



330 GC

Hydraulic Excavator

Technical Specifications

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

Table of Contents

Specifications	2
Engine	2
Swing Mechanism	2
Weights	2
Track	2
Drive	2
Hydraulic System	2
Service Refill Capacities	2
Standards	2
Sound Performance	2
Operating Weights and Ground Pressures	3
Major Component Weights	3
Dimensions	4
Working Ranges and Forces	5
Bucket Specifications and Compatibility	6
Attachments Offering Guide	7
Standard and Optional Equipment	8
Dealer Installed Kits and Attachments	10
330 GC Environmental Declaration	11



オフロード法2014年
基準適合

330 GC Hydraulic Excavator Specifications

Engine

Engine Model	Cat® C7.1	
Net Power		
ISO 9249	150 kW	201 hp
ISO 9249 (DIN)	204 hp (metric)	
Engine Power		
ISO 14396	151 kW	202 hp
ISO 14396 (DIN)	205 hp (metric)	
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.1 L	433 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	

- Meets U.S. EPA Tier 4 Final, EU Stage V, Korea Stage V, and Japan 2014 emission standards.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Rated engine speed at 2,200 rpm.

⁽¹⁾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 (hydrogenated 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).*

***Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.*

Swing Mechanism

Swing Speed	11.5 rpm	
Maximum Swing Torque	105 kN·m	77,370 lbf·ft

Weights

Operating Weight	27 800 kg	61,300 lb
------------------	-----------	-----------

- Standard undercarriage, Reach boom, R3.2 m (10'6") stick, General Duty Excavation (GDY) 1.20 m³ (1.57 yd³) bucket, 600 mm (24") triple grouser shoes and 5800 kg (12,790 lb) counterweight.

Track

Standard Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	800 mm	31 in
Number of Shoes (each side)	45	
Number of Track Rollers (each side)	7	
Number of Carrier Rollers (each side)	2	

Drive

Gradeability	35°/70%	
Maximum Travel Speed	5.3 km/h	3.3 mph
Maximum Drawbar Pull	248 kN	55,753 lbf

Hydraulic System

Main System – Maximum Flow – Implement	560 L/min (280 × 2 pumps)	148 gal/min (74 × 2 pumps)
Maximum Pressure – Equipment	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	28 400 kPa	4,118 psi
Boom Cylinder – Bore	140 mm	6 in
Boom Cylinder – Stroke	1407 mm	55 in
Stick Cylinder – Bore	150 mm	6 in
Stick Cylinder – Stroke	1646 mm	65 in
Bucket Cylinder – Bore	135 mm	5 in
Bucket Cylinder – Stroke	1156 mm	46 in

Service Refill Capacities

Fuel Tank Capacity	474 L	125.2 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	10 L	2.6 gal
Final Drive (each)	5.5 L	1.5 gal
Hydraulic System (including tank)	310 L	81.9 gal
Hydraulic Tank	147 L	38.8 gal
Diesel Exhaust Fluid (DEF) Tank	41 L	10.8 gal

Standards

Brakes	ISO 10265:2008
Cab/Rollover Protective Structure (ROPS)	ISO 12117-2:2008
Operator Protective Guards (OPG) (optional)	ISO 10262:1998 Level II

Sound Performance

ISO 6395:2008 (external)	103 dB(A)
ISO 6396:2008 (inside cab)	70 dB(A)

- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

330 GC Hydraulic Excavator Specifications

Operating Weights and Ground Pressures

Base Machine Configurations	600 mm (24") Triple Grouser Shoes		800 mm (31") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure
Base Frame with Track Rollers and Carrier Rollers				
5800 kg (12,790 lb) Counterweight and Standard Undercarriage Base Machine				
Reach Boom + R3.2CB2 (10'6") Stick + 1.20 m ³ (1.57 yd ³) GDX Bucket	27 800 kg (61,300 lb)	59.9 kPa (8.7 psi)	28 800 kg (63,500 lb)	46.6 kPa (6.8 psi)

