950 GC

Wheel Loader

Engine	
Engine Model	Cat® C7.1
Rated Net Power @ 2,200 rpm – ISO 9249	151 kW (202 hp)
Rated Gross Power @ 2,200 rpm – ISO 14396	168 kW (225 hp)

Buckets	
Bucket Capacities	2.5 m^3 to 4.4 m^3
Weights	
Operating Weight	18 676 kg

- For 3.3 m^3 general purpose buckets with BOCE.

950 GC Key Features and Benefits

Linkage
The proven Cat Z-bar linkage geometry with Performance Series Buckets offer excellent penetration into the pile and high breakout forces. The results are low fuel consumption and exceptional production capabilities.

Engine
C7.1 built on a proven block with a new injection system specifically designed for fuel available in emerging markets.

Hydraulics
Load sensing hydraulics produce flow and pressure for the implement system upon demand and only in amounts necessary to perform the needed work functions. This state of the art system results in low fuel consumption.

Serviceability
Our electrical and hydraulic service centers, along with additional key serviceability features, help make servicing customer machines and in-field component exchange quick, easy, and efficient.

Structures
Caterpillar design and manufacturing techniques assure outstanding service life.

Operator Station
The spacious cab features easy and intuitive controls and excellent visibility. The cab provides a comfortable working environment for efficient all day operation.

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The new Cat 950 GC Wheel Loader is designed specifically to handle all the jobs on your worksite from material handling and truck loading, to general construction, to stockpiling. This machine is purpose-built to be just the right machine to get your everyday jobs done. Great machine performance combined with low owning and operating costs make the 950 GC the right choice for your business.

Operator Environment

Work Comfortably and Efficiently.

Entry and Exit

Ladders are available on both sides of the machine to easily access the platforms. Platforms are equipped with guard and hand rails for safe access to the cab. The main cab door opens to the front and provides wide access to the operator environment.

Controls and Display

The complete operator interface has been designed with the operator in mind: easy to operate and simple to understand. The pilot-operated hydraulic implement controls deliver comfortable, low-effort operation. Two single axis levers or a joystick are available. Both arrangements are equipped with a remote kick-down switch. The joystick features an F-N-R switch as well. The adjustable steering column includes the manual shifter and turn signal control lever.

The dashboard display contains 5 analog-like gauges, several colored indicator lights and an LCD screen. This intuitive system allows the operator to monitor that the machine systems are operating properly.

Visibility

The 950 GC cab offers an unmatched viewing area with a wide, flat, and distortion-free front windshield. The glass stretches to the floor of the cab for excellent visibility to the bucket. The cab roof has channels which direct rain off the corners of the cab keeping windows clear. Front and back wiper ensure that a clear view is maintained. Internal and external rearview mirrors are standard. An optional rearview camera is available to clearly monitor movement behind the machine.

Climate Control

Air conditioning system is standard on the 950 GC. Ten louvered vents allow the operator to direct the air flow to remain productive and efficient all shift long. The controls are comfortably located on the right hand console. The cab air filters are located in the main unit outside of the operator environment for superior filtration and easy cleaning.

Seat

The comfort cloth mechanical suspension seat provides a variety of adjustments to suit the operator's size and weight including fore/aft, height and weight. An air suspension seat is offered as an option. The left-hand armrest and headrest are also adjustable.

Power Train

Powerful Efficiency.

Cat C7.1 Engine

The 950 GC is powered by a Cat C7.1 engine that meets Stage IIIA (Tier 3) emission standards and features a fuel-injection system specifically designed for fuel available in emerging markets.

The Engine Idle Management System (EIMS) minimizes fuel consumption by reducing engine rpm after a specified amount of idle time.

On-Demand Fan

Electronically controlled, hydraulically driven variable speed fan adjusts to meet the varying cooling requirements of the machine. This results in a reduced average fan speed lowering fuel consumption, noise levels and radiator plugging. In very cold operating conditions, an optional fan drive bypass valve allows the machine systems to warm up faster to operating temperatures.

