

# 950 GC Wheel Loader

# **Technical Specifications**

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

### **Table of Contents**

ngine	Cab
Veights	Brakes
Operating Specifications	Dimensions
Transmission	Turning Radius5
Service Refill Capacities	Tire Options5
Bucket Capacities	Changes Specific to the 950 GC
Air Conditioning System	Bucket Fill Factors and Selection Chart
Hydraulic System	Operating Specifications
īres	Fork Specifications11
Sound	Material Handling Arm Specifications



Engine			
Engine Model	Cat® C7.1		
Engine Power @ 2,000 rpm	179 kW	240 hp	
ISO 14396:2002			
ISO 14396:2002 (DIN)	243 hp (meta	ric)	
Gross Power @ 2,000 rpm	180 kW	241 hp	
SAE J1995:2014			
SAE J1995:2014 (DIN)	245 hp (metric)		
Net Power @ 1,700 rpm	168 kW	225 hp	
ISO 9249:2007, SAE J1349:2011			
SAE J1349:2011 (DIN)	228 hp (meta	ric)	
Engine Torque (1,400 rpm)	1092 N·m	805 lbf-ft	
ISO 14396:2002			
Gross Torque (1,400 rpm)	1099 N·m	811 lbf-ft	
SAE J1995:2014			
Net Torque (1,400 rpm)	1041 N·m	768 lbf-ft	
ISO 3294:2007, SAE J1349:2011,			
EEC 80/1269			
Bore	105 mm	4.13 in	
Stroke	135 mm	5.31 in	
Displacement	7.01 L	428 in3	

- Cat engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, and Japan 2014 emission standards.
- The net power advertised is the power available at the flywheel when the engine is equipped with fan, alternator, air cleaner, and aftertreatment.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - 20% biodiesel FAME (fatty acid methyl ester)\*
  - 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

\* Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

# Weights Operating Weight 19 069 kg 42,040 lb

• Weight and static tipping loads and operating weights shown are based on a machine configuration with Maxam 23.5R25 tires, full fluids, operator, standard counterweight, standard ambient arrangement, limited slip 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		
With Tire Deflection	11 160 kg	24,604 lb
No Tire Deflection	11 906 kg	26,248 lb
Breakout Force	154 kN	34,645 lbf

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

Transmission		
Forward 1	7.3 km/h	4.5 mph
Forward 2	12.8 km/h	8.0 mph
Forward 3	22.8 km/h	14.2 mph
Forward 4	36 km/h	22.4 mph
Reverse 1	7.3 km/h	4.5 mph
Reverse 2	12.8 km/h	8.0 mph
Reverse 3	22.8 km/h	14.2 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			
DEF Tank	16 L	4.2 gal			
Cooling System	50 L	13.2 gal			
Crankcase	18 L	4.8 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	112 L	29.6 gal			

<b>Bucket Capacities</b>		
Bucket Range	2.7-4.4 m <sup>3</sup>	3.5-5.75 yd <sup>3</sup>

### **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  $\rm CO_2$  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 2,390 rpm	256 L/min	68 gal/min
Implement System – Maximum Operating Pressure at $50 \pm 1.5$ 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	5.4 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	9.4 Seconds	

### Tires\*

- · Choices include:
- 23.5R25 L3 ★★ from Triangle and Maxam
- 23.5R25 L3 ★ from Bridgestone
- 23.5R25 L2 ★ from Bridgestone
- 23.5R25 L5 ★★ from Triangle, Maxam, and Bridgestone

Sound	
Operator Sound Pressure Level (ISO 6396:2008)	73 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	107 dB(A)**

<sup>\*</sup>Including countries that adopt the EU and UK directives.

<sup>\*\*</sup>EU Noise Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701.

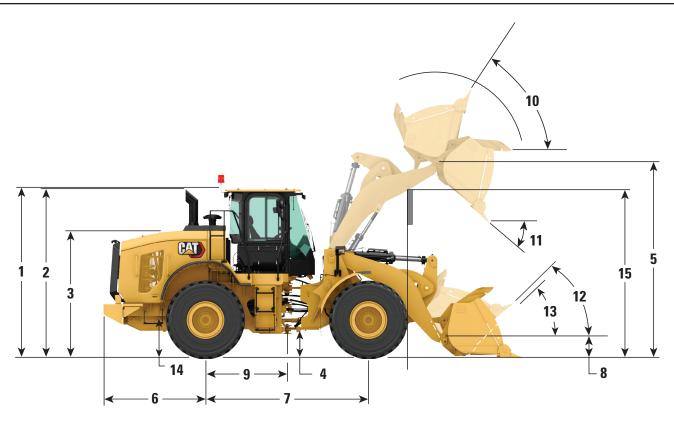
Cab	
ROPS/FOPS	ROPS/FOPS meet ISO 3471:2008 and ISO 3449:2005 Level II standards
Brakes	
Brakes	Brakes meet ISO 3450:2011 standards

3

<sup>\*</sup>Tire offerings vary by region. Consult your local Cat dealer for further details.

### **Dimensions**

All dimensions are approximate and based on Maxam MS302 23.5R25 L3 radial tires.



1 Height to Top of ROPS	3458 mm 11'4"		
2 Height to Top of Exhaust Pipe	3416 mm 11'2"		
<b>3</b> Height to Top of Hood	2673 mm 8'9"		
4 Ground Clearance	460 mm 1'6"		
<b>5</b> B-Pin Height	4188 mm 13'9"		
<b>6</b> Center Line of Rear Axle to Edge of Counterweight	2055 mm	6'9"	
7 Wheelbase	3300 mm 10'10"		
8 B-Pin Height at Carry	655 mm	2'2"	
<b>9</b> 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"	
<b>15</b> Lift Arm Clearance	3649 mm 12'0"		

### **Turning Radius**

All dimensions are approximate and based on 23.5R25 Maxam MS302 L3 tires.

