

972M XE

Wheel Loader

Technical Specifications

| Engine | |
|--------------------------------|------------------------|
| Engine Model | Cat® C9.3 |
| 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 |
| Stroke | 149 mm |
| Displacement | 9.3 L |

- Cat engine with ACERT™ Technology meets EU Stage V 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 | |
|-------------------|--------------------------|
| Bucket Capacities | 3.20-9.94 m ³ |
| Weight | |
| 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 m³ general purpose bucket with BOCE.

| Operating Specifications | |
|-------------------------------------|-----------|
| 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.

| 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 rd /4 th Function | 240 L/min |
| Maximum Pressure – Optional 3 rd /4 th Function | 21 780 kPa |
| Hydraulic Cycle Time with Rated Payload | |
| Raise from Carry Position | 6.1 Sec. |
| Dump, at Maximum Raise | 1.5 Sec. |
| Lower, Empty, Float Down | 3.1 Sec. |
| Total | 10.7 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 _{WA} * |
| 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 |

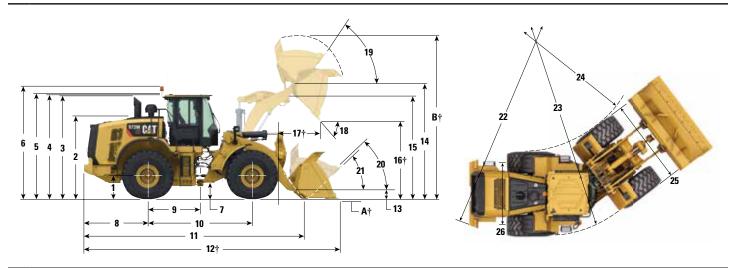
^{*}DEF must meet the requirements outlined in ISO 22241-1.

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 which has a $\rm CO_2$ equivalent 2.288 metric tonne.

Dimensions

All dimensions are approximate.



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

^{*}Standard and High Lift are with 4.8 m³ general purpose pin-on bucket with BOCE (see Operating Specifications for other buckets). †Dimensions are listed in Operating Specification charts.

All height and tire related dimensions are with Michelin 26.5R25 XHA2 L3 tires (see Dimension changes – Tires Chart for other tires).

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 |
| 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 |
| 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:

⁻ Michelin 26.5R25 XHA2 L3 radial tires.

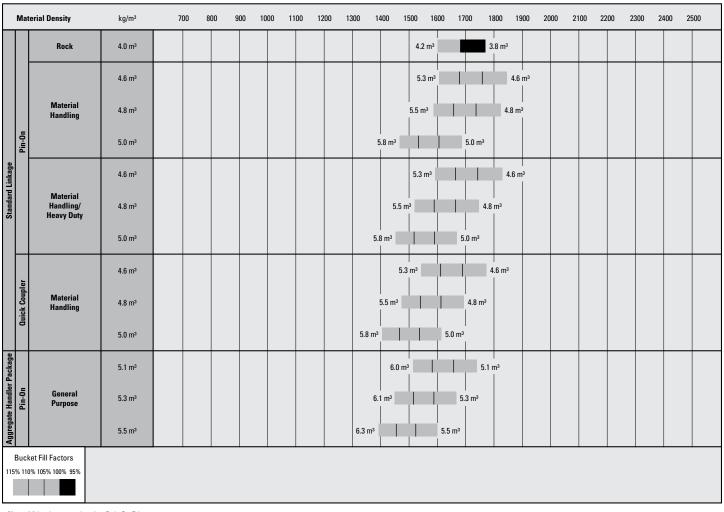
Bucket Fill Factors and Selection Chart

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

| Loose Material | | Material Density | Fill Factor (%)* |
|-----------------|-------------------|------------------------|------------------|
| Earth/Clay | | 1500-1700 kg/m³ | 115 |
| Sand and Gravel | | 1500-1700 kg/m³ | 115 |
| Aggregate: | 25-76 mm | 1600-1700 kg/m³ | 110 |
| | 19 mm and smaller | 1800 kg/m³ | 105 |
| Rock: | 76 mm and larger | 1600 kg/m ³ | 100 |

^{*}As a % of ISO 7546 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.