Transmission

The power-shift countershaft transmission, designed and built by Caterpillar, features high contact ratio gears, meaning that there are always up-to three teeth in contact. These heat treated gears complemented by heavy duty bearings make this transmission durable, fuel efficient and produce low noise and vibration levels during operation. It is commanded by the proven Cat Electronic Long Range Transmission (ELRT) control valve, which allows full-power shifts and directional shift changes. The fully modulated shifts ensures smoothness for operators and contributes significantly to fast cycles and extended component life.

Axles

Heavy-duty axles with inboard-planetary final drives and specially heat-treated bevel gears feature hydraulically actuated wet-disc brakes. Limited-slip differentials are available for applications where increased traction is needed.

Reliability/Serviceability

Tested and Proven – Ready to Work.

Service Centers

The hydraulic and electrical service centers provide grouped ground level access to numerous maintenance and service points enhancing safety and convenience for operators and service technicians. These are conveniently located under the access ladders on each side of the machine.

Grease Points

Grease fittings for difficult to reach components are grouped conveniently, allowing easy and quick preventive lubrication.

Caterpillar Designed

Components used to build Cat Wheel Loaders are designed and manufactured to Caterpillar quality standards throughout all Caterpillar facilities. The 950 GC is built on a long legacy of high performance and highly reliable wheel loaders.

Renowned Cat Dealer Support

Cat products are designed with superior quality, unsurpassed reliability, ease of serviceability and repairability and outstanding support, provided almost exclusively by Cat dealers. Cat dealers are with customers every step of the way to maximize machine uptime by providing unsurpassed worldwide parts support, trained technicians and customer support agreements. Dealers around the globe have been working with Cat customers for generations.

Cat Product Link™

Cat Product Link is a telematics solution, deeply integrated into the machine systems, allowing you to monitor the overall health of your machine including location tracking, fuel consumption and more.

Productivity

Work Smart. Move More.

Performance Series Buckets

Performance Series Buckets feature an optimized shape, longer floor, curved side walls and wider opening, allowing short load times, high fill factors ranging from 100% to 115% and better material retention. They load easy and carry more! A unique spill guard protects the cab and linkage components from material overflow. This design results in safer operation, shorter cycle times, reduced fuel consumption and overall higher production efficiency.

Z-bar Linkage

The 950 GC linkage generates excellent breakout force and good rack back angle for better bucket loading and load retention. Lift arms provide excellent dump clearance and reach for exceptional matching to various truck body heights. Lift and return-to-dig positions can be adjusted on the linkage.

Load Sensing Hydraulics

The 950 GC features a load sensing hydraulic system that only produces flow and pressure for the implement system when required, improving machine productivity and resulting in low fuel consumption. Operators will also notice an excellent power balance between rimpull and implements.

Ride Control

The optional Ride Control System improves ride, performance and load retention when traveling over rough terrain. Operators gain confidence moving at higher speeds in load and carry operations decreasing cycle times and increasing productivity.

Work Tools/Fusion Quick Coupler

Work Tool Options to Meet Your Needs.

Work Tool Attachments for All Support Functions on Your Job Site

A variety of pin-on and coupler attachments are available for 950 GC applications. Cat Work Tools are durable, reliable and designed for performance and efficiency with your Cat Wheel Loader.

Fusion™ Quick Coupler

The Fusion Quick Coupler System gives one common interface across a range of medium and small wheel loaders. A quick coupler allows one machine to use a range of different work tools on the job site. Fusion allows one work tool to be picked up by the entire range of medium and small wheel loaders.

With a Fusion Coupler, performance is virtually identical to pin-on attachments. The coupler sits back, close into the loader arms – minimizing offset, enabling increased machine performance. An advanced wedging mechanism creates a tight, rattle-free fit which results in a longer coupler and attachment service life. An open coupler frame design clears sight lines from the operator's seat to the load. Loading and unloading is done confidently and quickly with good visibility to the tool and load.

950 GC Wheel Loader Specifications

Engine

Engine Model	Cat C7.1
Rated Net Power @ 2,200 rpm – ISO 9249	151 kW (202 hp)
Rated Gross Power @ 2,200 rpm – ISO 14396	168 kW (225 hp)
Max Gross Power @ 2,000 rpm – ISO 14396	171 kW (229 hp)
Max Gross Torque @ 1,400 rpm	1020 N·m
Max Net Torque @ 1,300 rpm	931 N·m
Bore	105 mm
Stroke	135 mm
Displacement	7.01 L

Weights

Operating Weight	18 676 kg

- For 3.3 m^3 general purpose buckets with BOCE.