All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

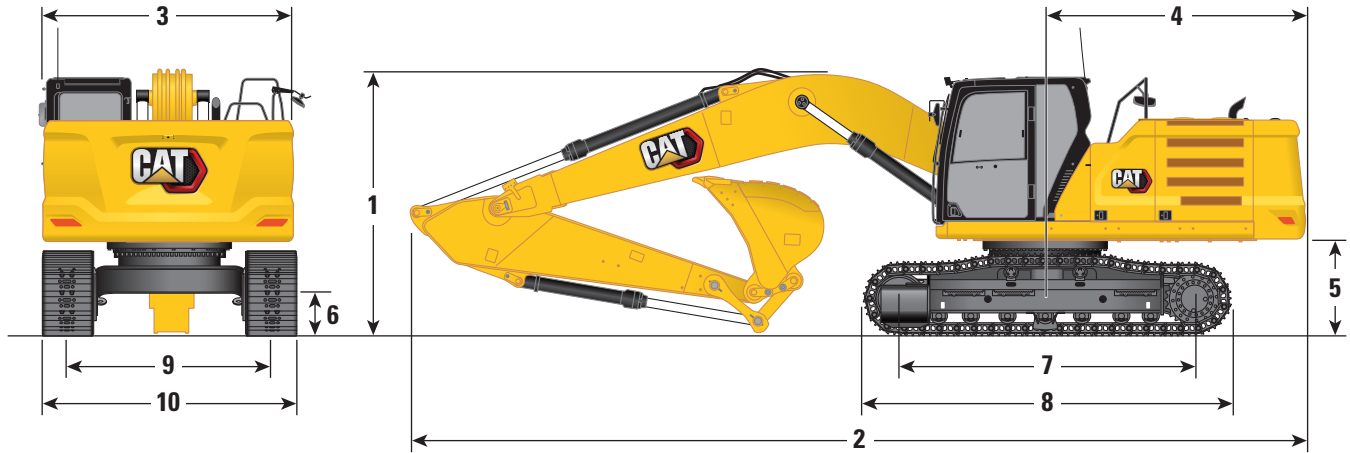
Major Component Weights

	kg	lb
Base machine (with 5800 kg [12,790 lb] counterweight, upper frame, standard undercarriage with HD rollers and two boom cylinders) – weight of 90% fuel tank and 75 kg (165 lb) operator not included.	19 220	42,400
Track Shoes:		
600 mm (24") Width, 11 mm (0.43") Thick, Triple Grouser Track Shoes	3280	7,200
800 mm (31") Width, 13 mm (0.51") Thick, Triple Grouser Track Shoes with Step Extension	4240	9,300
Two Boom Cylinders	490	1,100
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	460	1,000
Counterweight:		
5800 kg (12,790 lb) Counterweight	5800	12,800
Boom (including lines, pins, stick cylinder):		
Reach Boom 6.15 m (20'2")	2300	5,100
Stick (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R3.2CB2 (10'6")	1440	3,200
Buckets (without linkage, with tips and sidecutters):		
1.50 m ³ (1.96 yd ³) GDX, CB Linkage	1160	2,560
1.30 m ³ (1.70 yd ³) Heavy Duty Excavation (HDX), CB Linkage	1210	2,670
1.20 m ³ (1.57 yd ³) GDX, CB Linkage	1030	2,270
1.10 m ³ (1.44 yd ³) GDX, CB Linkage	980	2,160
Quick Couplers (QC):		
Pin Grabber QC CB with pins	530	1,200
Pin Grabber QC CB without pins	500	1,100
Dedicated QC	430	900

330 GC Hydraulic Excavator Specifications

Dimensions

All dimensions are approximate and may vary depending on bucket selection.