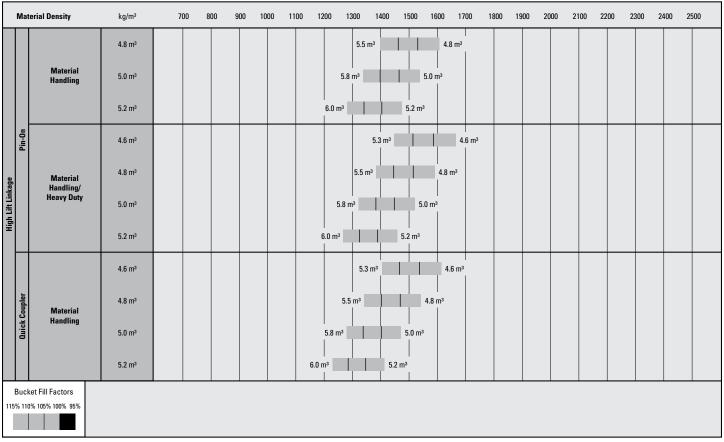
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| Loose Material | | Material Density | Fill Factor (%)* |
|-----------------|-------------------|------------------------|------------------|
| Earth/Clay | | 1500-1700 kg/m³ | 115 |
| Sand and Gravel | | 1500-1700 kg/m³ | 115 |
| Aggregate: | 25-76 mm | 1600-1700 kg/m³ | 110 |
| | 19 mm and smaller | 1800 kg/m³ | 105 |
| Rock: | 76 mm and larger | 1600 kg/m ³ | 100 |

^{*}As a % of ISO 7546 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.

Operating Specifications with Buckets

| Machine | | Standard Linkage | | | | | | High Lift |
|---|----------------|-----------------------------|-----------------------|-----------------------------|-----------------------|-----------------------------|-----------------------------|---------------------|
| Pin/Quick Coupler | | | Pin- | Pin-On | | Fusion™ QC | Universal QC | Linkage Change** |
| Bucket Type | | | Mate Hand | | | Material Handling | Material Handling | _ |
| Edge Type | | Bolt-On Cutting Edges | Teeth and Segments | Bolt-On Cutting Edges | Teeth and Segments | Bolt-On Cutting Edges | Bolt-On Cutting Edges | |
| Capacity – Rated | m ³ | 4.80 | 4.80 | 5.00 | 5.00 | 4.60 | 4.60 | _ |
| Capacity – Rated at 110% Fill Factor | m^3 | 5.28 | 5.28 | 5.50 | 5.50 | 5.06 | 5.06 | _ |
| Width | mm | 3220 | 3271 | 3220 | 3271 | 3220 | 3220 | _ |
| 16 † Dump Clearance at Maximum Lift and 45° Discharge | mm | 3099 | 2936 | 3070 | 2908 | 3069 | 2954 | 336 |
| 17† 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 |
| A† Digging Depth | mm | 103 | 103 | 103 | 103 | 103 | 39 | -5 |
| 12† Shipping Length (with Bucket) | mm | 9310 | 9534 | 9350 | 9574 | 9351 | 9529 | 338 |
| 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.

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.

^{**}Maximum values.

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

Operating Specifications with Buckets

| Machine | | S | tandard Linka | ge | | High Lift | |
|--|----------------|-----------------------------|---------------------------------|-----------------------------|------------------|-----------------------|-------|
| Pin/Quick Coupler | | Pin-On | | | | Linkage Change** | |
| 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 ³ | 4.80 | 4.80 | 5.00 | 4.97 | 4.00 | _ |
| Capacity – Rated at 110% Fill Factor | m ³ | 5.28 | 5.28 | 5.50 | 5.47 | 4.40 | _ |
| Width | mm | 3220 | 3294 | 3220 | 3294 | 3350 | _ |
| 16 † Dump Clearance at Maximum Lift and 45° Discharge | mm | 3099 | 2933 | 3070 | 2911 | 3160 | 336 |
| 17† 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 |
| A† Digging Depth | mm | 103 | 78 | 103 | 78 | 50 | -5 |
| 12† Shipping Length (with Bucket) | mm | 9310 | 9551 | 9350 | 9581 | 9472 | 338 |
| 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.

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.

^{**}Maximum values.

