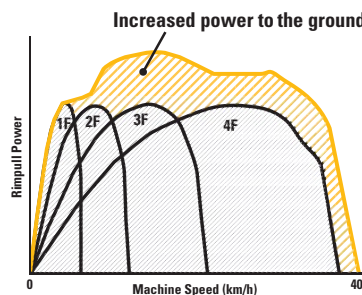
- **Stage IV ACERT Engine, Hydraulics, Transmission and Ride Control** – Deep system integration results in reduced emissions, more productivity, lower fuel consumption, without interrupting machine performance – making it seamless to you.
- **Advanced Power Train** – With the integrated Cat continuously variable transmission, the machine is well balanced and easier to operate at extremely low engine speeds providing increased productivity while burning less fuel.
- **Manual/Automatic Differential Locks** – Increase traction, reduce tire scuffing compared to other traction aids, further reducing your operating costs.
- **External Caliper Disc Parking Brakes** – Easily accessible for maintenance.
- **Machine Configuration** – Select the correct linkage, guarding, work tool and tire type based on machine application. Radial tires are preferred; ensure proper inflation pressures. Heavier tires burn more fuel.
- **Performance Series Buckets** – Deliver faster fill times and better material retention, ultimately reducing cycle times while improving productivity and fuel efficiency.

### Enabling Application Efficiency

- **Loading Bucket** – Load at low engine speed. 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. When slowing down the machine, use the lift command to recover the retarding energy.
- **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.



Lower engine speed working range



— advanced power train  
— conventional power train

# Serviceable

Easy to Maintain. Easy to Service.

## Engine Access ①

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 ②

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

## Service Centers

The electrical ③ and hydraulic ④ service centers provide grouped access to numerous features, enhancing safety and convenience for you and your service technicians, while reducing service time.

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

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

Hydraulic system components on the 966M XE and 972M XE are protected by full flow and kidney-loop filtration. A filter in the hydraulic tank return line filters all of the oil returning to the tank. There is also a case drain screen for additional protection and finally, a separate kidney-loop filter with a finer micron rating continuously filters smaller particles out of the system. This multilevel design ensures the hydraulic oil is clean and thoroughly protects the rest of the hydraulic system from contamination. A thermal bypass valve has been added to improve hydraulic system warm-up.





# Sustainable Conserving Resources.

The 966M XE and 972M XE are designed to compliment your business plan, reduce emissions and minimize the consumption of natural resources.

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



## Customer Support Unmatched Support Makes the Difference.



### Renowned Cat Dealer Support

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

# 966M XE/972M XE Wheel Loaders Specifications

## Engine – 966M XE

|                                |                        |
|--------------------------------|------------------------|
| Engine Model                   | Cat C9.3 ACERT         |
| Maximum Net Power (1,600 rpm)  |                        |
| ISO 9249                       | 222 kW (302 hp metric) |
| Peak Gross Torque (1,200 rpm)  |                        |
| ISO 14396                      | 1708 N·m               |
| Maximum Net Torque (1,200 rpm) |                        |
| ISO 9249                       | 1618 N·m               |
| Bore                           | 115 mm                 |
| Stroke                         | 149 mm                 |
| Displacement                   | 9.3 L                  |

- Cat engine with ACERT Technology meets Stage IV emission standards.
- The power ratings apply at the stated speed when tested under the reference conditions for the specified standards.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan running up to maximum speed, alternator, air cleaner and aftertreatment.

## Buckets – 966M XE

|                   |                        |
|-------------------|------------------------|
| Bucket Capacities | 2.5-9.2 m <sup>3</sup> |
|-------------------|------------------------|

## Weight – 966M XE

|                  |           |
|------------------|-----------|
| Operating Weight | 23 220 kg |
|------------------|-----------|

- 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> general purpose bucket with BOCE.

## Operating Specifications – 966M XE

|                                     |           |
|-------------------------------------|-----------|
| Static Tipping Load – Full 37° Turn |           |
| With Tire Deflection                | 14 668 kg |
| No Tire Deflection                  | 15 822 kg |
| Breakout Force                      | 173 kN    |

- For a machine configuration as defined under “Weight.”
- Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

## Engine – 972M XE

|                                |                        |
|--------------------------------|------------------------|
| Engine Model                   | Cat C9.3 ACERT         |
| Maximum Net Power (1,600 rpm)  |                        |
| ISO 9249                       | 232 kW (315 hp metric) |
| Peak Gross Torque (1,200 rpm)  |                        |
| ISO 14396                      | 1708 N·m               |
| Maximum Net Torque (1,200 rpm) |                        |
| ISO 9249                       | 1618 N·m               |
| Bore                           | 115 mm                 |
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| Displacement                   | 9.3 L                  |

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- 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 running up to maximum speed, alternator, air cleaner and aftertreatment.

## Buckets – 972M XE

|                   |                        |
|-------------------|------------------------|
| Bucket Capacities | 2.9-9.9 m <sup>3</sup> |
|-------------------|------------------------|

## Weight – 972M XE

|                  |           |
|------------------|-----------|
| Operating Weight | 24 897 kg |
|------------------|-----------|

- 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> general purpose bucket with BOCE.

## Operating Specifications – 972M XE

|                                     |           |
|-------------------------------------|-----------|
| Static Tipping Load – Full 37° Turn |           |
| With Tire Deflection                | 16 164 kg |
| No Tire Deflection                  | 17 421 kg |
| Breakout Force                      | 196 kN    |

- For a machine configuration as defined under “Weight.”
- Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.



# 966M XE/972M XE Wheel Loaders Specifications

## Brakes

|        |                                     |
|--------|-------------------------------------|
| Brakes | Brakes meet ISO 3450:2011 standards |
|--------|-------------------------------------|

## Transmission Virtual Gears

|           |           |
|-----------|-----------|
| Forward 1 | 6.7 km/h  |
| Forward 2 | 12.6 km/h |
| Forward 3 | 22.1 km/h |
| Forward 4 | 39.5 km/h |
| Reverse 1 | 6.7 km/h  |
| Reverse 2 | 12.6 km/h |
| Reverse 3 | 28.0 km/h |

- Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 826 mm roll radius.

## Hydraulic System

|   |                              |             |
|---|------------------------------|-------------|
| Implement Pump Type   | Variable Displacement Piston |             |
| Implement System  |                              |             |
| Maximum Pump Output (1,600 rpm*)                                      | 385 L/min                    |             |
| Maximum Operating Pressure  | 31 000 kPa                   |             |
| Maximum Flow – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function     | 240 L/min                    |             |
| Maximum Pressure – Optional 3 <sup>rd</sup> /4 <sup>th</sup> Function | 21 780 kPa                   |             |
| Hydraulic Cycle Time with Rated Payload                               | <b>966M</b>                  | <b>972M</b> |
| 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.                     | 3.4 Sec.    |
| Total   | 10.1 Sec.                    | 11.0 Sec.   |

\*Engine speed.

## Axles

|                                    |                         |
|------------------------------------|-------------------------|
| Front                              | Fixed                   |
| Rear                               | Oscillating ±13 degrees |
| Maximum Single-Wheel Rise and Fall | 502 mm                  |

## Cab

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

## Sound

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

|  |                       |
|--|-----------------------|
| Operator Sound Pressure Level (ISO 6396:2008)                    | 67 dB(A)*             |
| Exterior Sound Power Level (ISO 6395:2008)                       | 105 L <sub>WA</sub> * |
| European Union Directive “2000/14/EC” as amended by “2005/88/EC” |                       |

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

## Service Refill Capacities

|  |        |
|--|--------|
| Fuel Tank                              | 302 L  |
| DEF Tank*                              | 16.8 L |
| Cooling System                         | 71.6 L |
| Crankcase                              | 24.5 L |
| Transmission                           | 63 L   |
| Differentials and Final Drives – Front | 57 L   |
| Differentials and Final Drives – Rear  | 57 L   |
| Hydraulic Tank                         | 125 L  |