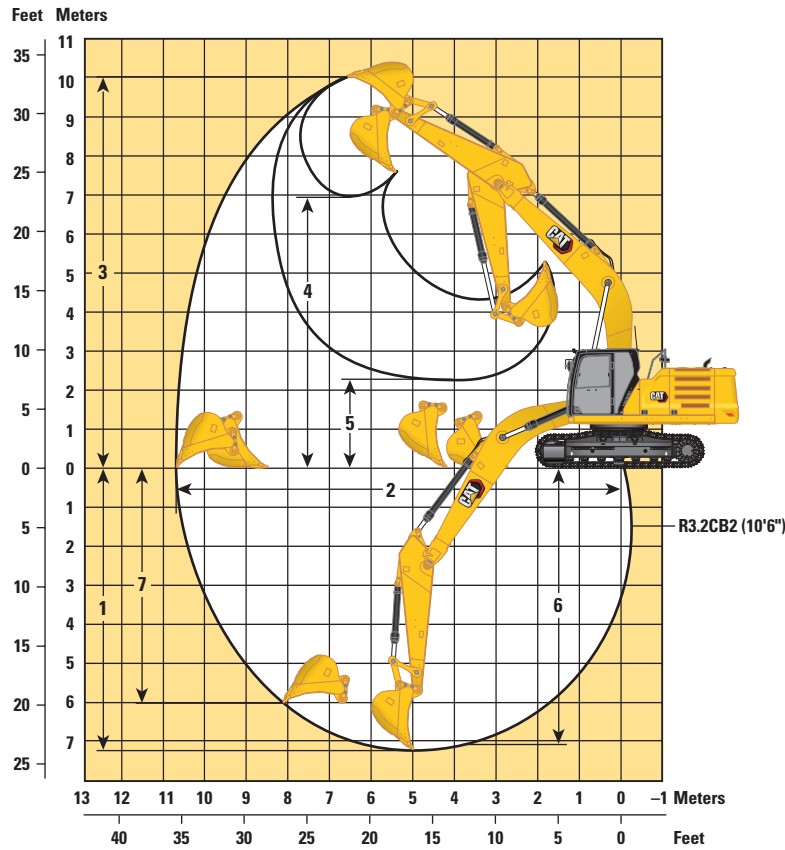


Boom Option	Reach Boom 6.15 m (20'2")	
Stick Option	Reach Stick R3.2CB2 (10'6")	
1 Machine Height:		
Cab Height	3050 mm	10'0"
OPG Height	3190 mm	10'6"
Handrail Height	3050 mm	10'0"
With Boom/Stick/Bucket Installed	3400 mm	11'0"
With Boom/Stick Installed	3380 mm	11'1"
With Boom Installed	3050 mm	10'0"
2 Machine Length:		
With Boom/Stick/Bucket Installed	10 420 mm	34'2"
With Boom/Stick Installed	10 420 mm	34'2"
With Boom Installed	9230 mm	30'3"
3 Upperframe Width	2940 mm	9'7"
4 Tail Swing Radius	3130 mm	10'3"
5 Counterweight Clearance	1110 mm	3'8"
6 Ground Clearance	490 mm	1'7"
7 Length to Center of Rollers	3490 mm	11'5"
8 Track Length	4350 mm	14'3"
9 Track Gauge	2390 mm	7'10"
10 Undercarriage Width:		
600 mm (24") Shoes	2990 mm	9'9"
800 mm (31") Shoes	3190 mm	10'5"
Bucket Type	GDX	
Bucket Capacity	1.20 m ³	1.57 yd ³
Bucket Tip Radius	1580 mm	5'2"

330 GC Hydraulic Excavator Specifications

Working Ranges and Forces

All dimensions are approximate and may vary depending on bucket selection.



Boom Option

Reach Boom
6.15 m (20'2")

Stick Option

Reach Stick
R3.2CB2 (10'6")

1 Maximum Digging Depth	7170 mm	23'6"
2 Maximum Reach at Ground Line	10 600 mm	34'9"
3 Maximum Cutting Height	10 010 mm	32'10"
4 Maximum Loading Height	7020 mm	23'0"
5 Minimum Loading Height	2370 mm	7'9"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	7010 mm	23'0"
7 Maximum Vertical Wall Digging Depth	5960 mm	19'7"
Bucket Digging Force (ISO)	179 kN	40,240 lbf
Stick Digging Force (ISO)	126 kN	28,330 lbf
Bucket Type	GDX	
Bucket Capacity	1.20 m ³	1.57 yd ³
Bucket Tip Radius	1580 mm	5'2"