Turning Radius to Outside of Tires	6164 mm	20'3"
Turning Radius to Inside of Tires	3419 mm	11'3"
Width Over Tires	2840 mm	9'4"
Turning Radius to Outside Edge of Counterweight	6196 mm	20'4"

### Tire Options\*

Tire Brand	Maxam	Triangle	Bridgestone	Maxam	Triangle	Bridgestone	Bridgestone
Tire Size	23.5R25						
Tread Type	L5	L5	L5	L3	L3	L3	L2
Tread Pattern	MS503	TL538S+	VSDT	MS302	TB516	VJT	VUT
Width over Tires – Maximum (unloaded)**	2775 mm 9'1"	2819 mm 9'3"	2821 mm 9'3"	2832 mm 9'3"	2751 mm 9'0"	2814 mm 9'2"	2825 mm 9'3"
Width over Tires – Maximum (loaded)**	2805 mm 9'2"	2827 mm 9'3"	2839 mm 9'4"	2843 mm 9'3"	2751 mm 9'0"	2833 mm 9'3"	2843 mm 9'3"
Change in Vertical Dimensions	51 mm	48 mm	44 mm	0 mm	2 mm	-14 mm	-17 mm
(average of front and rear)	2.01"	1.89"	1.73"	0"	0.01"	-0.55"	-0.06"
Change in Horizontal Reach	-18.5 mm	-22.5 mm	-15.5 mm	0 mm	5.5 mm	14.5 mm	14.5 mm
	-0.73"	-0.89"	-0.61"	0"	0.02"	0.57"	0.57"
Change in Clearance Circle to Outside of Tires	-19.0 mm	-8.0 mm	–2.0 mm	0 mm	–46 mm	−5 mm	0 mm
	-0.75"	-0.31"	-0.08"	0"	-0.15"	-0.02"	0"
Change in Clearance Circle to Inside of Tires	19.0 mm	8.0 mm	2.0 mm	0 mm	46 mm	5 mm	0 mm
	0.75"	0.31"	0.08"	0"	0.15"	0.02"	0"
Change in Operating Weight (without Ballast)	472 kg	420 kg	568 kg	0 kg	-12 kg	0 kg	-120 kg
	1041 lb	926 lb	1252 lb	0 lb	-26 lb	0 lb	–265 lb

<sup>\*</sup>Tire offerings vary by region. Consult your local Cat dealer for further details.

## Changes Specific to the 950 GC\*

Tire Brand	Maxam	Triangle	Bridgestone	Bridgestone
Tire Size	23.5R25	23.5R25	23.5R25	23.5R25
Tread Type	L3	L3	L3	L2
Tread Pattern	MS302	TB516	VJT	VUT
Change in Static Tipping Load – Straight	7 kg 15.4 lb	−8 kg −17.6 lb	0 kg 0 lb	−79 kg −174 lb
Change in Static Tipping Load – Articulated	0 kg 0 lb	−7 kg −15.4 lb	0 kg 0 lb	−70 kg −154 lb

<sup>\*</sup>Tire offerings vary by region. Consult your local Cat dealer for further details.

Note: Reference tire used for 'change' dimensions: Maxam MS302.

<sup>\*\*</sup>Width over tire bulge and includes tire growth.

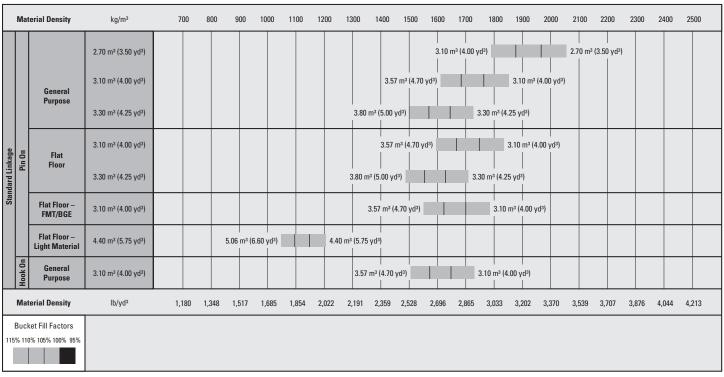
#### **Bucket Fill Factors and Selection Chart**

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 (2,528-2,865 lb/yd3)	115
Sand and Gravel		1500-1700 kg/m3 (2,528-2,865 lb/yd3)	115
Aggregate:	25-76 mm (1 to 3 in)	1600-1700 kg/m3 (2,696-2,865 lb/yd3)	110
	19 mm (0.75 in) and smaller	1800 kg/m3 (3,033 lb/yd3)	105
Rock:	76 mm (3 in) and larger	1600 kg/m3 (2,696 lb/yd3)	100

<sup>\*</sup>As a % of ISO 7546:1983 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 unless otherwise noted.