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

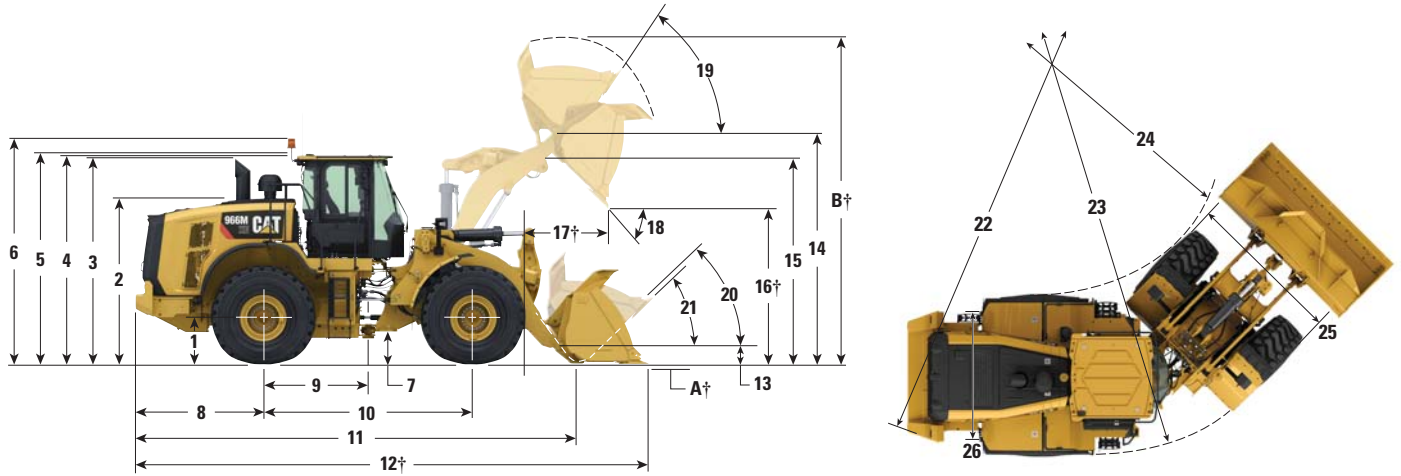
## Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant with a CO<sub>2</sub> equivalent 2.288 metric tonne.

# 966M XE/972M XE Wheel Loaders Specifications

## 966M XE/972M XE Dimensions

All dimensions are approximate.



|   | 966M XE<br>Standard Lift | 966M XE<br>High Lift | 972M XE<br>Standard Lift | 972M XE<br>High Lift |
|---|--------------------------|----------------------|--------------------------|----------------------|
| 1 Height to Axle Centerline                         | 799 mm                   | 799 mm               | 799 mm                   | 799 mm               |
| 2 Height to Top of Hood                             | 2818 mm                  | 2818 mm              | 2818 mm                  | 2818 mm              |
| 3 Height to Top of Exhaust Pipe                     | 3522 mm                  | 3522 mm              | 3522 mm                  | 3522 mm              |
| 4 Height to Top of ROPS                             | 3587 mm                  | 3587 mm              | 3587 mm                  | 3587 mm              |
| 5 Height to Top of Product Link Antenna             | 3636 mm                  | 3636 mm              | 3636 mm                  | 3636 mm              |
| 6 Height to Top of Warning Beacon                   | 3859 mm                  | 3859 mm              | 3859 mm                  | 3859 mm              |
| 7 Ground Clearance                                  | 434 mm                   | 434 mm               | 434 mm                   | 434 mm               |
| 8 Center Line of Rear Axle to Edge of Counterweight | 2180 mm                  | 2500 mm              | 2500 mm                  | 2500 mm              |
| 9 Center Line of Rear Axle to Hitch                 | 1775 mm                  | 1775 mm              | 1775 mm                  | 1775 mm              |
| 10 Wheelbase  | 3550 mm                  | 3550 mm              | 3550 mm                  | 3550 mm              |
| 11 Overall Length (without bucket)                  | 7289 mm                  | 8109 mm              | 7774 mm                  | 8109 mm              |
| 12 Shipping Length (with bucket level on ground)*†  | 8750 mm                  | 9570 mm              | 9315 mm                  | 9650 mm              |
| 13 Hinge Pin Height at Carry Height                 | 630 mm                   | 778 mm               | 680 mm                   | 778 mm               |
| 14 Hinge Pin Height at Max Lift                     | 4235 mm                  | 4793 mm              | 4458 mm                  | 4793 mm              |
| 15 Lift Arm Clearance at Max Lift                   | 3643 mm                  | 4140 mm              | 3843 mm                  | 4140 mm              |
| 16 Dump Clearance at Max Lift and 45° Discharge*†   | 2991 mm                  | 3549 mm              | 3154 mm                  | 3490 mm              |
| 17 Reach at Max Lift and 45° Discharge*†            | 1353 mm                  | 1328 mm              | 1357 mm                  | 1380 mm              |
| 18 Dump Angle at Max Lift and Dump (on stops)*      | 49 degrees               | 48 degrees           | 48 degrees               | 48 degrees           |
| 19 Rack Back at Max Lift*                           | 62 degrees               | 71 degrees           | 56 degrees               | 71 degrees           |
| 20 Rack Back at Carry Height*                       | 50 degrees               | 49 degrees           | 50 degrees               | 49 degrees           |
| 21 Rack Back at Ground*                             | 42 degrees               | 39 degrees           | 41 degrees               | 39 degrees           |
| 22 Turning Radius to Counterweight                  | 6804 mm                  | 6804 mm              | 6804 mm                  | 6804 mm              |
| 23 Turning Radius to Outside of Tires               | 6761 mm                  | 6761 mm              | 6761 mm                  | 6761 mm              |
| 24 Turning Radius to Inside of Tires                | 3853 mm                  | 3853 mm              | 3853 mm                  | 3853 mm              |
| 25 Max Width over Tires (unloaded)                  | 2991 mm                  | 2991 mm              | 2991 mm                  | 2991 mm              |
| Max Width over Tires (loaded)                       | 3009 mm                  | 3009 mm              | 3009 mm                  | 3009 mm              |
| 26 Tread Width                                      | 2230 mm                  | 2230 mm              | 2230 mm                  | 2230 mm              |

\*966M XE Standard and High Lift are with 4.2 m<sup>3</sup> general purpose pin-on bucket with BOCE (see Operating Specifications for other buckets).

†972M XE Standard and High Lift are with 4.8 m<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 Dimension changes – Tires Chart for other tires).



# 966M XE/972M XE Wheel Loaders Specifications

## Dimension Changes – Tires

| Tire Brand  | Michelin | Michelin | Michelin | Bridgestone | Bridgestone |
|---|----------|----------|----------|-------------|-------------|
| Tire Size   | 26.5R25  | 26.5R25  | 26.5R25  | 26.5R25     | 26.5R25     |
| Tread Type  | L-4      | L-5      | L-5      | L-3         | L-4         |
| Tread Pattern   | XLDD1    | XLDD2    | XMINED2  | VJT         | VSNT        |
| Width over Tires – Maximum (empty)*                       | 2987 mm  | 2986 mm  | 2970 mm  | 2982 mm     | 2973 mm     |
| Width over Tires – Maximum (loaded)*                      | 3019 mm  | 3015 mm  | 2998 mm  | 3016 mm     | 2993 mm     |
| Change in Vertical Dimensions (average of front and rear) | 44 mm    | 39 mm    | 53 mm    | 15 mm       | 25 mm       |
| Change in Horizontal Reach                                | -36 mm   | -34 mm   | -32 mm   | -3 mm       | -24 mm      |
| Change in Clearance Circle (radius) to Outside of Tires   | 5 mm     | 1 mm     | -7 mm    | 3 mm        | -8 mm       |
| Change in Clearance Circle (radius) to Inside of Tires    | -5 mm    | -1 mm    | 7 mm     | -3 mm       | 8 mm        |
| Change in Operating Weight (without Ballast)              | 420 kg   | 716 kg   | 1068 kg  | 164 kg      | 624 kg      |

## Changes Specific to the 966M XE

|   |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|
| Change in Static Tipping Load – Straight    | 303 kg | 517 kg | 771 kg | 118 kg | 451 kg |
| Change in Static Tipping Load – Articulated | 271 kg | 461 kg | 688 kg | 106 kg | 402 kg |

## Changes Specific to the 972M XE

|   |        |        |        |        |        |
|---|--------|--------|--------|--------|--------|
| Change in Static Tipping Load – Straight    | 283 kg | 482 kg | 719 kg | 110 kg | 420 kg |
| Change in Static Tipping Load – Articulated | 252 kg | 429 kg | 640 kg | 98 kg  | 374 kg |

## Dimension Changes – Tires

| Tire Brand  | Bridgestone | Bridgestone | Flexport           | Flexport           |
|---|-------------|-------------|--------------------|--------------------|
| Tire Size   | 26.5R25     | 775/65R29   | 70×14×28 (26.5×25) | 70×14×28 (26.5×25) |
| Tread Type  | L-5         | L-3         | —                  | —                  |
| Tread Pattern   | VSDL        | VTS         | OTR                | SMOOTH             |
| Width over Tires – Maximum (empty)*                       | 2874 mm     | 3080 mm     | 2955 mm            | 2896 mm            |
| Width over Tires – Maximum (loaded)*                      | 2900 mm     | 3101 mm     | 2972 mm            | 2915 mm            |
| Change in Vertical Dimensions (average of front and rear) | 50 mm       | 17 mm       | 59 mm              | 52 mm              |
| Change in Horizontal Reach                                | -29 mm      | -5 mm       | -23 mm             | -13 mm             |
| Change in Clearance Circle (radius) to Outside of Tires   | -54 mm      | 46 mm       | -19 mm             | -47 mm             |
| Change in Clearance Circle (radius) to Inside of Tires    | 54 mm       | -46 mm      | 19 mm              | 47 mm              |
| Change in Operating Weight (without Ballast)              | 1136 kg     | 856 kg      | 3287 kg            | 3764 kg            |

