



950 GC

Wheel Loader

Technical Specifications

Engine

Engine Model	Cat® C7.1	
Rated Net Power @ 2,200 rpm – ISO 9249:2007	151 kW	202 hp
Rated Gross Power @ 2,200 rpm – ISO 14396:2002	168 kW	225 hp
Max Gross Power @ 2,000 rpm – ISO 14396:2002	170 kW	228 hp
Max Gross Torque @ 1,400 rpm	1020 N·m	752 lbf·ft
Max Net Torque @ 1,300 rpm	931 N·m	687 lbf·ft
Bore	105 mm	4.13 in
Stroke	135 mm	5.31 in
Displacement	7.01 L	428 in ³

- Cat engine meets Brazil MAR-1, India Bharat Stage III, and China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- The power ratings apply at the stated speed when tested under the reference conditions for the specified standards.
- Net power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator with engine speed at 2,200 rpm.
- The gross power advertised is with the fan at maximum speed.

Weights

Operating Weight	18 392 kg	40,547 lb
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- Weight and static tipping loads and operating weights shown are based on a machine configuration with Triangle 23.5R25 tires, full fluids, operator, standard counterweight, standard ambient arrangement, open differential axles (front/rear), roading fenders, ride control and a 3.1 m³ (4.0 yd³) general purpose bucket with BOCE.

Operating Specifications

Static Tipping Load Full 38° Turn – ISO 14397-1:2007 (With Tire Deflection)*	10 942 kg	24,123 lb
Static Tipping Load Full 38° Turn – (No Tire Deflection)**	11 638 kg	25,657 lb
Breakout Force	154 kN	34,623 lbf

- For a machine configuration as defined under “Weights.”
- * (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.

Transmission

Forward 1	7.0 km/h	4.3 mph
Forward 2	12.5 km/h	7.8 mph
Forward 3	22.0 km/h	13.7 mph
Forward 4	36.0 km/h	22.4 mph
Reverse 1	7.0 km/h	4.3 mph
Reverse 2	12.5 km/h	7.8 mph
Reverse 3	22.0 km/h	13.7 mph

- 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	76.6 gal
Cooling System	48 L	12.7 gal
Crankcase	20 L	5.3 gal
Transmission	45 L	11.9 gal
Differentials and Final Drives – Front	40 L	10.6 gal
Differentials and Final Drives – Rear	38 L	10 gal
Hydraulic Tank	120 L	31.7 gal



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Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.9 kg (4.2 lb) of refrigerant which has a CO₂ equivalent 2.717 metric tonnes (2.995 tons).

Hydraulic System

Implement System Pump Type	Piston
Steering System Pump Type	Piston
Implement System – Maximum Pump Output at 2,200 rpm	256 L/min 68 gal/min
Implement System – Maximum Operating Pressure at 50 ± 1.5 L/min	27 900 kPa 4,047 psi
Implement System – Optional 3rd Function Maximum Pressure at 70 L/min (18.5 gal/min)	20 680 kPa 2,999 psi
Implement System – Optional 3rd Function Maximum Flow	240 L/min 63 gal/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 and Maxam)
 - 23.5R25 ★, L3 (Bridgestone)
 - 23.5R25, L5 (Triangle, Maxam, and Bridgestone)

*Tire offerings vary by region. Consult your local Cat dealer for further details.

Sound

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

With Cooling Fan Speed at Maximum Value:	
Operator Sound Pressure Level (ISO 6396:2008)	75 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	108 dB(A)
With Cooling Fan Speed at 70% of Maximum Value:*	
Operator Sound Pressure Level (ISO 6396:2008)	75 dB(A)
Exterior Sound Power Level	106 L _{WA} **

*For machines in countries that adopt the “EU Directives.”
 **European Union Directives “2000/14/EC” as amended by “2005/88/EC.”