FMT/BGE = Flush Mounted Back Grading Edge

### **Operating Specifications**

Bucket Type	General Purpose – Pin On							
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Teeth and Segments	Tips	
Capacity – Rated	m3	2.70	2.70	2.50	3.10	3.10	2.90	
	yd3	3.50	3.50	3.25	4.00	4.00	3.75	
Capacity – 110% Rated	m3	3.00	3.00	2.80	3.40	3.40	3.20	
	yd3	4.00	4.00	3.50	4.50	4.50	4.25	
Width	mm	2927	2994	2994	2927	2994	2994	
	ft/in	9'7"	9'10"	9'10"	9'7"	9'10"	9'10"	
Dump Clearance at Maximum Lift and	mm	3130	3015	3015	3050	2933	2933	
45° Discharge	ft/in	10'3"	9'9"	9'9"	10'0"	9'8"	9'8"	
Reach at Maximum Lift	mm	1207	1320	1320	1261	1372	1372	
and 45° Discharge	ft/in	4'0"	4'3"	4'3"	4'2"	4'6"	4'6"	
Reach at Level Lift Arm and	mm	2620	2781	2781	2719	2880	2880	
Bucket Level	ft/in	8'6"	9'1"	9'1"	8'11"	9'5"	9'5"	
Digging Depth	mm	86	86	56	86	86	56	
	in	3.39"	3.39"	2.2"	3.39"	3.39"	2.2"	
Overall Length	mm	8138	8312	8312	8292	8466	8466	
	ft/in	26'7"	27'3"	27'3"	27'3"	27'9"	27'9"	
Overall Height with Bucket at Maximum	mm	5557	5557	5557	5642	5642	5642	
Lift	ft/in	18'2"	18'2"	18'2"	18'6"	18'6"	18'6"	
Loader Clearance Circle with Bucket	mm	13 763	13 927	13 927	13 819	13 984	13 984	
at Carry Position	ft/in	45'2"	45'7"	45'7"	45'4"	45'11"	45'11"	
Static Tipping Load, Straight	kg	12 618	12 481	12 807	12 721	12 583	12 912	
(With Tire Deflection)*	lb	27,818	27,516	28,235	28,045	27,741	28,466	
Static Tipping Load, Straight	kg	13 328	13 190	13 525	13 559	13 420	13 760	
(No Tire Deflection)*	lb	29,383	29,079	29,818	29,892	29,586	30,336	
Static Tipping Load, Articulated	kg	10 975	10 838	11 147	11 160	11 021	11 335	
(With Tire Deflection)*	lb	24,196	23,894	24,575	24,604	24,297	24,989	
Static Tipping Load, Articulated	kg	11 666	11 528	11 846	11 906	11 766	12 090	
(No Tire Deflection)*	lb	25,719	25,415	26,116	26,248	25,940	26,654	
Breakout Force	kN	168	166	184	154	153	168	
	lbf	37,768	37,318	41,365	34,638	34,380	37,666	
Operating Weight*	kg	18 454	18 562	18 405	19 069	19 177	19 020	
	lb	40,684	40,922	40,576	42,040	42,278	41,932	

<sup>\*</sup>Static tipping loads and operating weights shown are based on a machine configuration with Maxam MS302 23.5R25 tires, full fluids, operator, standard counterweight, standard ambient arrangement, limited slip differential axles (front/rear), roading fenders, ride control.

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

<sup>(</sup>With Tire Deflection) Full compliance to ISO 14397-1:2007 Sections 1 through 6, which requires 2% verification between calculations and testing. (No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 through 5.

### **Operating Specifications**

Bucket Type		General Purpose – Pin On							
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Teeth and Segments	Tips		
Capacity – Rated	m3	3.30	3.30	3.10	3.40	3.40	3.20		
	yd3	4.25	4.25	4.00	4.50	4.50	4.25		
Capacity – 110% Rated	m3	3.60	3.60	3.40	3.70	3.70	3.50		
	yd3	4.75	4.75	4.50	4.75	4.75	4.50		
Width	mm	2927	2994	2994	2927	2994	2994		
	ft/in	9'7"	9'10"	9'10"	9'7"	9'10"	9'10"		
Dump Clearance at Maximum Lift and	mm	3012	2894	2894	2985	2867	2867		
45° Discharge	ft/in	9'11"	9'6"	9'6"	9'10"	9'5"	9'5"		
Reach at Maximum Lift	mm	1292	1402	1402	1312	1423	1423		
and 45° Discharge	ft/in	4'3"	4'7"	4'7"	4'4"	4'8"	4'8"		
Reach at Level Lift Arm and	mm	2769	2930	2930	2804	2965	2965		
Bucket Level	ft/in	9'1"	9'7"	9'7"	9'2"	9'9"	9'9"		
Digging Depth	mm	86	86	56	86	86	56		
	in	3.39"	3.39"	2.2"	3.4"	3.4"	2.2"		
Overall Length	mm	8342	8516	8516	8377	8551	8551		
	ft/in	27'4"	27'11"	27'11"	27'6"	28'1"	28'1"		
Overall Height with Bucket at Maximum	mm	5690	5690	5690	5722	5722	5722		
Lift	ft/in	18'8"	18'8"	18'8"	18'9"	18'9"	18'9"		
Loader Clearance Circle with Bucket	mm	13 847	14 013	14 013	13 867	14 034	14 034		
at Carry Position	ft/in	45'5"	46'0"	46'0"	45'5"	46'0"	46'0"		
Static Tipping Load, Straight	kg	12 635	12 495	12 817	12 574	12 434	12 760		
(With Tire Deflection)*	lb	27,855	27,547	28,257	27,721	27,413	28,132		
Static Tipping Load, Straight	kg	13 476	13 335	13 668	13 417	13 276	13 613		
(No Tire Deflection)*	lb	29,709	29,299	30,133	29,579	29,268	30,012		
Static Tipping Load, Articulated	kg	11 078	10 939	11 246	11 021	10 882	11 193		
(With Tire Deflection)*	lb	24,423	24,116	24,793	24,298	23,990	24,675		
Static Tipping Load, Articulated	kg	11 826	11 685	12 002	11 771	11 629	11 951		
(No Tire Deflection)*	lb	26,072	25,761	26,460	25,950	25,638	26,347		
Breakout Force	kN	148	147	160	144	143	156		
	lbf	33,238	32,981	36,033	32,318	32,062	34,966		
Operating Weight*	kg	19 110	19 218	19 061	19 137	19 245	19 088		
-	lb	42,130	42,368	42,022	42,191	42,429	42,083		

<sup>\*</sup>Static tipping loads and operating weights shown are based on a machine configuration with Maxam MS302 23.5R25 tires, full fluids, operator, standard counterweight, standard ambient arrangement, limited slip differential axles (front/rear), roading fenders, ride control.