## Changes Specific to the 966M XE

|   |        |        |         |         |
|---|--------|--------|---------|---------|
| Change in Static Tipping Load – Straight    | 821 kg | 618 kg | 2375 kg | 2719 kg |
| Change in Static Tipping Load – Articulated | 732 kg | 551 kg | 2118 kg | 2425 kg |

## Changes Specific to the 972M XE

|   |        |        |         |         |
|---|--------|--------|---------|---------|
| Change in Static Tipping Load – Straight    | 764 kg | 576 kg | 2212 kg | 2533 kg |
| Change in Static Tipping Load – Articulated | 680 kg | 513 kg | 1969 kg | 2255 kg |

\*Width over bulge and includes tire growth.

**Note:** Changes compared to:

- 966M XE with Michelin 26.5R25 XHA2 L3 radial tires.
- 972M XE with Michelin 26.5R25 XHA2 L3 radial tires.

# 966M XE/972M XE Wheel Loaders Specifications

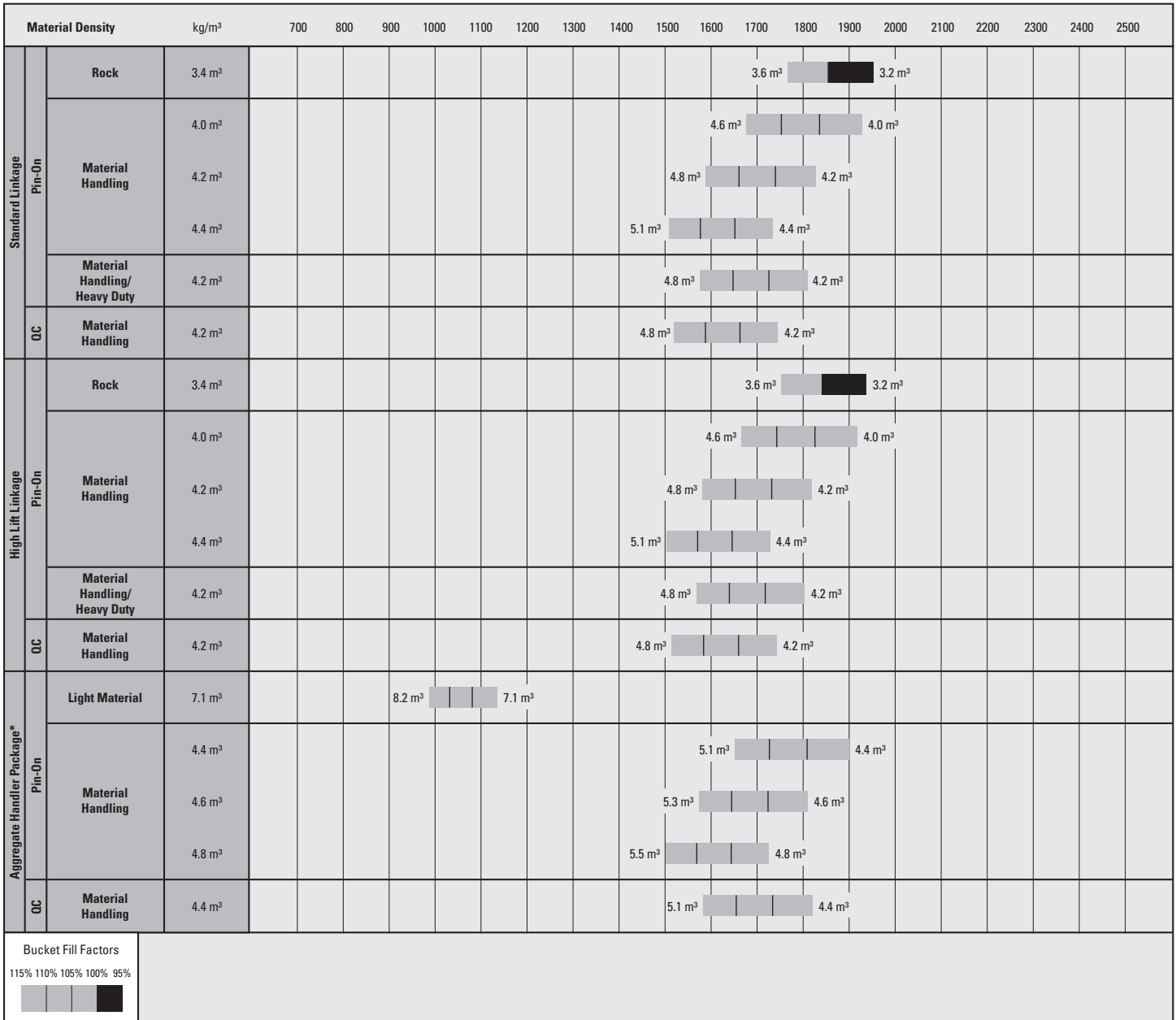
## 966M XE Bucket Fill Factors and Selection Chart

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

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

\*As a % of ISO rated capacity.

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



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

QC = Quick Coupler

\*Not for use with L5 Tires, Teeth or Teeth and Segments.



# 966M XE/972M XE Wheel Loaders Specifications

## 966M XE Operating Specifications with Buckets

| Machine  | Standard Linkage      |                    |                              |        |                       |                       |        | High Lift Linkage Change** |
|--|-----------------------|--------------------|------------------------------|--------|-----------------------|-----------------------|--------|----------------------------|
|  | Pin-On                |                    |                              |        | Fusion QC             | Universal QC          |        |                            |
| Pin/Quick Coupler  |                       |                    |                              |        |                       |                       |        |                            |
| Bucket Type  | Material Handling     |                    | Material Handling Heavy Duty |        | Material Handling     | Material Handling     |        |                            |
|  | Bolt-On Cutting Edges | Teeth and Segments | Bolt-On Cutting Edges        | FMT    | Bolt-On Cutting Edges | Bolt-On Cutting Edges |        |                            |
| Edge Type  |                       |                    |                              |        |                       |                       |        |                            |
| Capacity – Rated   | m <sup>3</sup>        | 4.20               | 4.20                         | 4.20   | 4.20                  | 4.20                  | 4.20   | —                          |
| Capacity – Rated at 110% Fill Factor                         | m <sup>3</sup>        | 4.62               | 4.62                         | 4.62   | 4.62                  | 4.62                  | 3.80   | —                          |
| Width  | mm                    | 3220               | 3271                         | 3220   | 3201                  | 3220                  | 3220   | —                          |
| <b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge | mm                    | 2949               | 2787                         | 2949   | 3001                  | 2899                  | 2787   | 559                        |
| <b>17</b> † Reach at Maximum Lift and 45° Discharge          | mm                    | 1245               | 1372                         | 1245   | 1236                  | 1296                  | 1498   | -25                        |
| Reach at Level Lift Arm and Bucket Level                     | mm                    | 2774               | 2978                         | 2774   | 2731                  | 2845                  | 3067   | 404                        |
| <b>A</b> † Digging Depth                                     | mm                    | 124                | 124                          | 124    | 94                    | 124                   | 60     | -25                        |
| <b>12</b> † Shipping Length (with Bucket)                    | mm                    | 8721               | 8946                         | 8721   | 8653                  | 8792                  | 8961   | 825                        |
| <b>B</b> † Overall Height with Bucket at Maximum Lift        | mm                    | 5901               | 5901                         | 5901   | 5940                  | 5943                  | 6134   | 559                        |
| Loader Clearance Circle Radius with Bucket at Carry Position | mm                    | 7504               | 7589                         | 7504   | 7473                  | 7519                  | 7561   | 242                        |
| Static Tipping Load, Straight (With Tire Deflection)*        | kg                    | 16 580             | 16 398                       | 16 465 | 16 155                | 15 919                | 14 950 | 55                         |
| Static Tipping Load, Straight (No Tire Deflection)*          | kg                    | 17 731             | 17 546                       | 17 615 | 17 312                | 17 052                | 16 058 | -32                        |
| Static Tipping Load, Articulated (With Tire Deflection)*     | kg                    | 14 605             | 14 421                       | 14 489 | 14 162                | 13 969                | 13 078 | -128                       |
| Static Tipping Load, Articulated (No Tire Deflection)*       | kg                    | 15 740             | 15 555                       | 15 623 | 15 307                | 15 091                | 14 177 | -187                       |
| Breakout Force***  | kN                    | 177                | 175                          | 176    | 180                   | 167                   | 141    | -15                        |
| Operating Weight*  | kg                    | 23 217             | 23 355                       | 23 336 | 23 706                | 23 678                | 23 889 | 1612                       |

\*Static tipping loads and operating weights 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.