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

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 | m³ | 5.00 | 5.20 | 5.40 | | |
| Capacity – Rated at 110% Fill Factor | m³ | 5.50 | 5.70 | 5.90 | | |
| Width | mm | 3230 | 3230 | 3230 | | |
| 16 † Dump Clearance at Maximum Lift and 45° Discharge | mm | 3092 | 3049 | 3021 | | |
| 17† Reach at Maximum Lift and 45° Discharge | mm | 1272 | 1314 | 1343 | | |
| Reach at Level Lift Arm and Bucket Level | mm | 3014 | 3074 | 3114 | | |
| A† Digging Depth | mm | 108 | 108 | 108 | | |
| 12† Shipping Length (with Bucket) | mm | 9005 | 9065 | 9105 | | |
| 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.

(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.

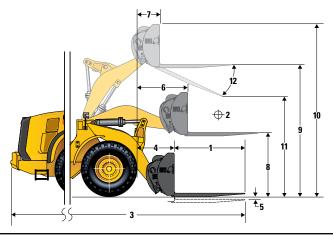
†Illustration shown with Dimension charts.

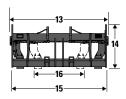
Additional buckets are available and offerings vary by region. Consult your local Cat dealer for further details.

^{**}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.

Operating Specifications with Pallet Fork





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

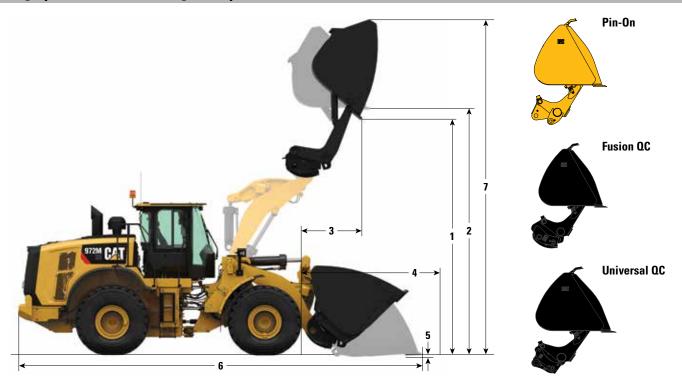
^{*}Static tipping loads and operating weights are based on L3 Michelin XHA tires, air conditioning, ride control, power train guard, full fluids, fuel tank, coolant, lubricants, and operator.

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

QC = Quick Coupler

^{**}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.

Operating Specifications with High Dump Buckets



| Machine | | Aggregate Handler | | |
|--|-------|-----------------------------|-----------------------------|-----------------------------|
| Interface | | Pin-On | Fusion QC | Universal QC |
| Edge Type | | Bolt-On Cutting Edges | Bolt-On Cutting Edges | Bolt-On Cutting Edges |
| Capacity – Rated | m³ | 11.10 | 11.10 | 11.10 |
| Capacity – Rated at 110% Fill Factor | m^3 | 12.20 | 12.20 | 12.20 |
| Width | mm | 3656 | 3656 | 3656 |
| Nominal Material Density – 110% Fill Factor | kg/m³ | 670 | 650 | 610 |
| 1 Dump Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge | mm | 4795 | 4811 | 4965 |
| 2 Clearance at Maximum Lift, Maximum Rack, Bucket Rolled out to Level | mm | 5477 | 5494 | 5647 |
| 3 Reach at Maximum Lift, Maximum Rack, Bucket Rolled out to 45° Discharge | mm | 1936 | 1947 | 2051 |
| 4 Reach at Level Lift Arm and Bucket Level | mm | 3958 | 3978 | 4163 |
| 5 Digging Depth | mm | 73 | 73 | 73 |
| 6 Overall Length | mm | 9945 | 9965 | 10 150 |
| 7 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. QC = Quick Coupler

972M XE Wheel Loader Standard and Optional Equipment

Standard and Optional Equipment

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

| | Standard | Optional |
|---|----------|----------|
| POWER TRAIN | | |
| Axles, ecology drains | ✓ | |
| Axles, manually actuated differential lock front axle, open differential rear axle | ✓ | |
| Axles – automatic front/rear differential locks, axle oil cooler, extreme temperature seals, seal guards | | ✓ |
| Brake wear indicators | ✓ | |
| Brakes, full hydraulic enclosed wet- disc with modulated neutralizer and integrated retarding | ✓ | |
| Cat Clean Emissions Module (CEM) with Diesel Exhaust Fluid (DEF) tank and pump | ✓ | |
| Engine, Cat C9.3 – meets Stage V emission standards | ✓ | |
| Fan, radiator, on demand | ✓ | |
| Fan, VPF (variable pitch fan), automatic and manual control | | ✓ |
| Fuel priming pump (electric) | ✓ | |
| Fuel/water separator | ✓ | |
| Parking brake, disc and caliper | ✓ | |
| Precleaner, engine air intake | ✓ | |
| Radiator, high debris, wide fin spacing | | ✓ |
| Transmission, Cat continuously variable | ✓ | |
| CAT® CONNECT TECHNOLOGY | | |
| Detect technologies: Rear vision camera Cat rear object detection | ✓ | ✓ |
| Link technologies: Product Link VIMS TM | ✓ | √ |
| Payload technologies: Cat Production Measurement 2.0 (CPM), Printer, Cat Production Measurement, Aggregate Autodig | | √ |
| Advanced Productivity subscription | | ✓ |
| Machine security system | | ✓ |