Operating Specifications

Static Tipping Load Full 40° Turn – ISO 14397-1*	10 503 kg
Static Tipping Load Full 40° Turn – Rigid Tires**	11 197 kg
Breakout Force	147 kN

- For 3.3 m^3 general purpose buckets with BOCE.

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

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

Transmission

Forward 1	7.0 km/h
Forward 2	12.5 km/h
Forward 3	22.0 km/h
Forward 4	34.0 km/h
Reverse 1	7.0 km/h
Reverse 2	12.5 km/h
Reverse 3	22.0 km/h

- Maximum travel speeds (23.5-25 tires).
- Maximum travel speed in standard vehicle with empty bucket and standard L3 tires with 760 mm (30 in) roll radius.

Service Refill Capacities

Fuel Tank Size	290 L
Cooling System	48 L
Crankcase	20 L
Transmission	45 L
Differentials and Final Drives – Front	40 L
Differentials and Final Drives – Rear	38 L
Hydraulic Tank	120 L

Hydraulic System

Implement System Pump Type	Piston
Steering System Pump Type	Piston
Implement System – Maximum Pump Output @ 2,200 rpm	248 L/min
Implement System – Maximum Operating Pressure @ 50 ± 1.5 L/min	27 900 kPa
Implement System – Optional 3rd Function Maximum Pressure @ 70 L/min	20 680 kPa
Implement System – Optional 3rd Function Maximum Flow	280 L/min
Hydraulic Cycle Time – Raise from Carry Position	6.1 Seconds
Hydraulic Cycle Time – Dump at Maximum Raise	1.2 Seconds
Hydraulic Cycle Time – Lower, Empty, Float Down	2.8 Seconds
Hydraulic Cycle Time – Total Cycle Time	10.1 Seconds

Tires

- Choices include:
  23.5-25 16PR, L3 (Triangle)
  23.5R25 ★★, L3 (Triangle)
  23.5R25 ★, L3 (Bridgestone)

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. The cab was properly installed and maintained. The tests were conducted with the cab doors and the cab windows closed. 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.
- The declared dynamic operator sound pressure level for a standard machine configuration, measured according to the procedures specified in "ISO 6396:2008," is 75 dB(A) with a cooling fan speed set at maximum value.
- The declared dynamic machine sound power level for a standard machine configuration, measured according to the procedures specified in "ISO 6395:2008," is 108 dB(A) with the cooling fan speed set at maximum value.

Sound Level Information for Machines in Countries that Adopt the "EU Directives":

- The declared dynamic operator sound pressure level for a standard machine configuration, measured according to the procedures specified in "ISO 6396:2008," is 75 dB(A) with a cooling fan speed set at 70 percent of the maximum value.
- The declared machine sound power level that is labeled on the machine is 106 L_{WA}. The measurement of the sound power level was made according to the test procedures and conditions that are specified in the European Union Directive "2000/14/EC" as amended by "2005/88/EC."