\*\*\*Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

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

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

†Illustration shown with Dimension charts.

FMT = Flush Mounted Teeth

QC = Quick Coupler

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

# 966M XE/972M XE Wheel Loaders Specifications

## 966M XE Operating Specifications with Buckets

| Machine  |                | Standard Linkage            |        |                       |                    |                       |                    | High Lift Linkage Change** |
|--|----------------|-----------------------------|--------|-----------------------|--------------------|-----------------------|--------------------|----------------------------|
| Pin/Quick Coupler  |                | Pin-On                      |        |                       |                    |                       |                    |                            |
| Bucket Type  |                | Material Handling (Roading) |        | Material Handling     |                    | Rock (V-Edge)         |                    |                            |
| Edge Type  |                | Bolt-On Cutting Edges       | FMT    | Bolt-On Cutting Edges | Teeth and Segments | Bolt-On Cutting Edges | Teeth and Segments |                            |
| Capacity – Rated   | m <sup>3</sup> | 4.20                        | 4.20   | 4.40                  | 4.40               | 3.40                  | 3.40               | —                          |
| Capacity – Rated at 110% Fill Factor                         | m <sup>3</sup> | 3.70                        | 3.56   | 4.84                  | 4.84               | 3.74                  | 3.74               | —                          |
| Width  | mm             | 2995                        | 3000   | 3220                  | 3271               | 3252                  | 3252               | —                          |
| <b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge  | mm             | 2969                        | 3020   | 2921                  | 2758               | 3124                  | 3026               | 559                        |
| <b>17†</b> Reach at Maximum Lift and 45° Discharge           | mm             | 1406                        | 1393   | 1274                  | 1401               | 1419                  | 1541               | -25                        |
| Reach at Level Lift Arm and Bucket Level                     | mm             | 2854                        | 2811   | 2814                  | 3018               | 2783                  | 2939               | 405                        |
| <b>A†</b> Digging Depth                                      | mm             | 124                         | 94     | 124                   | 124                | 68                    | 68                 | -25                        |
| <b>12†</b> Shipping Length (with Bucket)                     | mm             | 8801                        | 8733   | 8761                  | 8986               | 8715                  | 8876               | 829                        |
| <b>B†</b> Overall Height with Bucket at Maximum Lift         | mm             | 5939                        | 5939   | 5931                  | 5931               | 5845                  | 5845               | 559                        |
| Loader Clearance Circle Radius with Bucket at Carry Position | mm             | 7421                        | 7401   | 7514                  | 7600               | 7529                  | 7572               | 242/235                    |
| Static Tipping Load, Straight (With Tire Deflection)*        | kg             | 16 858                      | 16 957 | 16 501                | 16 318             | 17 075                | 17 006             | -62/58                     |
| Static Tipping Load, Straight (No Tire Deflection)*          | kg             | 18 022                      | 18 129 | 17 657                | 17 471             | 18 262                | 18 191             | -145/-7                    |
| Static Tipping Load, Articulated (With Tire Deflection)*     | kg             | 14 889                      | 14 979 | 14 527                | 14 343             | 15 033                | 14 963             | -220/-111                  |
| Static Tipping Load, Articulated (No Tire Deflection)*       | kg             | 16 034                      | 16 132 | 15 668                | 15 481             | 16 204                | 16 133             | -288/-163                  |
| Breakout Force***  | kN             | 168                         | 173    | 171                   | 170                | 186                   | 185                | -15                        |
| Operating Weight*  | kg             | 22 848                      | 22 833 | 23 270                | 23 408             | 24 007                | 24 059             | 1612                       |

\*Static tipping loads and operating weights 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 (Rock/Other Buckets).

\*\*\*Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

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

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

†Illustration shown with Dimension charts.

FMT = Flush Mounted Teeth

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



# 966M XE/972M XE Wheel Loaders Specifications

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

| Machine  |                | Aggregate Handler***  |                       |                       |                       |                       |                       |
|--|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Pin/Quick Coupler  |                | Pin-On                |                       |                       |                       | Fusion QC             | Universal QC          |
| Bucket Type  |                | Material Handling     |                       |                       | Light Material        | Material Handling     | Material Handling     |
| Edge Type  |                | Bolt-On Cutting Edges | Bolt-On Cutting Edges | Bolt-On Cutting Edges | Bolt-On Cutting Edges | Bolt-On Cutting Edges | Bolt-On Cutting Edges |
| Capacity – Rated   | m <sup>3</sup> | 4.40                  | 4.60                  | 4.80                  | 7.10                  | 4.40                  | 4.40                  |
| Capacity – Rated at 110% Fill Factor                         | m <sup>3</sup> | 4.84                  | 5.06                  | 5.28                  | 7.81                  | 4.84                  | 4.00                  |
| Width  | mm             | 3220                  | 3220                  | 3220                  | 3447                  | 3220                  | 3220                  |
| <b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge | mm             | 2921                  | 2893                  | 2865                  | 2625                  | 2872                  | 2841                  |
| <b>17</b> † Reach at Maximum Lift and 45° Discharge          | mm             | 1274                  | 1302                  | 1330                  | 1548                  | 1323                  | 1622                  |
| Reach at Level Lift Arm and Bucket Level                     | mm             | 2814                  | 2854                  | 2894                  | 3217                  | 2884                  | 3104                  |
| <b>A</b> † Digging Depth                                     | mm             | 124                   | 124                   | 124                   | 140                   | 124                   | 60                    |
| <b>12</b> † Shipping Length (with Bucket)                    | mm             | 8809                  | 8849                  | 8889                  | 9224                  | 8879                  | 9046                  |
| <b>B</b> † Overall Height with Bucket at Maximum Lift        | mm             | 5931                  | 5982                  | 6023                  | 6071                  | 5973                  | 6183                  |
| Loader Clearance Circle Radius with Bucket at Carry Position | mm             | 7514                  | 7524                  | 7534                  | 7728                  | 7529                  | 7571                  |
| Static Tipping Load, Straight (With Tire Deflection)*        | kg             | 18 077                | 18 013                | 17 938                | 17 508                | 17 397                | 16 505                |
| Static Tipping Load, Straight (No Tire Deflection)*          | kg             | 19 386                | 19 329                | 19 260                | 18 881                | 18 687                | 17 789                |
| Static Tipping Load, Articulated (With Tire Deflection)*     | kg             | 15 861                | 15 799                | 15 726                | 15 301                | 15 209                | 14 390                |
| Static Tipping Load, Articulated (No Tire Deflection)*       | kg             | 17 158                | 17 103                | 17 036                | 16 663                | 16 492                | 15 670                |
| Breakout Force**   | kN             | 171                   | 166                   | 161                   | 129                   | 162                   | 138                   |
| Operating Weight*  | kg             | 23 965                | 24 000                | 24 046                | 24 223                | 24 427                | 24 592                |

\*Static tipping loads and operating weights 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.

\*\*Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

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

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

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

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

†Illustration shown with Dimension charts.