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

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

<sup>(</sup>No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 through 5.

### **Operating Specifications**

Bucket Type				Flat Floo	r – Pin On		
Edge Type		Bolt-On Cutting Edges	Teeth and Segments	Tips	Bolt-On Cutting Edges	Teeth and Segments	Tips
Capacity – Rated	m3	3.10	3.10	2.90	3.30	3.30	3.10
	yd3	4.00	4.00	3.75	4.25	4.25	4.00
Capacity – 110% Rated	m3	3.40	3.40	3.20	3.60	3.60	3.40
	yd3	4.50	4.50	4.25	4.75	4.75	4.50
Width	mm	2927	2994	2994	2927	2994	2994
	ft/in	9'7"	9'10"	9'10"	9'7"	9'10"	9'10"
Dump Clearance at Maximum Lift and 45° Discharge	mm	2981	2856	2856	2943	2817	2817
	ft/in	9'9"	9'4"	9'4"	9'8"	9'3"	9'3"
Reach at Maximum Lift and 45° Discharge	mm	1178	1281	1281	1217	1319	1319
	ft/in	3'10"	4'2"	4'2"	4'0"	4'4"	4'4"
Reach at Level Lift Arm and Bucket Level	mm	2729	2890	2890	2784	2945	2945
	ft/in	8'11"	9'6"	9'6"	9'2"	9'8"	9'8"
Digging Depth	mm	86	86	56	86	86	56
	in	3.39"	3.39"	2.2"	3.39"	3.39"	2.2"
Overall Length	mm	8302	8476	8476	8357	8531	8531
	ft/in	27'3"	27'10"	27'10"	27'5"	28'0"	28'0"
Overall Height with Bucket at Maximum Lift	mm	5643	5643	5643	5692	5692	5692
	ft/in	18'6"	18'6"	18'6"	18'8"	18'8"	18'8"
Loader Clearance Circle with Bucket at Carry Position	mm	13 824	13 990	13 990	13 855	14 022	14 022
	ft/in	45'4"	45'11"	45'11"	45'6"	46'0"	46'0"
Static Tipping Load, Straight (With Tire Deflection)*	kg	12 603	12 465	12 783	12 511	12 373	12 690
	lb	27,785	27,481	28,182	27,582	27,278	27,977
Static Tipping Load, Straight (No Tire Deflection)*	kg	13 426	13 287	13 614	13 337	13 197	13 524
	lb	29,599	29,293	30,014	29,403	29,094	29,815
Static Tipping Load, Articulated (With Tire Deflection)*	kg	11 055	10 917	11 220	10 968	10 830	11 133
	lb	24,372	24,068	24,736	24,180	23,876	24,544
Static Tipping Load, Articulated (No Tire Deflection)*	kg	11 787	11 648	11 959	11 703	11 563	11 875
	lb	25,986	25,679	26,365	25,801	25,492	26,180
Breakout Force	kN	153	152	166	146	145	158
	lbf	34,341	34,084	37,319	32,834	32,578	35,565
Operating Weight*	kg	19 082	19 190	19 033	19 124	19 232	19 075
	lb	42,069	42,307	41,961	42,161	42,399	42,053

<sup>\*</sup>Static tipping loads and operating weights shown are based on a machine configuration with Maxam MS302 23.5R25 tires, full fluids, operator, standard counterweight, standard ambient arrangement, limited slip differential axles (front/rear), roading fenders, ride control.

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

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

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

### **Operating Specifications**

Bucket Type		Flat Floor – Pin On	Flat Floor – Light Material – Pin On	G	eneral Purpos – Hook On	se
Edge Type		Flush Mounted Back Grading Edge	Bolt-On Cutting Edges	Bolt-On Cutting Edges	Teeth and Segments	Tips
Capacity – Rated	m3	3.10	4.40	3.10	3.10	2.90
	yd3	4.00	5.75	4.00	4.00	3.75
Capacity – 110% Rated	m3	3.40	4.80	3.40	3.40	3.20
	yd3	4.50	6.25	4.50	4.50	4.25
Width	mm	2994	3059	2927	2994	2994
	ft/in	9'10"	10'0"	9'7"	9'10"	9'10"
Dump Clearance at Maximum Lift	mm	2815	2782	3008	2891	2891
and 45° Discharge	ft/in	9'3"	9'2"	9'10"	9'6"	9'6"
Reach at Maximum Lift and 45° Discharge	mm	1364	1355	1297	1409	1409
	ft/in	4'6"	4'5"	4'3"	4'8"	4'8"
Reach at Level Lift Arm and Bucket Level	mm	2977	2995	2774	2935	2935
	ft/in	9'9"	9'10"	9'1"	9'8"	9'8"
Digging Depth	mm	59	102	94	94	64
	in	2.32"	4.02"	3.7"	3.7"	2.52"
Overall Length	mm	8541	8581	8353	8527	8527
	ft/in	28'0"	28'2"	27'5"	28'0"	28'0"
Overall Height with Bucket at Maximum Lift	mm	5692	5910	5662	5662	5662
	ft/in	18'8"	19'5"	18'7"	18'7"	18'7"
Loader Clearance Circle with Bucket	mm	14 018	14 109	13 849	14 017	14 017
at Carry Position	ft/in	46'0"	46'4"	45'5"	46'0"	46'0"
Static Tipping Load, Straight	kg	12 317	11 832	11 976	11 838	12 157
(With Tire Deflection)*	lb	27,154	26,085	26,403	26,098	26,802
Static Tipping Load, Straight (No Tire Deflection)*	kg	13 146	12 666	12 800	12 661	12 991
	lb	28,982	27,924	28,219	27,913	28,640
Static Tipping Load, Articulated	kg	10 762	10 316	10 439	10 301	10 605
(With Tire Deflection)*	1b	23,726	22,743	23,014	22,710	23,380
Static Tipping Load, Articulated	kg	11 499	11 056	11 171	11 032	11 346
(No Tire Deflection)*	1b	25,351	24,374	24,628	24,321	25,014
Breakout Force	kN	155	123	146	145	159
	lbf	34,757	27,648	32,926	32,667	35,683
Operating Weight*	kg	19 399	19 558	19 698	19 806	19 649
	lb	42,767	43,118	43,427	43,665	43,319