Cab

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

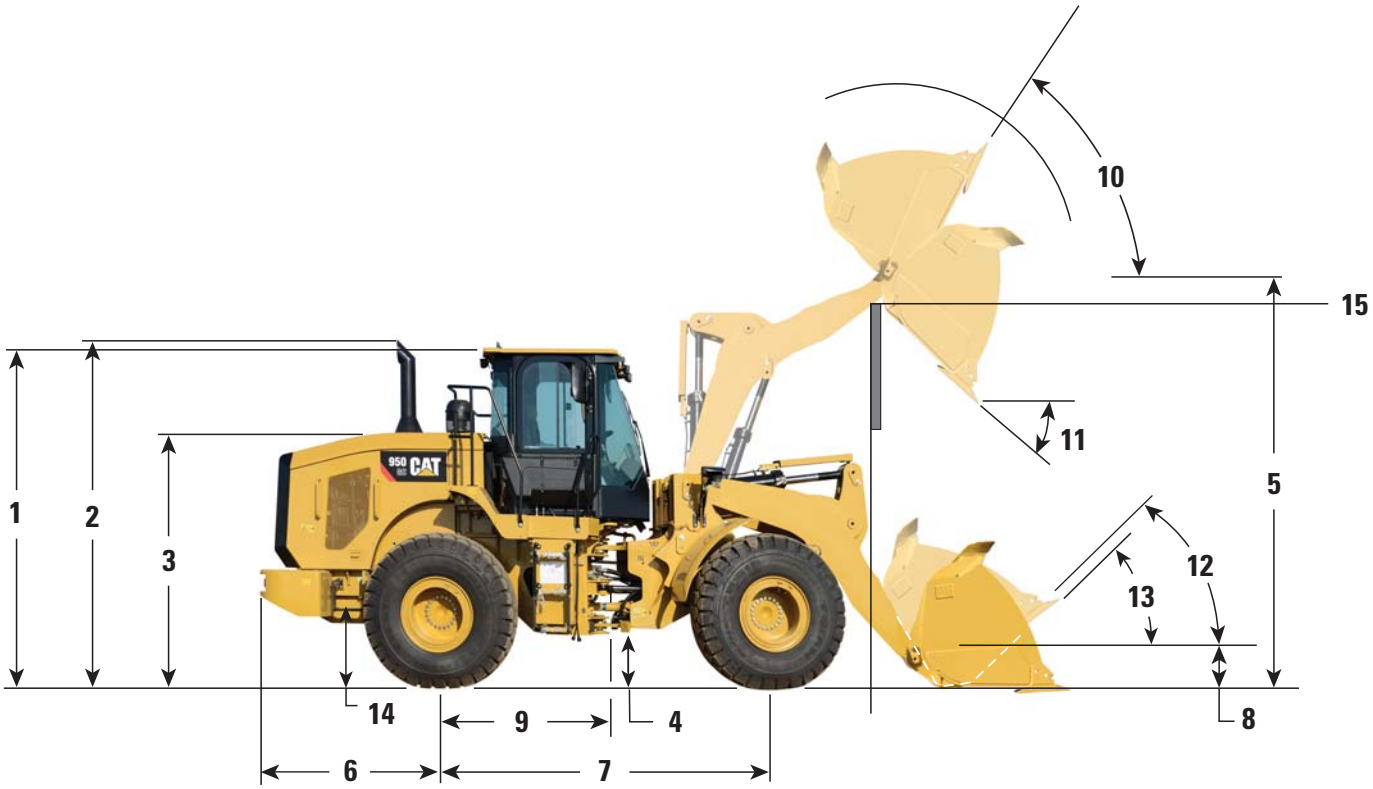
Brakes

Brakes	Brakes meet ISO 3450

950 GC Wheel Loader Specifications

Dimensions

All dimensions are approximate and based on L3 Triangle 23.5-25 Bias tires.



1	Height to Top of ROPS	3458 mm
2	Height to Top of Exhaust Pipe	3596 mm
3	Height to Top of Hood	2568 mm
4	Ground Clearance	460 mm
5	B-Pin Height	4188 mm
6	Center Line of Rear Axle to Edge of Counterweight	2001 mm
7	Wheelbase	3300 mm
8	B-Pin Height @ Carry	655 mm
9	Center Line of Rear Axle to Hitch	1650 mm
10	Rack Back @ Maximum Lift	60 degrees
11	Dump Angle @ Maximum Lift	52 degrees
12	Rack Back @ Carry	45 degrees
13	Rack Back @ Ground	40 degrees
14	Height to Center Line of Axle	750 mm
15	Lift Arm Clearance	3649 mm

Turning Radius

All dimensions are approximate and based on L3 Triangle 23.5-25 Bias tires.