QC = Quick Coupler

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

# 966M XE/972M XE Wheel Loaders Specifications

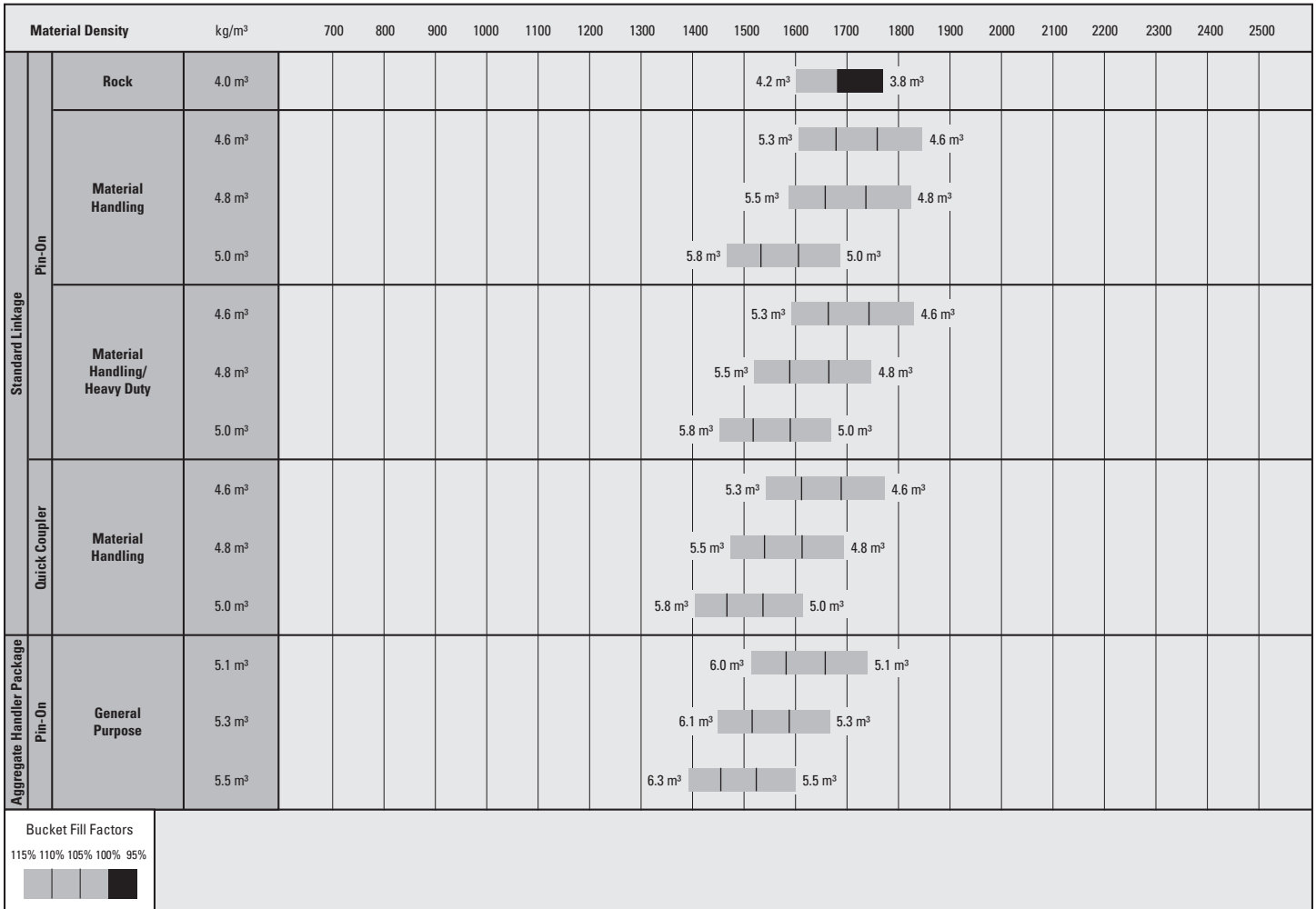
## 972M XE Bucket Fill Factors and Selection Chart

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

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

\*As a % of ISO rated capacity.

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



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



# 966M XE/972M XE Wheel Loaders Specifications

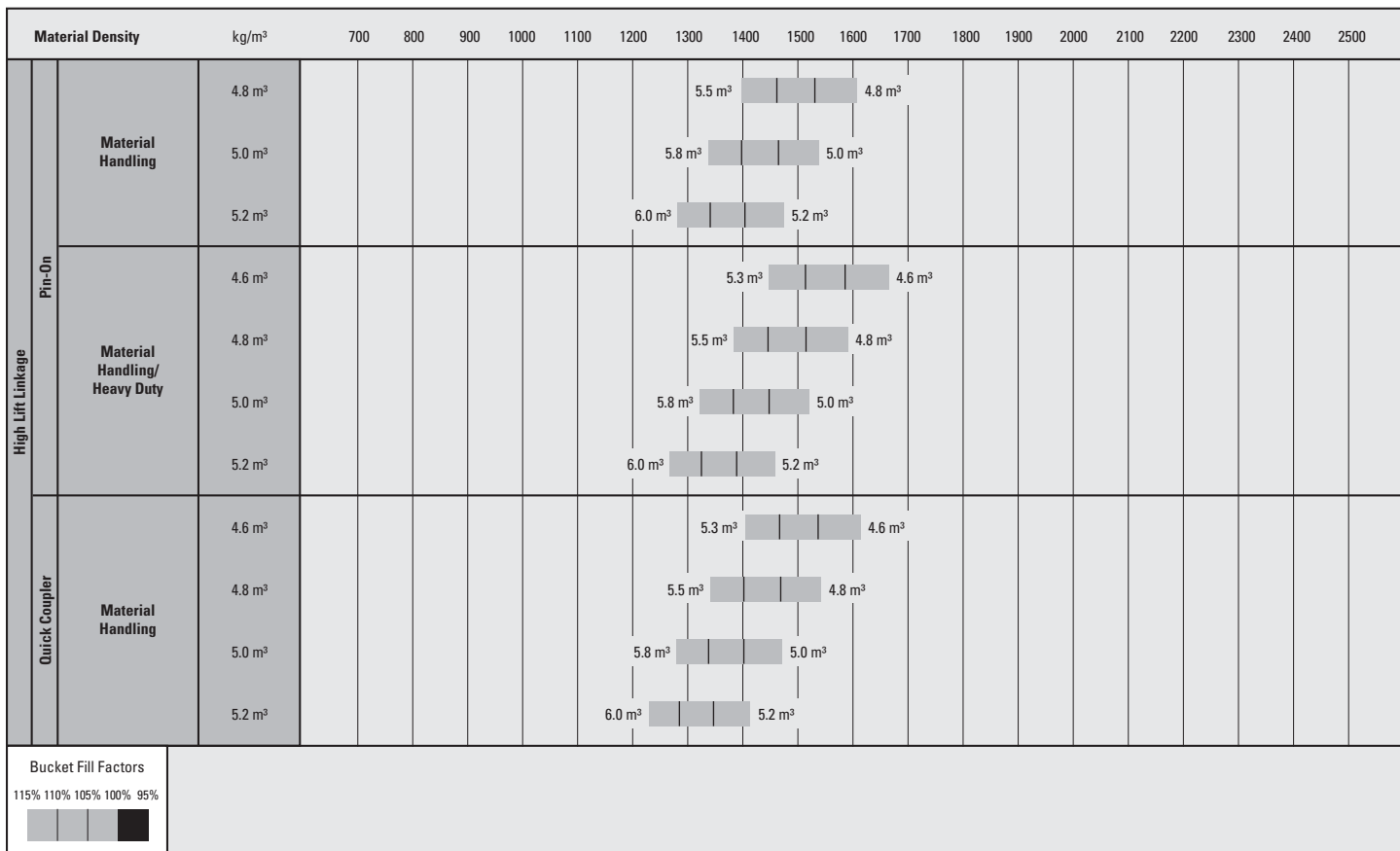
## 972M XE Bucket Fill Factors and Selection Chart

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

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

\*As a % of ISO rated capacity.