330 GC Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	Reach Boom
		mm	in	m ³	yd ³	kg	lb	%	R3.2 (10' 6")
Pin-On (No Quick Coupler)									
General Duty Excavation	CB	1300	51	1.10	1.44	983	2,167	100	●
	CB	1350	53	1.20	1.57	1034	2,280	100	●
	CB	1650	65	1.50	1.96	1157	2,552	100	⊖
Heavy Duty Excavation	CB	1300	51	1.10	1.44	1110	2,447	100	●
	CB	1450	57	1.30	1.70	1213	2,674	100	⊙
Maximum load with pin-on (payload + bucket)								kg	3660
								lb	8,069
With Pin Grabber Quick Coupler									
General Duty Excavation	CB	1300	51	1.10	1.44	983	2,167	100	⊙
	CB	1350	53	1.20	1.57	1034	2,280	100	⊙
	CB	1650	65	1.50	1.96	1157	2,552	100	○
Heavy Duty Excavation	CB	1300	51	1.10	1.44	1110	2,447	100	⊙
	CB	1450	57	1.30	1.70	1213	2,674	100	⊖
Maximum load with coupler (payload + bucket)								kg	3134
								lb	6,909

The above loads are in compliance with hydraulic excavator standard EN474-5:2006 + A3:2013, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451:2007.

Bucket weight with General Duty tips.

Maximum Material Density:

● 2100 kg/m³ (3,500 lb/yd³)

⊙ 1800 kg/m³ (3,000 lb/yd³)

⊖ 1500 kg/m³ (2,500 lb/yd³)

○ 1200 kg/m³ (2,000 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

330 GC Hydraulic Excavator Specifications

Attachments Offering Guide

Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

Match

* Working range front only

PIN-ON ATTACHMENTS

Boom Type		Reach
Stick Length		R3.2 (10'6")
Hydraulic Hammers	H120 S	✓
	H130 S	✓
	H140 S	✓
	H160 S	✓*
Rotary Cutters	RC20	✓
	RC30	✓

CAT PIN GRABBER COUPLER ATTACHMENTS

Boom Type		Reach
Stick Length		R3.2 (10'6")
Hydraulic Hammers	H120 S	✓
	H130 S	✓
	H140 S	✓
Rotary Cutters	RC20	✓
	RC30	✓

BOOM-MOUNT ATTACHMENTS

Boom Type		Reach
Mobile Scrap and Demolition Shears	S2070	✓
	S3050 Flat Top	✓

330 GC Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
CAB			ENGINE		
ROPS	✓		Cat® C7.1 single turbo diesel engine	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓		Two selectable modes: Power, Smart	✓	
Automatic bi-level air conditioner	✓		Automatic engine speed control	✓	
Jog dial and shortcut keys for monitor control	✓		Auto engine idle-shutdown	✓	
Keyless push-to-start engine control	✓		4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓	
Height-adjustable console, three steps with tool	✓		52° C (125° F) high-ambient cooling capability without derate	✓	
Fixed left-side console	✓		-18° C (0° F) cold start capability	✓	
Mechanically adjustable seat suspension	✓		-32° C (-25° F) cold start capability		✓
51 mm (2") seat belt	✓		2 × 115 amp dual alternator	✓	
Bluetooth® integrated radio with USB/Aux ports	✓		Sealed double element air filter with integrated pre-cleaner	✓	
12V DC outlets	✓		Two-stage fuel filtration with water separator and indicator	✓	
Document storage	✓		Electric fuel priming pump	✓	
Cup and bottle holders	✓		Electric cooling fans with auto-reverse function	✓	
Openable two-piece front window	✓		HYDRAULIC SYSTEM		
Rear window emergency exit	✓		Electronic main control valve	✓	
Upper radial wiper with washer	✓		Electric boom regeneration circuit	✓	
Openable steel hatch	✓		Stick regeneration circuit	✓	
LED dome light	✓		Automatic warm up	✓	
Roller front sunscreen	✓		Automatic two-speed travel	✓	
Roller rear sunscreen		✓	Boom and stick drift reduction valve	✓	
Washable floor mat	✓		High performance hydraulic return filter	✓	
Beacon ready	✓		Final drive with bio hydraulic oil capable travel motor	✓	
CAT TECHNOLOGY			Hammer return filter circuit		✓
VisionLink®	✓*		Tool Control (two pump, one/two way high-pressure flow)		✓
VisionLink Productivity		✓	Medium-pressure circuit		✓
Remote Flash	✓		Common Quick Coupler Circuit for Cat Pin Grabber and CW Dedicated		✓
*Connect subscription only. Additional subscriptions are available. Contact your Cat dealer for availability.			Electronic Pattern Changer (requires activation)	✓	