Turning Radius to Outside of Tires	6164 mm
Turning Radius to Inside of Tires	3419 mm
Width Over Tires	2745 mm
Turning Radius to Outside Edge of Counterweight	6190 mm

Operating Specifications

Bucket Type		General Purpose – Pin On								
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Teeth	Bolt-On Cutting Edges	Teeth and Segments	Teeth	Bolt-On Cutting Edges	Teeth and Segments	Teeth
Capacity – Rated	m^3	2.70	2.70	2.50	3.10	3.10	2.90	3.30	3.30	3.10
Capacity – 110% Rated	m^3	2.97	2.97	2.75	3.41	3.41	3.19	3.63	3.63	3.41
Width	mm	2927	2994	2994	2927	2994	2994	2927	2994	2994
Dump Clearance at Maximum Lift and 45° Discharge	mm	3130	3015	3015	3050	2933	2933	3012	2893	2893
Reach at Maximum Lift and 45° Discharge	mm	1212	1326	1326	1262	1374	1374	1292	1403	1403
Reach at Level Lift Arm and Bucket Level	mm	2626	2787	2787	2720	2881	2881	2770	2931	2931
Digging Depth	mm	86	86	56	86	86	56	86	86	56
Overall Length	mm	8138	8312	8312	8238	8412	8412	8288	8462	8462
Overall Height with Bucket at Maximum Lift	mm	5557	5557	5557	5519	5519	5519	5693	5693	5693
Loader Clearance Circle with Bucket at Carry Position	mm	13 764	13 928	13 928	13 819	13 984	13 984	13 847	14 013	14 013
Static Tipping Load, Straight with Tire Squash*	kg	11 924	11 787	12 106	12 178	12 040	12 365	12 082	11 943	12 266
Static Tipping Load, Straight without Tire Squash*	kg	12 582	12 444	12 773	12 854	12 714	13 050	12 759	12 619	12 952
Static Tipping Load, Articulated with Tire Squash*	kg	10 408	10 271	10 576	10 594	10 455	10 764	10 503	10 363	10 671
Static Tipping Load, Articulated without Tire Squash*	kg	11 053	10 915	11 228	11 286	11 147	11 466	11 197	11 057	11 374
Breakout Force	kN	168	166	184	154	152	167	147	146	160
Operating Weight	kg	17 903	18 011	17 854	18 631	18 739	18 582	18 676	18 784	18 627
Reach @ 2134 mm Height, 45° Dumped	mm	1908	1970	1970	1923	1978	1978	1935	1986	1986
Clearance at Full Raise and Dump (on Stops)	mm	3028	2897	2897	2954	2823	2823	2917	2786	2786
Dump Angle at Full Raise and Dump (on Stops)	degrees	53	53	53	52	52	52	52	52	52

*Static tipping loads and operating weights shown are based on standard machine configuration with 26.5R25 L3 Triangle TB516 radial tires, full fuel tank, coolants, lubricants, air conditioner and operator.

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

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

950 GC Wheel Loader Specifications

Operating Specifications

Bucket Type		General Purpose – Pin On					
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Teeth	Bolt-On Cutting Edges	Teeth and Segments	Teeth
Capacity – Rated	m^3	3.40	3.40	3.20	3.60	3.60	3.40
Capacity – 110% Rated	m^3	3.74	3.74	3.52	3.96	3.96	3.74
Width	mm	2927	2994	2994	2927	2994	2994
Dump Clearance at Maximum Lift and 45° Discharge	mm	2985	2867	2867	2939	2820	2820
Reach at Maximum Lift and 45° Discharge	mm	1314	1425	1425	1351	1460	1460
Reach at Level Lift Arm and Bucket Level	mm	2805	2966	2966	2865	3026	3026
Digging Depth	mm	86	86	56	86	86	56
Overall Length	mm	8323	8497	8497	8383	8557	8557
Overall Height with Bucket at Maximum Lift	mm	5723	5723	5723	5781	5781	5781
Loader Clearance Circle with Bucket at Carry Position	mm	13 867	14 034	14 034	13 902	14 069	14 069
Static Tipping Load, Straight with Tire Squash*	kg	12 020	11 880	12 198	11 904	11 763	12 084
Static Tipping Load, Straight without Tire Squash*	kg	12 699	12 558	12 885	12 584	12 442	12 774
Static Tipping Load, Articulated with Tire Squash*	kg	10 444	10 304	10 607	10 333	10 193	10 499
Static Tipping Load, Articulated without Tire Squash*	kg	11 140	10 998	11 311	11 031	10 889	11 205
Breakout Force	kN	143	142	155	137	135	147
Operating Weight	kg	18 706	18 814	18 657	18 764	18 872	18 715
Reach @ 2134 mm Height, 45° Dumped	mm	1945	1994	1994	1958	2003	2003
Clearance at Full Raise and Dump (on Stops)	mm	2891	2760	2760	2846	2716	2716
Dump Angle at Full Raise and Dump (on Stops)	degrees	52	52	52	51	51	51

*Static tipping loads and operating weights shown are based on standard machine configuration with 26.5R25 L3 Triangle TB516 radial tires, full fuel tank, coolants, lubricants, air conditioner and operator.