Cab

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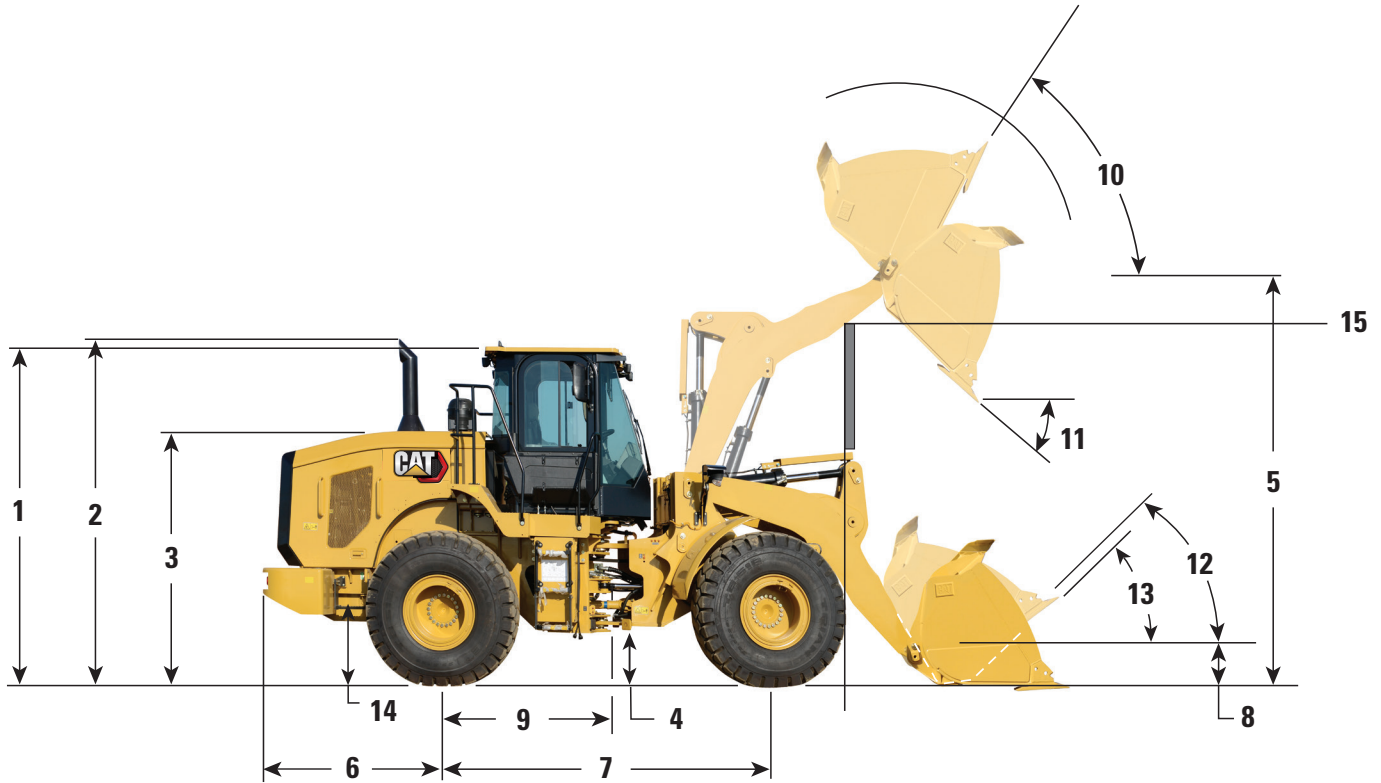
Brakes

Brakes	Brakes meet ISO 3450:2011 standards
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Dimensions

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



1	Height to Top of ROPS	3458 mm	11'4"
2	Height to Top of Exhaust Pipe	3596 mm	11'10"
3	Height to Top of Hood	2568 mm	8'5"
4	Ground Clearance	460 mm	1'6"
5	B-Pin Height	4188 mm	13'9"
6	Center Line of Rear Axle to Edge of Counterweight	2001 mm	6'6"
7	Wheelbase	3300 mm	10'10"
8	B-Pin Height at Carry	655 mm	2'2"
9	Center Line of Rear Axle to Hitch	1650 mm	5'5"
10	Rack Back at Maximum Lift		60 degrees
11	Dump Angle at Maximum Lift		52 degrees
12	Rack Back at Carry		45 degrees
13	Rack Back at Ground		40 degrees
14	Height to Center Line of Axle	750 mm	2'6"
15	Lift Arm Clearance	3649 mm	12'0"