(continued on next page)

330 GC Standard and Optional Equipment

Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
BOOM, STICK AND LINKAGE			SERVICE AND MAINTENANCE		
6.15 m (20'2") Reach boom	✓		Grouped location of engine oil and fuel filters	✓	
3.2 m (10'6") Reach stick	✓		Ground-level second dipstick for engine oil	✓	
Bucket Linkage, CB2 family	✓		Side entry to service platform	✓	
UNDERCARRIAGE AND STRUCTURES			Scheduled Oil Sampling (S·O·S SM) ports	✓	
Center track guiding guard	✓		Radiator screen		✓
Bottom guards	✓		Integrated vehicle health management system	✓	
Swivel guard		✓	SAFETY AND SECURITY		
Travel motor guards	✓		Auto hammer stop	✓	
Grease lubricated track	✓		Rearview and right-hand-sideview cameras	✓	
Tie-down points on base frame	✓		Cat PL161 Attachment Locator		✓
5800 kg (12,790 lb) counterweight	✓		Secure start with PIN code	✓	
600 mm (24") triple grouser track shoes	✓		Caterpillar One Key security system	✓	
800 mm (31") triple grouser track shoes		✓	Lockable external tool/storage box	✓	
ELECTRICAL SYSTEM			Lockable door, fuel, and hydraulic tank locks	✓	
Maintenance-free 1,000 CCA batteries (×2)	✓		Lockable fuel drain compartment	✓	
Programmable time-delay LED working lights	✓		Service platform with anti-skid plate and recessed bolts	✓	
Centralized electrical disconnect switch	✓		RH handrail and hand hold	✓	
LED chassis light	✓		Cab mirror for RH track edge	✓	
LED Left Hand (LH) and Right Hand (RH) boom lights, cab lights		✓	Signaling/warning horn	✓	
			Swing alarm		✓
			Ground-level secondary engine shutoff switch in cab	✓	
			Lockable disconnect switch	✓	
			Hydraulic lock out lever that neutralizes all controls	✓	
			Inspection lighting		✓

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- LH/RH electrical pedal (two-way) for tool control
- Radial lower wiper for two piece (70/30) windshield, with washer
- Polycarbonate roof hatch
- P5A laminated glass front windshield and roof hatch

SAFETY AND SECURITY

- Bluetooth receiver

GUARDS

- Operator Protective Guards (not compatible with cab light cover, rain protector)
- Mesh guard full front (not compatible with cab light cover, rain protector)
- Mesh guard lower half front

SERVICE AND MAINTENANCE

- Grease gun holder

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>.

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 (hydrogenated 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).*

***Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.*

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.85 kg (1.9 lb) of refrigerant which has a CO₂ equivalent of 1.216 metric tonnes (1.340 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 < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

Sound Performance

ISO 6395:2008 (external) – 103 dB(A)

ISO 6396:2008 (inside cab) – 70 dB(A)

- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

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.
 - Advanced hydraulic systems balance power and efficiency
 - Smart mode matches machine power to digging requirements automatically
 - Cut maintenance costs up to 25% with extended service intervals
 - Programmable high-efficiency cooling fans run only when needed
 - The latest hydraulic oil filter provides longer life with a 3,000-hour replacement interval

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	86.85%
Iron	4.63%
Nonferrous Metal	1.55%
Mixed Metal	0.07%
Mixed-Metal and Nonmetal	0.63%
Plastic	1.79%
Rubber	0.16%
Mixed Nonmetallic	0.23%
Fluid	3.12%
Other	0.96%
Uncategorized	0.00%
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 16714:2008 (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 16714:2008 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 – 97%

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

© 2023 Caterpillar
All rights reserved

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

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission. VisionLink is a trademark of Caterpillar Inc., registered in the United States and in other countries.

Based on the Labor, Safety and Health Laws in Japan, employer of small construction equipment are required to provide specific training for all operators on machines with ship weight less than 3 metric ton. For machines greater than 3 metric ton, operator needs to obtain operator license certification from a Government approved registered training school.

AEXJ0088-05 (10-2023)
Replaces AEXJ0088-04
Build Number: 07F
(Japan)