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

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

Operating Specifications

Bucket Type		General Purpose – Hook On			Material Handling – Pin On
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Teeth	Bolt-On Cutting Edges
Capacity – Rated	m^3	3.10	3.10	2.90	4.4
Capacity – 110% Rated	m^3	3.41	3.41	3.19	4.84
Width	mm	2927	2994	2994	3059
Dump Clearance at Maximum Lift and 45° Discharge	mm	3008	2891	2891	2782
Reach at Maximum Lift and 45° Discharge	mm	1299	1410	1410	1362
Reach at Level Lift Arm and Bucket Level	mm	2775	2936	2936	3002
Digging Depth	mm	94	94	64	102
Overall Length	mm	8299	8473	8473	8527
Overall Height with Bucket at Maximum Lift	mm	5662	5662	5662	5910
Loader Clearance Circle with Bucket at Carry Position	mm	13 850	14 017	14 017	14 110
Static Tipping Load, Straight with Tire Squash*	kg	11 577	11 439	11 755	11 184
Static Tipping Load, Straight without Tire Squash*	kg	12 240	12 101	12 427	11 664
Static Tipping Load, Articulated with Tire Squash*	kg	10 016	9878	10 179	9641
Static Tipping Load, Articulated without Tire Squash*	kg	10 697	10 557	10 868	10 186
Breakout Force	kN	146	145	159	123
Operating Weight	kg	19 109	19 217	19 060	18 330
Reach @ 2134 mm Height, 45° Dumped	mm	1940	1993	1993	1883
Clearance at Full Raise and Dump (on Stops)	mm	2907	2777	2777	2739
Dump Angle at Full Raise and Dump (on Stops)	degrees	52	52	52	47.7

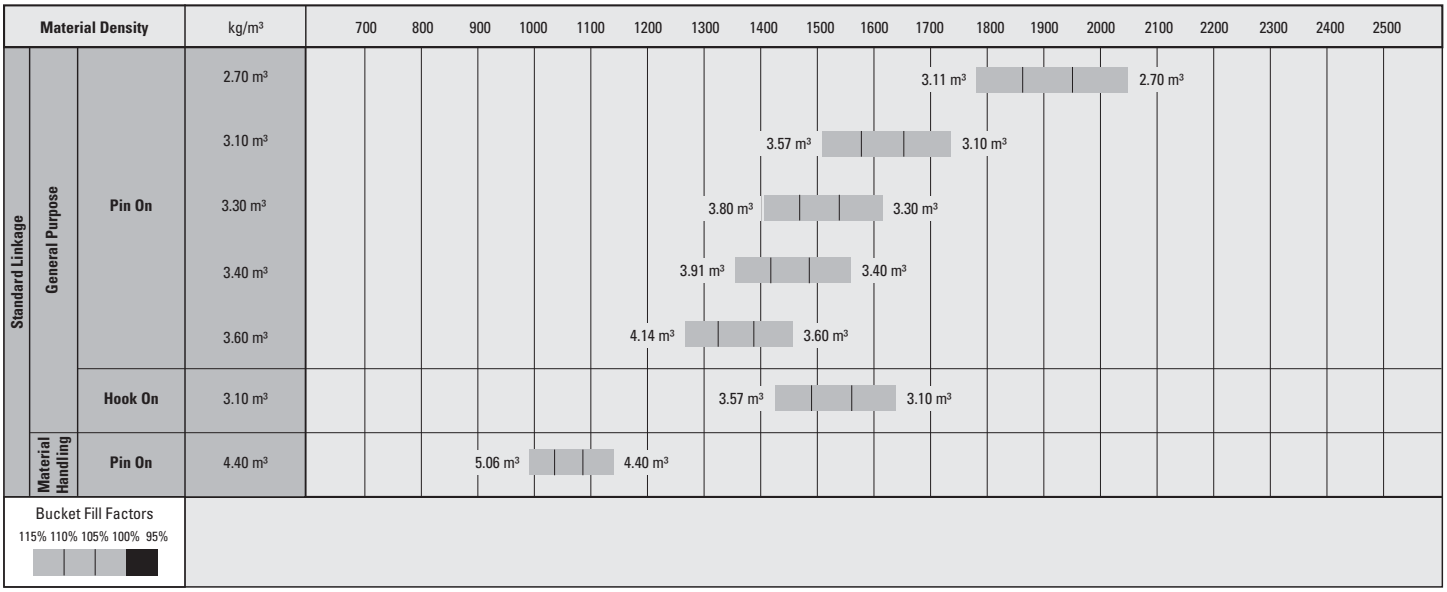
*Static tipping loads and operating weights shown are based on standard machine configuration with 26.5R25 L3 Triangle TB516 radial tires, full fuel tank, coolants, lubricants, air conditioner and operator. Hook On Bucket includes Quick Coupler.