Turning Radius

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

	Turning Radius to Outside of Tires	6164 mm	20'3"
	Turning Radius to Inside of Tires	3419 mm	11'3"
	Width Over Tires	2790 mm	9'2"
	Turning Radius to Outside Edge of Counterweight	6190 mm	20'3"

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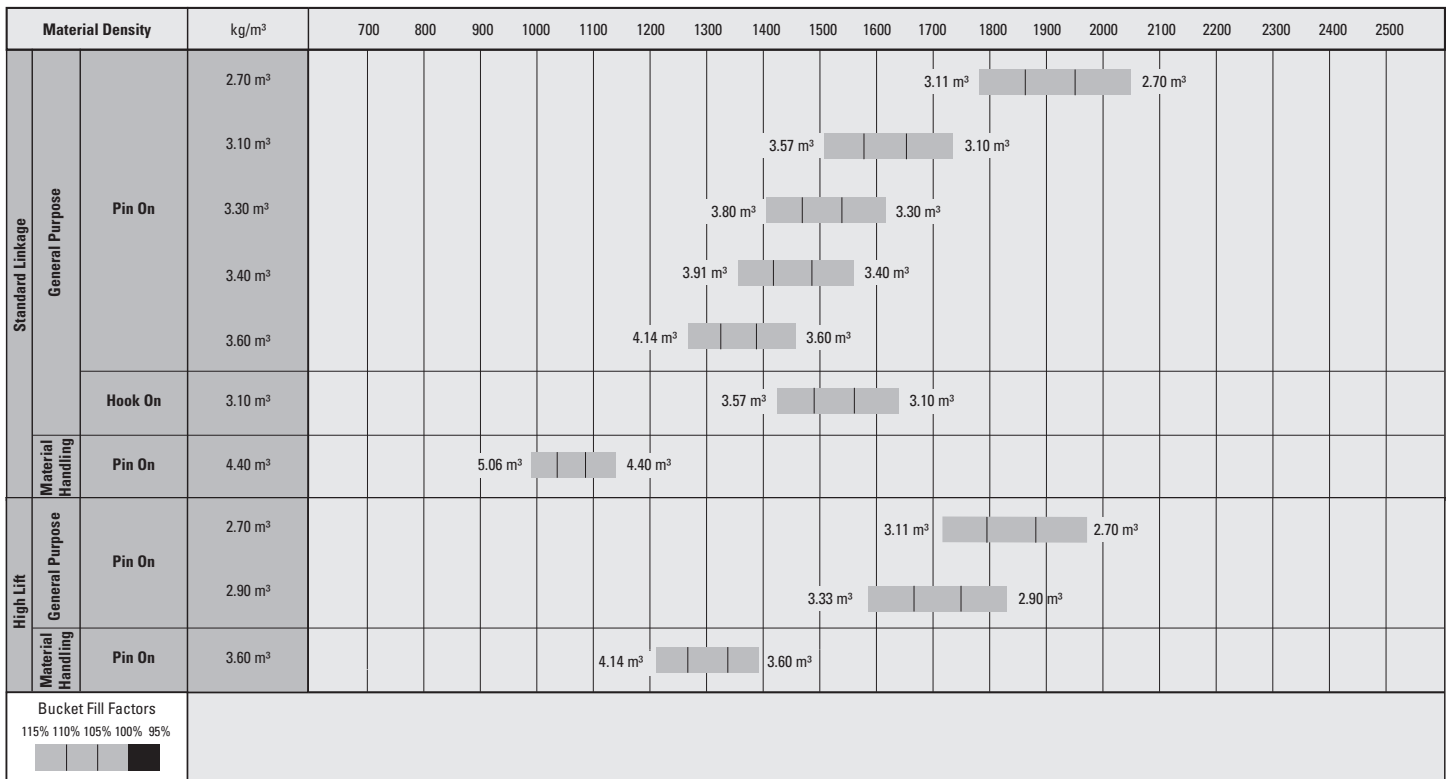
Bucket Fill Factors and Selection Chart