<sup>\*</sup>Static tipping loads and operating weights shown are based on a machine configuration with Maxam MS302 23.5R25 tires, full fluids, operator, standard counterweight, standard ambient arrangement, limited slip differential axles (front/rear), roading fenders, ride control.

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

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

<sup>(</sup>No Tire Deflection) Compliance to ISO 14397-1:2007 Sections 1 through 5.

60" Tine

548-3265

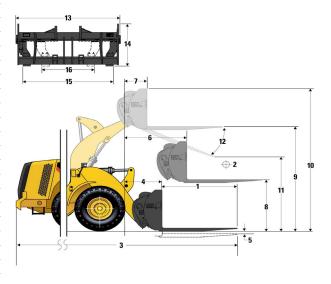
Hinge (B) Pin Height (mm)

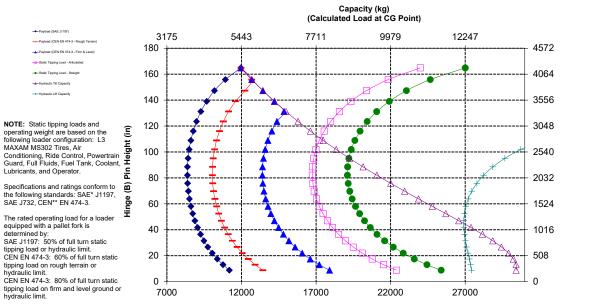
### **Fork Specifications**

#### Fork Specifications

1 Tine Length	mm	4504
· ····o zorigar	in	1524 60.0
2 Load Center	mm	762
2 Load Center	in	30.0
Static Tipping Load - Straight (Forks Level)	kg	9221
	lbs	20323 8096
Static Tipping Load - Articulated (Forks Level)	kg Ibs	17844
Rated Load (SAE J1197 - 50% FTSTL)	kg	4048
Rated Load (SAE 31197 - 50 % F131L)	Ibs	8922
Rated Load (CEN EN 474-3 Rough Terrain - 60%	FTSTL) kg	4858
	, IDS	10707
Rated Load (CEN EN 474-3 Firm and Level Grou	nd - 80% FTSTL) kg lbs	6182 13625
	mm	8960
3 Maximum Overall Length	in	352.7
4 Reach with Forks at Ground Level	mm	1266
4 Reach with Forks at Ground Level	in	49.8
5 Ground to Top of Tine at Minimum Height and Fo	rk Level mm	-86
	IN	-3.4
6 Reach with Arms Horizontal and Forks Level	mm	1768 69.6
	in mm	846
7 Reach with Fork at Maximum Height	in	33.3
8 Ground to Top of Tine with Arms Horizontal and F		1759
6 Ground to Top of Tine with Arms Horizontal and F	ork Level in	69.2
9 Ground to Top of Tine at Maximum Height and Fo	ork Level mm	3877
	In	152.7
10 Overall Height of Fork at Full Lift (top of carriage	to ground) mm in	4652 183.2
	mm	2485
11 Clearance at Full Lift and Max Dump	in	97.8
12 Max Discharge Angle from Horizontal	deg	48
12 Max Discharge Angle Horri Horizontal		
13 Overall Carriage Width	mm	2217
	in	87.3
14 Overall Carriage Height	mm in	840 33.1
	mm	2070
15 Outside Tine Width (max spread)	in	81.5
16 Outside Tine Width (min spread)	mm	470
To Outside Title Width (Illin spread)	in	18.5
Tine Width (single tine)	mm	150.0
	in	5.9
Tine Thickness	mm in	65.0 2.6
	ka	6300
Tine Capacity	lbs	13885
Operating Weight	kg	18852
Operating Weight	Ibs	41551

950 GC STD 87" Carriage Pallet Fork, FUSION 530-1861





Capacity (lbs)
(Calculated Load at CG Point)

Standardization

\*SAE - Society of Automotive

Engineers
\*\*CEN - European Committee for

WARNING: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

### **Fork Specifications**

#### **Fork Specifications**

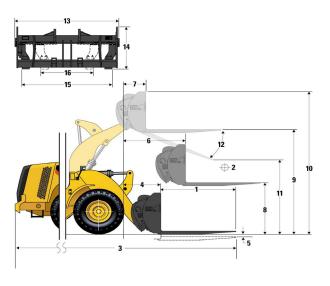
1830 72.0
915
36.0
8775
19340 7699
16968
3849
8484
4619
10181
5428
11962
9266 364.8
1266
49.8
-86
-3.4
1768
69.6
846
33.3
1759 69.2
3877
152.7
4652
183.2
2259
88.9
48
2217
87.3
840
33.1
2070 81.5
470
18.5
150.0
5.9
65.0
2.6 5246
11562
18899
41654