| r details. | | |
|--|----------|----------|
| | Standard | Optional |
| OPERATOR ENVIRONMENT | | |
| Air conditioner, heater, and defroster (auto temp and fan) | ✓ | |
| Beverage holders (2) with storage compartment for cell phone/MP3 player | ✓ | |
| Bucket/work tool function lockout | ✓ | |
| Cab air filter | ✓ | |
| Cab, pressurized and sound suppressed (ROPS/FOPS) | ✓ | |
| Cab tie-off | ✓ | |
| Cat seat cover, removable | | ✓ |
| Coat hook (2) | ✓ | |
| Cover, HVAC metallic | | ✓ |
| Door, remote opening system | | ✓ |
| EH controls, SAL (single axis lever) | √ | |
| lift and tilt function | | |
| EH controls, joystick lift and tilt: – Additional integrated roller switches for 3 rd and 4 th functions | | ✓ |
| EH controls, SAL 3 rd function – | | |
| Additional roller switch for 4 th function | | V |
| EH parking brake | ✓ | |
| Ergonomic cab access ladders and handrails | ✓ | |
| Filter, carbon fresh air | | ✓ |
| Horn, electric | ✓ | |
| Light, two dome (cab) | ✓ | |
| Mirrors, heated rearview external with integrated spot mirrors | | ✓ |
| Mirrors, rearview external with integrated spot mirrors | ✓ | |
| Multi-function 18 cm color touchscreen display for rear vision camera, clock and machine parameters | ✓ | |
| Post mounted membrane 16 switch keypad | ✓ | |
| Precleaner, HVAC | | ✓ |
| Precleaner, HVAC (RESPA) | | ✓ |
| Radio, AM/FM/CD/USB/MP3 Bluetooth® | | ✓ |
| Radio ready (entertainment) includes antenna, speakers and converter (12V, 10-amp) | ✓ | |
| Receptacles (2), 12V | ✓ | |

(continued on next page)

972M XE Wheel Loader Standard and Optional Equipment

Standard and Optional Equipment (continued)

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

| | Standard | Optional |
|---|----------|----------|
| OPERATOR ENVIRONMENT (continued) | | |
| Roof, metallic | | ✓ |
| Seat, cloth, air suspension | ✓ | |
| Seat, suede/cloth, air suspension, heated | | ✓ |
| Seat, leather/cloth, air suspension, heated/cooled | | ✓ |
| Seat belt, 51 mm retractable, with indicator | ✓ | |
| Seat belt, 4 point harness, with indicator | | ✓ |
| Steering, EH joystick, speed sensing with force feedback | ✓ | |
| Sun visor, front | ✓ | |
| Sun visor, rear | | ✓ |
| Viscous mounts | ✓ | |
| Wet-arm wipers/washers front and rear, intermittent front wiper | ✓ | |
| Windows, rubber mounted | | ✓ |
| Window, sliding (left and right sides) | ✓ | |
| Windows, with front guard | | ✓ |
| Windows, with heavy duty front guard | | ✓ |
| Windows, with full guards front, | | ✓ |
| rear and sides | | |
| ELECTRICAL AND LIGHTING | | |
| Alarm, back-up | ✓ | |
| Alternator, 145-amp brushed | ✓ | |
| Batteries (2), maintenance free 1,400 CCA | ✓ | |
| Emergency engine shutdown switch | ✓ | |
| External seat belt indicator light | | ✓ |
| Ignition key; start/stop switch | ✓ | |
| 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 signal lights | √ | |
| Work lights, four additional halogen cab-mounted or; | | √ |
| Work lights, two additional auxiliary front HI LED and two additional auxiliary rear LED cab-mounted, 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 | | |