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 ³ (2,528-2,865 lb/yd ³)	115
Sand and Gravel		1500-1700 kg/m ³ (2,528-2,865 lb/yd ³)	115
Aggregate:	25-76 mm (1 to 3 in)	1600-1700 kg/m ³ (2,696-2,865 lb/yd ³)	110
	19 mm (0.75 in) and smaller	1800 kg/m ³ (3,033 lb/yd ³)	105
Rock:	76 mm (3 in) and larger	1600 kg/m ³ (2,696 lb/yd ³)	100

*As a % of ISO 7546:1983 rated capacity.

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



All buckets are showing Bolt-On Edges.

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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
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	2894	2894
Reach at Maximum Lift and 45° Discharge	mm	1207	1320	1320	1262	1374	1374	1293	1404	1404
Reach at Level Lift Arm and Bucket Level	mm	2620	2781	2781	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	5642	5642	5642	5690	5690	5690
Loader Clearance Circle with Bucket at Carry Position	mm	13 763	13 927	13 927	13 819	13 984	13 984	13 847	14 013	14 013
Static Tipping Load, Straight with Tire Squash*	kg	12 618	12 481	12 807	12 577	12 438	12 766	12 491	12 352	12 672
Static Tipping Load, Straight without Tire Squash*	kg	13 328	13 190	13 525	13 290	13 151	13 488	13 207	13 067	13 397
Static Tipping Load, Articulated with Tire Squash*	kg	10 975	10 838	11 147	10 942	10 804	11 115	10 862	10 722	11 027
Static Tipping Load, Articulated without Tire Squash*	kg	11 666	11 528	11 846	11 638	11 498	11 820	11 559	11 419	11 733
Breakout Force	kN	168	166	184	154	153	168	148	147	160
Operating Weight	kg	18 454	18 562	18 405	18 392	18 500	18 343	18 433	18 541	18 384
Reach at 2134 mm Height, 45° Dumped	mm	1903	1965	1965	1923	1978	1978	1936	1988	1988
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 23.5R25 L3 Triangle TB516 radial tires, full fuel tank, coolants, lubricants, air conditioner and operator.

(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.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

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Operating Specifications

Bucket Type		General Purpose – Pin On					
		Bolt-On Cutting Edges	Teeth and Segments	Teeth	Bolt-On Cutting Edges	Teeth and Segments	Teeth
Edge Type							
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	1424	1424	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	5722	5722	5722	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	12 432	12 292	12 616	12 168	12 027	12 349
Static Tipping Load, Straight without Tire Squash*	kg	13 149	13 008	13 343	12 887	12 745	13 078
Static Tipping Load, Articulated with Tire Squash*	kg	10 805	10 665	10 974	10 548	10 407	10 714
Static Tipping Load, Articulated without Tire Squash*	kg	11 505	11 363	11 682	11 249	11 107	11 424
Breakout Force	kN	144	143	156	137	135	147
Operating Weight	kg	18 460	18 568	18 411	18 676	18 784	18 627
Reach at 2134 mm Height, 45° Dumped	mm	1944	1993	1993	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 23.5R25 L3 Triangle TB516 radial tires, full fuel tank, coolants, lubricants, air conditioner and operator.

(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.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

950 GC Wheel Loader Specifications

Operating Specifications

Bucket Type		General Purpose – Hook On			Flat Floor – Pin On
		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	1357
Reach at Level Lift Arm and Bucket Level	mm	2775	2936	2936	2996
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	14 109
Static Tipping Load, Straight with Tire Squash*	kg	11 834	11 696	12 014	11 695
Static Tipping Load, Straight without Tire Squash*	kg	12 535	12 396	12 723	12 404
Static Tipping Load, Articulated with Tire Squash*	kg	10 224	10 086	10 388	10 105
Static Tipping Load, Articulated without Tire Squash*	kg	10 908	10 768	11 080	10 796
Breakout Force	kN	146	145	159	123
Operating Weight	kg	19 021	19 129	18 972	18 881
Reach at 2134 mm Height, 45° Dumped	mm	1940	1993	1993	1878
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 23.5R25 L3 Triangle TB516 radial tires, full fuel tank, coolants, lubricants, air conditioner and operator. Hook On Bucket includes Quick Coupler.