**950 GC STD** Pallet Fork, FUSION

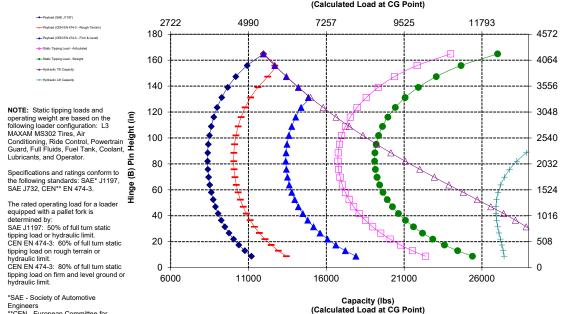
87" Carriage 530-1861

72" Tine

530-1869



## Capacity (kg) (Calculated Load at CG Point)



Hinge (B) Pin Height (mm)

\*SAE - Society of Automotive

Engineers
\*\*CEN - European Committee for

The rated operating load for a loader equipped with a pallet fork is

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.



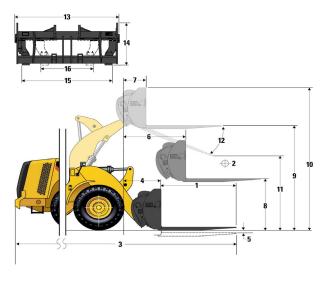
WARNING: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

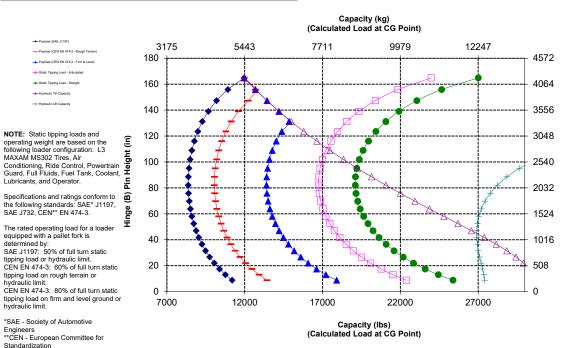
### **Fork Specifications**

#### Fork Specifications

1	Tine Length	mm in	1524 60.0
2	Load Center	mm	762
	Load Center	in	30.0
	Static Tipping Load - Straight (Forks Level)	kg	8947 19719
	0.0. =	lbs ka	7820
	Static Tipping Load - Articulated (Forks Level)	lbs	17236
	Rated Load (SAE J1197 - 50% FTSTL)	kg	3910
	Traica Edda (O/IE 01137 - 00701 101E)	lbs	8618
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg Ibs	4692 10342
_		kg	6256
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	lbs	13789
3	Maximum Overall Length	mm	8915
_	Maximum Overali Lengtii	in	351.0
4	Reach with Forks at Ground Level	mm	1221
		in	48.1 18
5	Ground to Top of Tine at Minimum Height and Fork Level	mm in	0.7
_	5	mm	1761
6	Reach with Arms Horizontal and Forks Level	in	69.3
7	Reach with Fork at Maximum Height	mm	839
_	Trouble Will Fork at Maximum Floight	in	33.0
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm	1863
	<u> </u>	in mm	73.4 3982
9	Ground to Top of Tine at Maximum Height and Fork Level	in	156.8
10	Overall Height of Fork at Full Lift (top of carriage to ground)	mm	5022
10	Overall Height of Fork at Full Lift (top of carnage to ground)	in	197.7
11	Clearance at Full Lift and Max Dump	mm	2434
		in	95.8
12	Max Discharge Angle from Horizontal	deg	54
13	Overall Carriage Width	mm	2528
		in mm	99.5 1130
14	Overall Carriage Height	in	44.5
15	Outside Tine Width (max spread)	mm	2178
13	Outside Title Width (max spread)	in	85.7
16	Outside Tine Width (min spread)	mm	576
_		in	22.7
	Tine Width (single tine)	mm in	180.0 7.1
	Tine Thisleness	mm	90.0
	Tine Thickness	in	3.5
	Tine Capacity	kg	17800
	- mo capacity	lbs	39231
	Operating Weight	kg	19227
	<u> </u>	lbs	42377

950 GC STD 96" Carriage 60" Tine 520-7957 520-7980





WARNING: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

Hinge (B) Pin Height (mm)

### **Fork Specifications**

#### **Fork Specifications**

	rk opecinications		
1	Tine Length	mm in	1829 72.0
2	Load Center	mm	915
	Louis Conto	in	36.0
	Static Tipping Load - Straight (Forks Level)	kg	8496
		lbs ka	18725 7417
	Static Tipping Load - Articulated (Forks Level)	lbs	16348
	Rated Load (SAE J1197 - 50% FTSTL)	kg	3709
	Traica Edad (G/IE 01157 - 50%) Troite)	lbs	8174
	Rated Load (CEN EN 474-3 Rough Terrain - 60% FTSTL)	kg lbs	4450 9809
	B + 11 1/051/51/47/05' 11 10 1 000/ 57071)	kg	5658
	Rated Load (CEN EN 474-3 Firm and Level Ground - 80% FTSTL)	lbs	12469
3	Maximum Overall Length	mm	9220
	Waxiirian Overali Edilgin	in	363.0
4	Reach with Forks at Ground Level	m̈т	1221
		in	48.1
5	Ground to Top of Tine at Minimum Height and Fork Level	mm in	18 0.7
_		mm	1761
6	Reach with Arms Horizontal and Forks Level	in	69.3
_	Decade with Federal Manieron Height	mm	839
7	Reach with Fork at Maximum Height	in	33.0
8	Ground to Top of Tine with Arms Horizontal and Fork Level	mm	1863
	Ground to rop or time with / time rionzontal and ronk Eever	in	73.4
9	Ground to Top of Tine at Maximum Height and Fork Level	mm	3982
		in mm	156.8 5022
10	Overall Height of Fork at Full Lift (top of carriage to ground)	in	197.7
	Ol	mm	2187
11	Clearance at Full Lift and Max Dump	in	86.1
12	Max Discharge Angle from Horizontal	deg	54
13	Overall Carriage Width	mm	2528
	Oronan Garnago Triadi	in	99.5
14	Overall Carriage Height	mm	1130 44.5
_		in mm	2178
15	Outside Tine Width (max spread)	in	85.7
	Outside The Mildle (min annual)	mm	576
16	Outside Tine Width (min spread)	in	22.7
	Tine Width (single tine)	mm	180.0
	Tille Width (Single tille)	in	7.1
	Tine Thickness	mm	90.0
		in	3.5
	Tine Capacity	kg	14800
		lbs kg	32619 19288
	Operating Weight	lbs	42511