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



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

# 966M XE/972M XE Wheel Loaders Specifications

## 972M XE Operating Specifications with Buckets

| Machine  | Standard Linkage      |                    |                       |                    |                       |                       | High Lift Linkage Change** |       |
|--|-----------------------|--------------------|-----------------------|--------------------|-----------------------|-----------------------|----------------------------|-------|
|  | Pin-On                |                    |                       |                    | Fusion QC             | Universal QC          |                            |       |
| Pin/Quick Coupler  |                       |                    |                       |                    |                       |                       |                            |       |
| Bucket Type  | Material Handling     |                    |                       |                    | Material Handling     | Material Handling     |                            |       |
|  | Bolt-On Cutting Edges | Teeth and Segments | Bolt-On Cutting Edges | Teeth and Segments | Bolt-On Cutting Edges | Bolt-On Cutting Edges |                            |       |
| Edge Type  |                       |                    |                       |                    |                       |                       |                            |       |
| Capacity – Rated   | m <sup>3</sup>        | 4.80               | 4.80                  | 5.00               | 5.00                  | 4.60                  | 4.60                       | —     |
| Capacity – Rated at 110% Fill Factor                         | m <sup>3</sup>        | 5.28               | 5.28                  | 5.50               | 5.50                  | 5.06                  | 5.06                       | —     |
| Width  | mm                    | 3220               | 3271                  | 3220               | 3271                  | 3220                  | 3220                       | —     |
| <b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge | mm                    | 3099               | 2936                  | 3070               | 2908                  | 3069                  | 2954                       | 336   |
| <b>17</b> † Reach at Maximum Lift and 45° Discharge          | mm                    | 1272               | 1399                  | 1300               | 1427                  | 1301                  | 1507                       | 23    |
| Reach at Level Lift Arm and Bucket Level                     | mm                    | 3009               | 3214                  | 3049               | 3254                  | 3050                  | 3277                       | 274   |
| <b>A</b> † Digging Depth                                     | mm                    | 103                | 103                   | 103                | 103                   | 103                   | 39                         | -5    |
| <b>12</b> † Shipping Length (with Bucket)                    | mm                    | 9310               | 9534                  | 9350               | 9574                  | 9351                  | 9529                       | 338   |
| <b>B</b> † Overall Height with Bucket at Maximum Lift        | mm                    | 6193               | 6193                  | 6223               | 6223                  | 6199                  | 6439                       | 336   |
| Loader Clearance Circle Radius with Bucket at Carry Position | mm                    | 7607               | 7696                  | 7618               | 7707                  | 7616                  | 7666                       | 169   |
| Static Tipping Load, Straight (With Tire Deflection)*        | kg                    | 18 380             | 18 196                | 18 306             | 18 121                | 17 763                | 16 413                     | -1598 |
| Static Tipping Load, Straight (No Tire Deflection)*          | kg                    | 19 613             | 19 425                | 19 545             | 19 357                | 18 970                | 17 566                     | -1763 |
| Static Tipping Load, Articulated (With Tire Deflection)*     | kg                    | 16 050             | 15 864                | 15 977             | 15 790                | 15 463                | 14 230                     | -1429 |
| Static Tipping Load, Articulated (No Tire Deflection)*       | kg                    | 17 288             | 17 101                | 17 222             | 17 034                | 16 679                | 15 398                     | -1608 |
| Breakout Force***  | kN                    | 196                | 195                   | 191                | 189                   | 191                   | 160                        | -7    |
| Operating Weight*  | kg                    | 24 977             | 25 114                | 25 026             | 25 164                | 25 409                | 25 690                     | 85    |

\*Static tipping loads and operating weights 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.

\*\*\*Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

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

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

†Illustration shown with Dimension charts.

QC = Quick Coupler

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



# 966M XE/972M XE Wheel Loaders Specifications

## 972M XE Operating Specifications with Buckets

| Machine  |                | Standard Linkage             |        |                       |        |                    | High Lift Linkage Change** |
|--|----------------|------------------------------|--------|-----------------------|--------|--------------------|----------------------------|
| Pin/Quick Coupler  |                | Pin-On                       |        |                       |        |                    |                            |
| Bucket Type  |                | Material Handling Heavy Duty |        |                       |        | Rock (V-Edge)      |                            |
| Edge Type  |                | Bolt-On Cutting Edges        | FMT    | Bolt-On Cutting Edges | FMT    | Teeth and Segments |                            |
| Capacity – Rated   | m <sup>3</sup> | 4.80                         | 4.80   | 5.00                  | 4.97   | 4.00               | —                          |
| Capacity – Rated at 110% Fill Factor                         | m <sup>3</sup> | 5.28                         | 5.28   | 5.50                  | 5.47   | 4.40               | —                          |
| Width  | mm             | 3220                         | 3294   | 3220                  | 3294   | 3350               | —                          |
| <b>16†</b> Dump Clearance at Maximum Lift and 45° Discharge  | mm             | 3099                         | 2933   | 3070                  | 2911   | 3160               | 336                        |
| <b>17†</b> Reach at Maximum Lift and 45° Discharge           | mm             | 1272                         | 1476   | 1300                  | 1497   | 1547               | 23                         |
| Reach at Level Lift Arm and Bucket Level                     | mm             | 3009                         | 3271   | 3049                  | 3301   | 3171               | 274                        |
| <b>A†</b> Digging Depth                                      | mm             | 103                          | 78     | 103                   | 78     | 50                 | -5                         |
| <b>12†</b> Shipping Length (with Bucket)                     | mm             | 9310                         | 9551   | 9350                  | 9581   | 9472               | 338                        |
| <b>B†</b> Overall Height with Bucket at Maximum Lift         | mm             | 6193                         | 6234   | 6234                  | 6265   | 6057               | 335                        |
| Loader Clearance Circle Radius with Bucket at Carry Position | mm             | 7607                         | 7703   | 7618                  | 7711   | 7726               | 170                        |
| Static Tipping Load, Straight (With Tire Deflection)*        | kg             | 18 233                       | 17 921 | 18 151                | 17 857 | 18 317             | -1583                      |
| Static Tipping Load, Straight (No Tire Deflection)*          | kg             | 19 464                       | 19 161 | 19 388                | 19 101 | 19 562             | -1747                      |
| Static Tipping Load, Articulated (With Tire Deflection)*     | kg             | 15 901                       | 15 570 | 15 820                | 15 507 | 15 920             | -1416                      |
| Static Tipping Load, Articulated (No Tire Deflection)*       | kg             | 17 139                       | 16 820 | 17 065                | 16 761 | 17 177             | -1593                      |
| Breakout Force***  | kN             | 196                          | 200    | 190                   | 195    | 193                | -7                         |
| Operating Weight*  | kg             | 25 121                       | 25 506 | 25 176                | 25 550 | 26 189             | 85                         |

\*Static tipping loads and operating weights 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.

\*\*\*Measured 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C.

Specifications and ratings conform to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

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

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

†Illustration shown with Dimension charts.

FMT = Flush Mounted Teeth

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

# 966M XE/972M XE Wheel Loaders Specifications

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

| Machine  |                | Aggregate Handler***  |                       |                       |
|--|----------------|-----------------------|-----------------------|-----------------------|
| Pin/Quick Coupler  |                | Pin-On                |                       |                       |
| Bucket Type  |                | Material Handling     |                       |                       |
| Edge Type  |                | Bolt-On Cutting Edges | Bolt-On Cutting Edges | Bolt-On Cutting Edges |
| Capacity – Rated   | m <sup>3</sup> | 5.00                  | 5.20                  | 5.40                  |
| Capacity – Rated at 110% Fill Factor                         | m <sup>3</sup> | 5.50                  | 5.70                  | 5.90                  |
| Width  | mm             | 3230                  | 3230                  | 3230                  |
| <b>16</b> † Dump Clearance at Maximum Lift and 45° Discharge | mm             | 3092                  | 3049                  | 3021                  |
| <b>17</b> † Reach at Maximum Lift and 45° Discharge          | mm             | 1272                  | 1314                  | 1343                  |
| Reach at Level Lift Arm and Bucket Level                     | mm             | 3014                  | 3074                  | 3114                  |
| <b>A</b> † Digging Depth                                     | mm             | 108                   | 108                   | 108                   |
| <b>12</b> † Shipping Length (with Bucket)                    | mm             | 9005                  | 9065                  | 9105                  |
| <b>B</b> † Overall Height with Bucket at Maximum Lift        | mm             | 6234                  | 6265                  | 6306                  |
| Loader Clearance Circle Radius with Bucket at Carry Position | mm             | 7615                  | 7631                  | 7642                  |
| Static Tipping Load, Straight (With Tire Deflection)*        | kg             | 19 368                | 19 309                | 19 227                |
| Static Tipping Load, Straight (No Tire Deflection)*          | kg             | 20 712                | 20 659                | 20 583                |
| Static Tipping Load, Articulated (With Tire Deflection)*     | kg             | 16 857                | 16 799                | 16 718                |
| Static Tipping Load, Articulated (No Tire Deflection)*       | kg             | 18 214                | 18 161                | 18 087                |
| Breakout Force**   | kN             | 191                   | 186                   | 181                   |
| Operating Weight*  | kg             | 25 715                | 25 755                | 25 809                |

\*Static tipping loads and operating weights 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.

\*\*Measure 102 mm behind tip of cutting edge with bucket hinge pin as pivot in accordance with SAE J732C. Specifications and ratings confirm to all applicable standards recommended by the Society of Automotive Engineers, including SAE Standard J732C governing loader ratings.

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

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

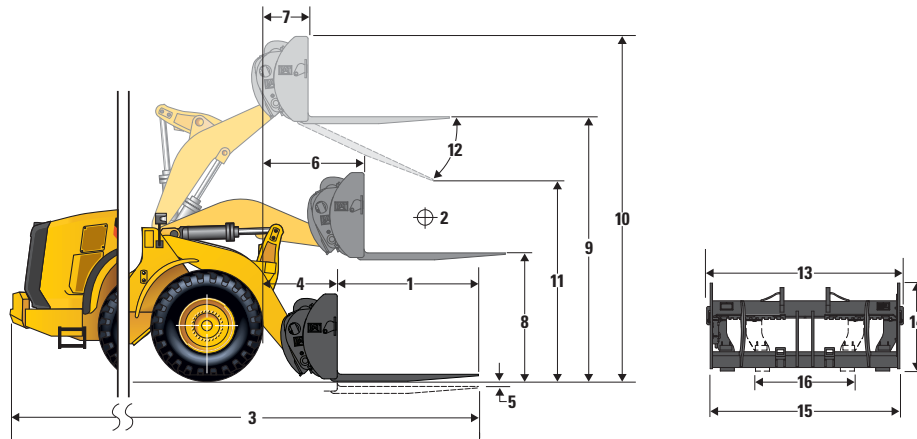
(No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 thru 5.