(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.

Bucket and work tool offerings vary by region. Consult your local Cat dealer for further details.

950 GC Wheel Loader Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWER TRAIN			ELECTRICAL		
Brakes, full hydraulic enclosed wet-disc	✓		Alarm, back-up/main disconnect switch	✓	
Cat C7.1 Tier 3 equivalent	✓		Alternator (115-amp, brush type)	✓	
EIMS (Engine Idle Management System)	✓		Batteries, maintenance free (2×900 CCA)	✓	
Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand	✓		Ignition key; start/stop switch	✓	
Fan, reversing cooling, automatic and manual control		✓	Lighting system: 4 halogen work lights	✓	
Filter, fuel primary/secondary/tertiary	✓		Lighting system: 8 halogen work lights		✓
Filters, engine air, primary/secondary	✓		Lighting system: 4 LED work lights		✓
Fuel priming pump (manual)	✓		Lights: warning beacon		✓
Fuel/water separator	✓		Roading lights with high/low beam and F and R turn signals		✓
Muffler, sound suppressed	✓		Starter, electric (heavy duty)	✓	
Radiator, unit core (9.5 fpi) with ATAAC	✓		Starting and charging system, 24V	✓	
Starting aid, glow plugs	✓		HYDRAULICS		
Switch, transmission neutralizer lockout	✓		Dedicated brake and fan gear pump	✓	
Torque converter	✓		Dedicated load sensing steering pump	✓	
Transmission, automatic, power shift (4F/3R), kick-down function, overspeed protection	✓		Load sensing implement system pilot operated	✓	
OPERATOR ENVIRONMENT			Quick coupler control		✓
Air conditioning (HVAC) with 10 vents and filter unit located outside of cab	✓		Ride control		✓
Bucket/work tool function lockout	✓		S·O·S SM oil sampling valves	✓	
Cab, pressurized and sound suppressed	✓		3 rd function with additional dedicated single axis lever		✓
Camera, rearview		✓	LINKAGE		
Coat hook	✓		Fusion TM quick coupler control		✓
Computerized monitoring system	✓		Lift and bucket return-to-dig kickouts (electro-magnetic), mechanical adjustment	✓	
Cup holders and personal tray on right console	✓		Z-bar, fabricated crosstube/tilt lever	✓	
Doors, service access (locking)	✓		ADDITIONAL EQUIPMENT		
Heater and defroster	✓		Autolube system		✓
Horn	✓		Cold weather starting (batteries 2 x 1,400 CCA and ether starting aid)		✓
Mirrors, rearview internal and external	✓		Counterweight, 1800 kg	✓	
Pilot hydraulic controls, lift and tilt function; two (2) single axis levers or joystick	✓		Differentials, limited slip		✓
12V power port (10A)	✓		Fenders (front and rear) steel	✓	
Radio installation, complete		✓	Fender extensions or roading		✓
ROPS/FOPS structure	✓		Grill, airborne debris	✓	
Seat, Cat Comfort (cloth), mechanical suspension	✓		Hitch, drawbar with pin	✓	
Seat, air suspended		✓	Hood, metallic panels on steel structure	✓	
Steering column, adjustable angle	✓		L5 traction tires		✓
Steering, secondary, electrical		✓	Power train guard		✓
Storage tray behind seat	✓		Precleaner, turbine		✓
Window, sliding (left and right sides)	✓		Product Link TM ready		✓
Wipers/washers (front and rear)	✓		Toolbox		✓
			Windshield guard		✓

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.

For additional information, refer to the Technical Specifications brochures for the 950 GC model available at www.cat.com or your Cat dealer.



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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Global