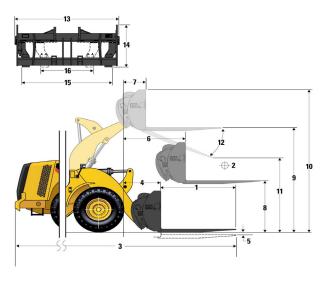
**950 GC STD** 

**Construction Fork, FUSION** 

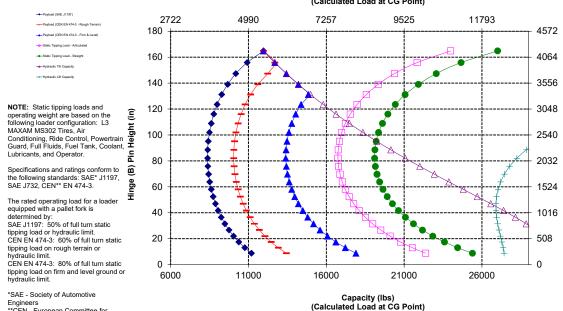
96" Carriage 520-7957

72" Tine 520-7979

Hinge (B) Pin Height (mm)



## Capacity (kg) (Calculated Load at CG Point)



The rated operating load for a loader equipped with a pallet fork is

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

WARNING: Do not exceed tine load capacity. Individual tine capacity is stamped on the side of each tine.

### **Material Handling Arm Specifications**

### 950 GC

624-9044 Fusion MHA

MHA Specifications		Retracted	Extension 1	Extension 2	Extension 3	Extension 4	Extended
Max Lift - Hook Reach (1, 2, 3, 4, 5, 6)	mm	2,043	2,174	2,305	2,437	2,568	2,699
nax Liit - Hook Reach (1, 2, 3, 4, 5, 6)	ft, in	6' 8"	7' 1"	7' 6"	7' 11"	8' 5"	8' 10"
Max Lift - Hook Height (7, 8, 9, 10, 11, 12)	mm	7,058	7,333	7,608	7,883	8,158	8,433
nax Liit - Hook Height (7, 8, 9, 10, 11, 12)	ft, in	23' 1"	24' 0"	24' 11"	25' 10"	26' 9"	27' 8"
ovel Heek Beech (12, 14, 15, 16, 17, 19)	mm	4,626	4,930	5,235	5,540	5,845	6,150
Level - Hook Reach (13, 14, 15, 16, 17, 18)		15' 2"	16' 2"	17' 2"	18' 2"	19' 2"	20' 2"
_evel - Hook Height (19)	mm	1,829	1,829	1,829	1,829	1,829	1,829
evel - Hook Height (19)	ft, in	6' 0"	6' 0"	6' 0"	6' 0"	6' 0"	6' 0"
Min Lift - Hook Reach (20, 21, 22, 23, 24, 25)	mm	1,469	1,565	1,660	1,755	1,850	1,946
/iin Liit - Hook Reach (20, 21, 22, 23, 24, 25)	ft, in	4' 9"	5' 1"	5' 5"	5' 9"	6' 0"	6' 4"
Min Lift - Hook Height (26, 27, 28, 29, 30, 31)	mm	(2,979)	(3,269)	(3,558)	(3,848)	(4,137)	(4,427
//// Lift - Hook Height (20, 27, 26, 29, 30, 31)	ft, in	-9' 2"	-10' 3"	-11' 3"	-12' 4"	-13' 5"	-14' 5"
Distinction load Charlets	kg	5,740	5,429	5,150	4,897	4,667	4,457
Static Tipping Load, Straight	lb	12,650	11,966	11,350	10,793	10,286	9,823
District Time in a local Additional Addition	kg	5,039	4,766	4,519	4,296	4,094	3,908
Static Tipping Load, Articulated	lb	11,106	10,503	9,960	9,469	9,022	8,614
0 6 8 11		18,613	18,613	18,613	18,613	18,613	18,613

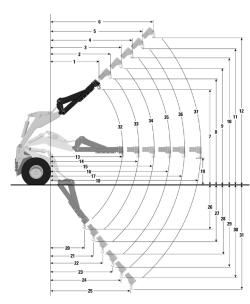
41,024

41,024

41.024

lb

41,024



6Pos

#### Payload Capacity (kg) (Calculated Load at CG Point)

41,024

41,024

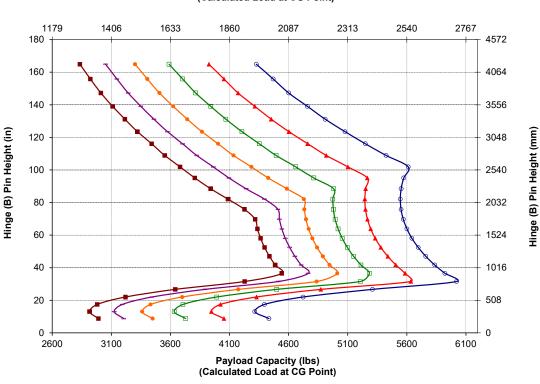


Operating Weight

Specifications and ratings conform to the following standards: SAE\* J1197, SAE J732

The rated operating load for a loader equipped with a material handling arm is determined by: SAE J1197: 50% of full turn static tipping load or hydraulic limit.