†Illustration shown with Dimension charts.

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

# 966M XE/972M XE Wheel Loaders Specifications

## 966M XE/972M XE Operating Specifications with Pallet Fork



| Machine  |         | 966M XE   | 972M XE   |
|--|---------|-----------|-----------|
| Interface  |         | Fusion QC | Fusion QC |
| 1 Tine Length  | mm      | 1829      | 1829      |
| 2 Load Center  | mm      | 915       | 915       |
| 3 Maximum Overall Length   | mm      | 9531      | 10 012    |
| 4 Reach with Forks at Ground Level                                 | mm      | 1106      | 1267      |
| 5 Ground to Top of Tine at Minimum Height and Fork Level           | mm      | -11       | 10        |
| 6 Reach with Arms Horizontal and Forks Level                       | mm      | 1704      | 1834      |
| 7 Reach with Fork at Maximum Height                                | mm      | 836       | 788       |
| 8 Ground to Top of Tine with Arms Horizontal and Fork Level        | mm      | 1955      | 1956      |
| 9 Ground to Top of Tine at Maximum Height and Fork Level           | mm      | 4039      | 4262      |
| 10 Overall Height of Fork at Full Lift (Top of Carriage to Ground) | mm      | 5079      | 5302      |
| 11 Clearance at Full Lift and Maximum Dump                         | mm      | 2292      | 2516      |
| 12 Maximum Discharge Angle from Horizontal                         | degrees | 51        | 51        |
| 13 Overall Carriage Width  | mm      | 2528      | 2528      |
| 14 Overall Carriage Height   | mm      | 1130      | 1130      |
| 15 Outside Tine Width (Maximum Spread)                             | mm      | 2178      | 2178      |
| 16 Outside Tine Width (Minimum Spread)                             | mm      | 576       | 576       |
| Tine Width (Single Tine)   | mm      | 180.0     | 180.0     |
| Tine Thickness   | mm      | 90.0      | 90.0      |
| Tine Capacity  | kg      | 14 800    | 14 800    |
| Static Tipping Load – Straight (Forks Level)*                      | kg      | 11 345    | 13 012    |
| Static Tipping Load – Articulated (Forks Level)*                   | kg      | 10 013    | 11 401    |
| Rated Load (SAE J1197 – 50% FTSTL)**                               | kg      | 5007      | 5701      |
| Rated Load (CEN EN 474-3 Rough Terrain – 60% FTSTL)**              | kg      | 6008      | 6841      |
| Rated Load (CEN EN 474-3 Firm and Level Ground – 80% FTSTL)**      | kg      | 7807      | 9121      |
| Operating Weight*  | kg      | 22 683    | 24 378    |

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

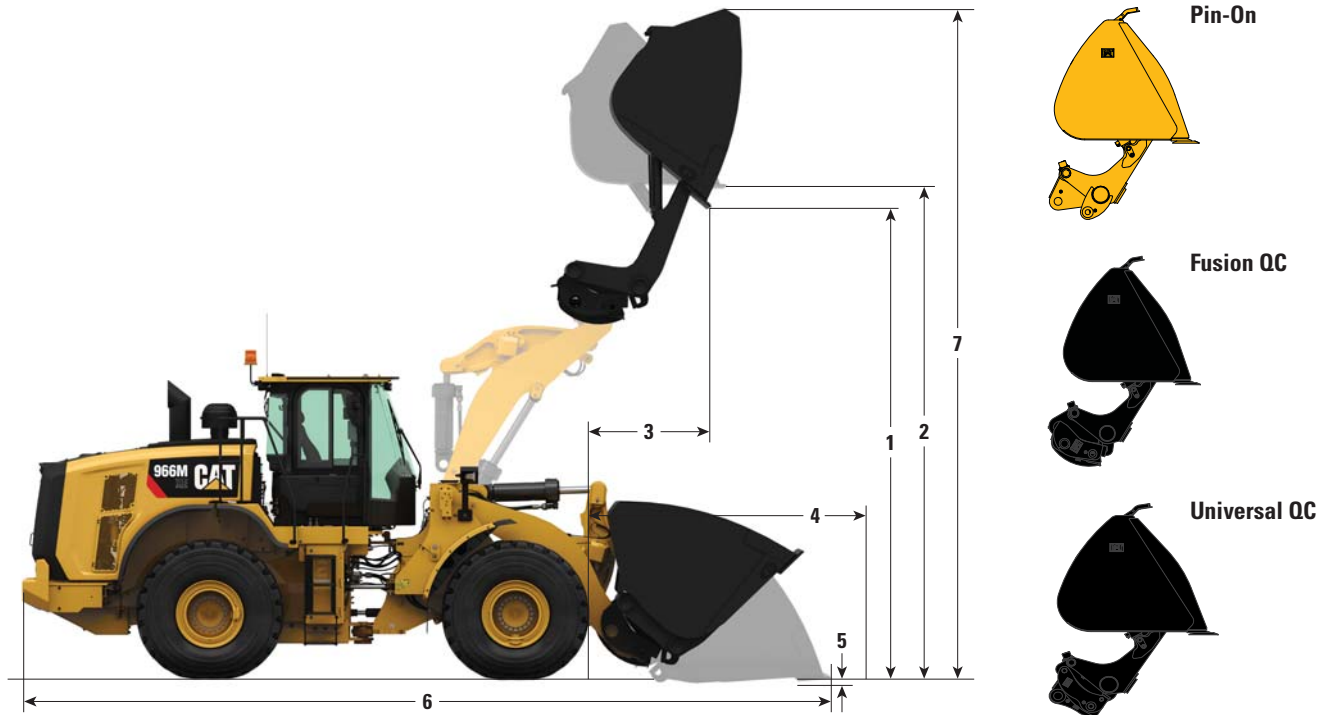
\*\*The rated operating load for a loader equipped with a pallet fork is determined by: SAE J1197: 50% of full turn static tipping load or hydraulic limit. CEN EN 474-3: 60% of full turn static tipping load on rough terrain or hydraulic limit. CEN EN 474-3: 80% of full turn static tipping load on firm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

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



# 966M XE/972M XE Wheel Loaders Specifications

## 966M XE Operating Specifications with High Dump Buckets



| Machine Interface   | 966M XE Aggregate Handler |                       |                       |        |
|---|---------------------------|-----------------------|-----------------------|--------|
|   | Pin-On                    | Fusion QC             | Universal QC          |        |
| Edge Type   | Bolt-On Cutting Edges     | Bolt-On Cutting Edges | Bolt-On Cutting Edges |        |
| Capacity – Rated  | m <sup>3</sup>            | 11.10                 | 11.10                 | 11.10  |
| Capacity – Rated at 110% Fill Factor  | m <sup>3</sup>            | 12.20                 | 12.20                 | 12.20  |
| Width   | mm                        | 3656                  | 3656                  | 3656   |
| Nominal Material Density – 110% Fill Factor   | kg/m <sup>3</sup>         | 630                   | 610                   | 570    |
| <b>1</b> Dump Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge | mm                        | 4680                  | 4698                  | 4861   |
| <b>2</b> Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to Level              | mm                        | 5348                  | 5366                  | 5529   |
| <b>3</b> Reach at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge          | mm                        | 1885                  | 1894                  | 1982   |
| <b>4</b> Reach at Level Lift Arm and Bucket Level   | mm                        | 3828                  | 3848                  | 4033   |
| <b>5</b> Digging Depth  | mm                        | 94                    | 94                    | 94     |
| <b>6</b> Overall Length   | mm                        | 9823                  | 9843                  | 10 028 |
| <b>7</b> Overall Height with Bucket at Maximum Height and Maximum Rack                    | mm                        | 7483                  | 7500                  | 7663   |
| Clearance Circle (Radius) with Bucket at Carry Position                                   | mm                        | 8023                  | 7994                  | 8049   |
| Static Tipping Load, Straight (With Tire Deflection)*                                     | kg                        | 15 420                | 14 969                | 14 157 |
| Static Tipping Load, Straight (No Tire Deflection)*                                       | kg                        | 16 762                | 16 300                | 15 441 |
| Static Tipping Load, Articulated (With Tire Deflection)*                                  | kg                        | 13 288                | 12 845                | 12 106 |
| Static Tipping Load, Articulated (No Tire Deflection)*                                    | kg                        | 14 645                | 14 191                | 13 407 |
| Breakout Force  | kN                        | 93                    | 92                    | 82     |
| Operating Weight*   | kg                        | 25 442                | 25 926                | 26 085 |