| | Standard | Optional |
|--|----------|------------|
| ELECTRICAL AND LIGHTING (continued) | | - Pilonian |
| Main disconnect switch | ✓ | |
| Receptacle start (cables not included) | √ | |
| Reversing strobes | | √ |
| Speed limiter – 20 km/h | | ✓ |
| Starter, electric, heavy duty | ✓ | |
| Starting and charging system (24V) | √ | |
| Secondary steering | √ | |
| Speed limiter, adjustable | √ | |
| FLUIDS | | |
| Biodegradable oil, Cat HYDO™ | | ✓ |
| Premixed extended life coolant with | √ | |
| freeze protection to -34°C | | |
| Premixed extended life coolant with | | ✓ |
| freeze protection to -50°C | | |
| HYDRAULICS | | |
| Couplings, Cat O-ring face seal | √ | |
| Hoses, Cat XT TM | ✓ | |
| Hydraulic oil cooler (swing-out) | ✓ | |
| Hydraulic system, load sensing | ✓ | |
| Oil sampling valves | ✓ | |
| 3 rd function with Ride Control | | ✓ |
| 4 th function with Ride Control | | ✓ |
| Remote diagnostic pressure taps | ✓ | |
| Ride control, 2V | ✓ | |
| Steering, load sensing | ✓ | |
| LINKAGE | | |
| Extended capacity | | ✓ |
| High lift | | ✓ |
| Kickout, lift and tilt, automatic | ✓ | |
| Quick coupler ready | | ✓ |
| Z-bar, cast crosstube/tilt lever | ✓ | |
| STARTERS, BATTERIES, AND ALTERNATORS | | |
| Cold start – 240V | | ✓ |
| WORK TOOLS | | |
| Forks, logging | | ✓ |
| Forks, pallet | | ✓ |
| Fusion quick coupler | | ✓ |
| Performance Series buckets | | ✓ |

(continued on next page)

972M XE Wheel Loader Standard and Optional Equipment

Standard and Optional Equipment (continued)

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

| | Standard | Optional | | Standard | Optio |
|---|----------|----------|---|----------|----------|
| COMPUTERIZED MONITORING SYSTEM | | | OTHER STANDARD AND OPTIONAL EQUIPME | NT | |
| With following gauges: | ✓ | | Auto idle shutdown | ✓ | |
| | | | Cat Autolube System | | ✓ |
| Diesel Exhaust Fluid (DEF) level | | | Ecology drains for engine, transmission, and hydraulics | ✓ | |
| oil, transmission oil | | | Ether aid ready | ✓ | |
| Fuel level With following warning indicators: | ✓ | | Fenders, steel front with mud-flap/rear with extension | ✓ | |
| Regeneration | | | Fenders, roading | | ✓ |
| Temperature: axle oil, engine intake manifold Pressure: engine oil, fuel pressure hi/low, primary steering oil, service | | | Filters: fuel, engine air, engine oil, hydraulic oil, transmission | ✓ | |
| | | | Fuel cooler | ✓ | |
| brake oil | | | Grease zerks | ✓ | |
| Battery voltage hi/low Engine air filter restriction Hydraulic oil filter restriction Hydraulic oil low | | | Grill, airborne debris | ✓ | |
| | | | Guard, power train | | ~ |
| | | | Guard, rear radiator grill | | ٧ |
| Parking brake | | | Hitch, drawbar with pin | ✓ | |
| Vith following gauges: Speedometer/tachometer Digital gear range indicator Diesel Exhaust Fluid (DEF) level Temperature: engine coolant, hydraulic oil, transmission oil Fuel level Vith 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 | | | Hood, non-metallic power tilting | ✓ | |
| Transmission inter bypass | | | Oil change, high speed engine | | ~ |
| | | | Platform, window washing | ✓ | |
| | | | Precleaner, turbine | | ~ |
| | | | Precleaner, trash | | v |
| | | | Precleaner rain cap | ✓ | |
| | | | Service centers (electrical and hydraulic) | ✓ | |
| | | | Sight gauges: engine coolant, hydraulic oil, and transmission oil level | ✓ | |
| | | | Toolbox | ✓ | |
| | | | Vandalism protection caplocks | ✓ | |
| | | | Wheel chocks | | ✓ |
| | | | OTHER CONFIGURATIONS | | |
| | | | . 1 11 | | |

Aggregate handler

Industrial and waste handler

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

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

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