\*SAE - Society of Automotive Engineers



### **Standard and Optional Equipment**

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

	Standard	Optional
OPERATOR ENVIRONMENT		
Cab, pressurized and sound suppressed	✓	
CB radio ready		✓
Doors, service access (locking)	✓	
Steering column, adjustable angle	✓	
Steering, secondary, electrical*		✓
Seat, Cat Comfort (cloth), mechanical suspension	✓	
Seat, high-back, air suspended		✓
Seat, air suspended, heated		✓
Radio: DAB+/AM/FM/BT		✓
ROPS/FOPS cab structure	✓	
Mirrors, rear view external	✓	
Air conditioning (HVAC) with 10 vents and filter unit located outside of cab	✓	
Windows, sliding (left and right sides)	✓	
POWERTRAIN		
Cat C7.1 engine, meets emission standards	✓	
Axles, oil cooler		✓
Engine Idle Management System (EIMS)	✓	
Filter, fuel primary-water separator/ secondary	✓	
Radiator, unit core (9.5 fpi) with ATAAC	✓	
Fan, radiator, electronically controlled, hydraulically driven, temperature sensing, on demand	✓	
Fan, reversing cooling, automatic and manual control		✓
Guard		✓
Switch, transmission neutralizer (adjustable) lockout	✓	
Torque converter	✓	
Brakes, full hydraulic enclosed wet-disc	✓	
Transmission, automatic, power shift (4F/3R), kick-down 2-1 manual	✓	
HYDRAULICS		
Load sensing implement system	✓	
Dedicated load sensing steering pump	✓	
Ride control		✓
3rd function with additional dedicated single axis lever		✓
Hoses, Cat XT <sup>TM</sup>	✓	
S•O•S <sup>SM</sup> oil sampling valves	✓	

ioi details.		
	Standard	Optional
ELECTRICAL		
Starter, electric, heavy duty	✓	
Starting and charging system, 24V	✓	
Lighting system: 4 halogen work lights, 2	✓	
halogen roading lights		
LED taillights	✓	
Lights: 4 LED or 8 halogen work lights		✓
MONITORING SYSTEM		
Digital indicators:	$\checkmark$	
Gear indicator		
Speedometer		
Service meter units Fault codes		
Gauges:		
Engine coolant temperatures/fluid level	•	
Hydraulic/transmission oil temperature		
Tachometer/DEF level		
ADDITIONAL EQUIPMENT		
Cat Autolube		$\checkmark$
Camera, front view (kit)**		✓
Fenders, roading		✓
Cat Payload scale system		✓
Cat Payload installation		✓
Storage/toolbox		✓
Tilt cylinder guard		✓
Variable backup alarm (3dB above ambient	✓	
noise)		
Windshield guard		✓
Product Link ready	✓	
L5 traction tires		✓
L3 radial or bias ply tires	✓	
Precleaner, turbine		✓
LINKAGE		
Lift and bucket return-to-dig kickouts	$\checkmark$	
(electro-magnetic), mechanical adjustment		
Quick coupler control		$\checkmark$

<sup>\*</sup>Standard where mandated.

Z-bar, fabricated crosstube/tilt lever

<sup>\*\*</sup> Refer to M0106413 publication for usage requirements.

### 950 GC Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.html.

#### **Engine**

- The Cat® C7.1 engine meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, and Japan 2014 emission standards.
- Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)\*
  - √ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

\*Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).

### **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  $\rm CO_2$  equivalent of 2.717 metric tonnes (2.995 tons).

#### **Paint**

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- Cadmium  $\leq 0.01\%$
- Chromium < 0.01%
- Lead < 0.01%

#### Sound

Operator Sound Pressure Level (ISO 6396:2008)	73 dB(A)
Exterior Sound Power Level (ISO 6395:2008)	109 dB(A)
Operator Sound Pressure Level (ISO 6396:2008)	72 dB(A)*
Exterior Sound Power Level (ISO 6395:2008)	107 dB(A)**

- \*Including countries that adopt the EU and UK directives.
- \*\*EU Noise Directive 2000/14/EC and UK Noise Regulation 2001 No. 1701.

#### **Oils and Fluids**

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

### **Features and Technology**

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  - Engine Idle Management System and Auto Engine Idle Shutdown reduces idle RPM and maximize fuel efficiency
- Variable speed fan adjusts to meet machine cooling requirements to help save fuel
- Load sensing hydraulics produce flow and pressure on-demand and only in amounts necessary to perform the needed functions

#### Recycling

 The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage
Steel	43.72%
Iron	1.17%
Nonferrous Metal	27.13%
Mixed Metal	0.00%
Mixed-Metal and Nonmetal	0.60%
Plastic	0.06%
Rubber	0.58%
Mixed Nonmetallic	0.05%
Fluid	0.30%
Other	24.39%
Uncategorized	2.00%
Total	100%

 A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714 (Earthmoving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused or both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following value in the table may vary.

Recyclability - 94%



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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AEXO2457-04 (7-2024) Build Number: 01B (N Am, Europe, Japan, S Korea, Turkey, Chile, Colombia)