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

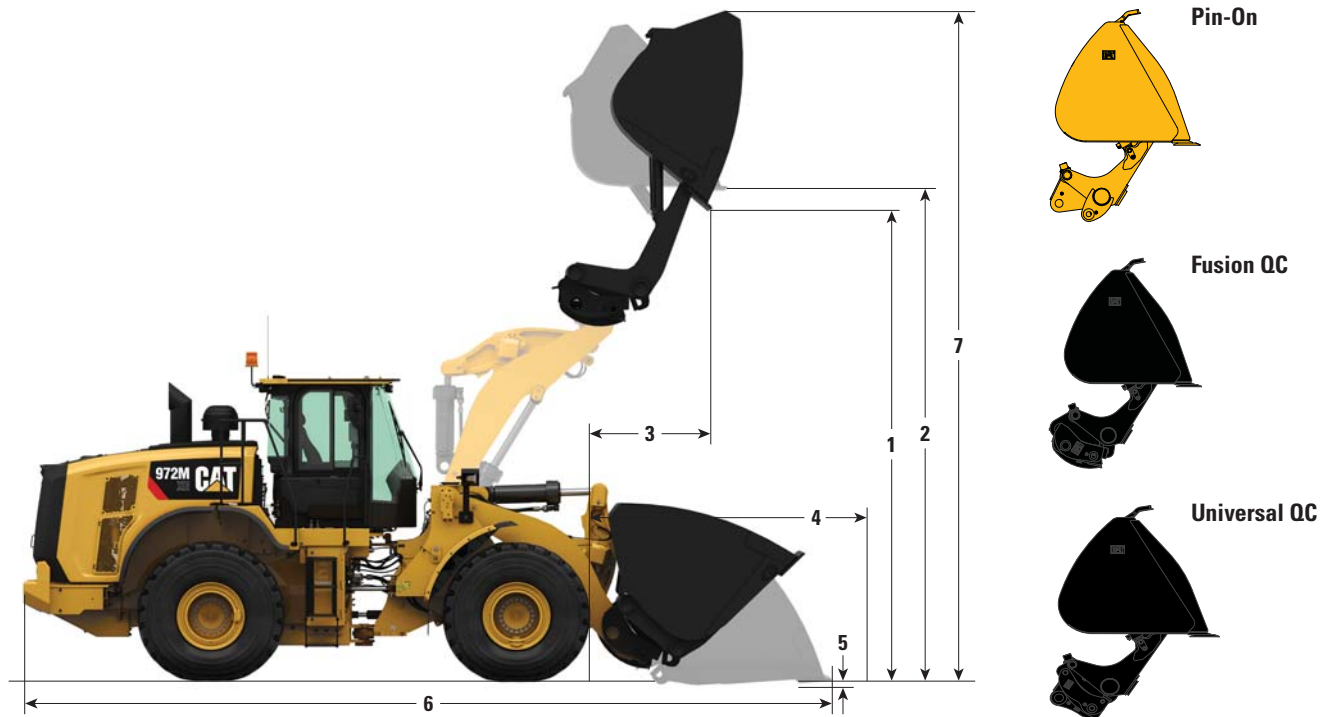
(With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 thru 6, which requires 2% verification between calculations and testing.

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

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

# 966M XE/972M XE Wheel Loaders Specifications

## 972M XE Operating Specifications with High Dump Buckets



| Machine Interface   | 972M XE Aggregate Handler |                       |                       |        |
|---|---------------------------|-----------------------|-----------------------|--------|
|   | Pin-On                    | Fusion QC             | Universal QC          |        |
| Edge Type   | Bolt-On Cutting Edges     | Bolt-On Cutting Edges | Bolt-On Cutting Edges |        |
| Capacity – Rated  | m <sup>3</sup>            | 11.10                 | 11.10                 | 11.10  |
| Capacity – Rated at 110% Fill Factor  | m <sup>3</sup>            | 12.20                 | 12.20                 | 12.20  |
| Width   | mm                        | 3656                  | 3656                  | 3656   |
| Nominal Material Density – 110% Fill Factor   | kg/m <sup>3</sup>         | 670                   | 650                   | 610    |
| <b>1</b> Dump Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge | mm                        | 4795                  | 4811                  | 4965   |
| <b>2</b> Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to Level              | mm                        | 5477                  | 5494                  | 5647   |
| <b>3</b> Reach at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge          | mm                        | 1936                  | 1947                  | 2051   |
| <b>4</b> Reach at Level Lift Arm and Bucket Level   | mm                        | 3958                  | 3978                  | 4163   |
| <b>5</b> Digging Depth  | mm                        | 73                    | 73                    | 73     |
| <b>6</b> Overall Length   | mm                        | 9945                  | 9965                  | 10 150 |
| <b>7</b> Overall Height with Bucket at Maximum Height and Maximum Rack                    | mm                        | 7614                  | 7631                  | 7784   |
| Clearance Circle (Radius) with Bucket at Carry Position                                   | mm                        | 8112                  | 8083                  | 8141   |
| Static Tipping Load, Straight (With Tire Deflection)*                                     | kg                        | 16 513                | 16 065                | 15 214 |
| Static Tipping Load, Straight (No Tire Deflection)*                                       | kg                        | 17 877                | 17 415                | 16 513 |
| Static Tipping Load, Articulated (With Tire Deflection)*                                  | kg                        | 14 153                | 13 710                | 12 938 |
| Static Tipping Load, Articulated (No Tire Deflection)*                                    | kg                        | 15 544                | 15 092                | 14 273 |
| Breakout Force  | kN                        | 114                   | 113                   | 102    |
| Operating Weight*   | kg                        | 27 026                | 27 510                | 27 669 |

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

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

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

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

# 966M XE/972M XE Standard Equipment

## Standard Equipment

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

### OPERATOR ENVIRONMENT

- Cab, pressurized and sound suppressed (ROPS/FOPS)
- Viscous mounts
- Multi-function 18 cm color 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 retractable, with indicator
- Sun visor, front
- Wet-arm wipers/washers front and rear, intermittent front wiper
- Window, sliding (left and right sides)
- Cab tie-off

### COMPUTERIZED MONITORING SYSTEM

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

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

### ELECTRICAL AND LIGHTING

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

### CAT CONNECT TECHNOLOGIES

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

### POWER TRAIN

- Engine, Cat 9.3 ACERT meets Stage IV emission standards
- Cat Clean Emissions Module (CEM) with Diesel Exhaust Fluid (DEF) tank and pump
- Fuel priming pump (electric)
- Fuel/water separator
- Precleaner, engine air intake
- Cat continuously variable transmission
- Axles, manually actuated differential lock front axle, open differential rear axle
- Axles, ecology drains

- Brakes, full hydraulic enclosed wet-disc with modulated neutralizer and integrated retarding
- Brake wear indicators
- Parking brake, disc and caliper
- Right pedal lock, maximum rimpull control and machine speed limit in the cab
- 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™
- Couplings, Cat O-ring face seal
- Hydraulic oil cooler (swing out)
- Oil sampling valves

### FLUIDS

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

### OTHER STANDARD EQUIPMENT

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



## Optional Equipment

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

### OPERATOR ENVIRONMENT

- Door, remote opening system
- Cover, HVAC metallic
- EH controls, SAL 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/CD/USB/MP3 Bluetooth®
- Seat, heated, air suspension
- Seat belt, 4 point harness, with indicator
- Seat, deluxe with leather inserts and headrest, heated and ventilated, air-suspended, adjustable lumbar support
- Roof, metallic
- Sun visor, rear
- Windows, rubber mounted
- Windows, with front guard
- Windows, with heavy duty front guard
- Windows, with full guards front, rear and sides
- Cat seat cover, removable

### ELECTRICAL AND LIGHTING

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

### STARTERS, BATTERIES, AND ALTERNATORS

- Cold start – 240V

### CAT CONNECT TECHNOLOGIES

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

### POWER TRAIN

- Axles
  - Automatic front/rear differential locks
  - Axle oil cooler
  - 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 (966M XE only)
- Extended capacity (972M XE 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
- 4<sup>th</sup> function with Ride Control

### FLUIDS

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

### OTHER OPTIONAL EQUIPMENT

- Cat Autolube System
- Fenders, roading
- Guard, power train
- Guard, rear radiator grill
- Oil change, high speed engine
- Precleaner, turbine
- Precleaner, trash
- Wheel chocks

### OTHER OPTIONAL CONFIGURATIONS

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

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