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

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

950 GC Wheel Loader Specifications

Bucket Selection Chart



All buckets are showing Bolt-On Edges.

Standard Equipment

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

POWER TRAIN

- Engine – Cat C7.1 ATAAC Stage IIIA/Tier 3
- Torque converter
- Transmission, automatic, power shift (4F/3R), kick-down function, overspeed protection
- Brakes, full hydraulic enclosed wet-disc
- EIMS (Engine Idle Management System)
- Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand
- Filter, fuel primary/secondary/tertiary
- Fuel/water separator
- Filters, engine air, primary/secondary
- Fuel priming pump (manual)
- Muffler, sound suppressed
- Radiator, unit core (9.5 fpi) with ATAAC
- Starting aid, glow plugs
- Switch, transmission neutralizer lockout

HYDRAULICS

- Load sensing implement system pilot operated
- Dedicated load sensing steering pump
- Dedicated brake and fan gear pump

ELECTRICAL

- Alarm, back-up/main disconnect switch
- Alternator (115-amp, brush type)
- Batteries, maintenance free (2×900 CCA)
- Ignition key; start/stop switch
- Lighting system, halogen (6 total)
  - Four (4) halogen work lights
  - Two (2) halogen roading lights
- Starting and charging system (24-volt)
- Starter, electric (heavy duty)

OPERATOR ENVIRONMENT

- Air conditioning with 10 vents and filter unit located outside of cab
- Bucket/work tool function lockout
- Cab, pressurized and sound suppressed
- Hydroformed (ROPS/FOPS) structure
- 12V power port (10A)
- Coat hook
- Pilot hydraulic controls, lift and tilt function; two (2) single axis levers or joystick
- Heater and defroster
- Horn
- Cup holders and personal tray on right console
- Storage tray behind seat
- Mirrors, rearview internal and external
- Seat, Cat Comfort (cloth) mechanical suspension, auto-retractable seat belt
- Steering column, adjustable angle
- Wipers/washers (front and rear)
- Window, sliding (left and right side)
- Computerized monitoring system

OTHER STANDARD EQUIPMENT

- Lift and return-to-dig kick outs (Electro-Magnetic), mechanical adjustment
- Doors, service access (locking)
- Fenders (front and rear) steel
- Grill, airborne debris
- Hitch, drawbar with pin
- Hood, non-metallic on steel structure
- Counterweight, 1800 kg
- Linkage, Z-bar, fabricated crosstube/ tilt lever
- S·O·S℠ oil sampling valves
- Product Link Ready

950 GC Optional Equipment

Optional Equipment

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

- Cold weather starting (batteries 2×1,400 CCA and ether starting aid)
- Third hydraulic function, one single axis lever
- Quick coupler control
- Limited slip differentials
- Autolube system
- Air precleaner turbine
- Ride control
- Heated rear window
- Air suspended seat
- Secondary steering, electrical
- Reversing cooling fan (auto/manual controlled)
- Toolbox
- Warning beacon
- Extra working lights (4), Halogen or HID
- Rearview camera
- Radio
- Fender extensions/roading

Notes

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

AEHQ7152-02 (12-2014)
Replaces AEHQ7152-01

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