

# 330 GC Hydraulic Excavator

# **Technical Specifications**

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

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Engine		
Engine Model	Cat® C7.1	
Engine Power – ISO 9249	157.8 kW	212 hp
Engine Power – ISO 14396	159 kW	213 hp
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in <sup>3</sup>

- Meets China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 3/EU Stage IIIA.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Net power is tested per ISO 9249. Standards 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 speed at 1,800 rpm.

Swing Mechanism		
Swing Speed	11.50 rpm	
Maximum Swing Torque	105 kN·m	77,370 lb-ft

# Weights28 800 kg63,500 lb

 Long undercarriage, Reach boom, R3.2 m (10'6") stick, HD 1.54 m³ (2.01 yd³) HD bucket, 600 mm (24") triple grouser shoes and 6.7 t (14,770 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	247 kN	55,528 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	4,120 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

Standards	
Brakes	ISO 10265:2008
Cab/ROPS	ISO 12117-2:2008
FOGS (optional)	ISO 10262-2:1998

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.

#### **Operating Weights and Ground Pressures**

	600 mm (24")		600 mm (24")		800 mm (31")	
	Triple Grouser Shoes		HD Triple Grouser Shoes		Triple Grouser Shoes	
	Ground Weight Pressure			Weight	Ground Pressure	
	kg	kPa	kg	kPa	kg	kPa
	(lb)	(psi)	(Ib)	(psi)	(lb)	(psi)
Base Machine with 6.7 t (14,770 lb) Counterweight and Long Undercarriage						
Reach Boom + R3.2CB2 (10'6") Stick + 1.54 m <sup>3</sup> (2.01 yd <sup>3</sup> )	28 800	56	29 010	56	30 100	44
HD Bucket	(63,500)	(8.1)	(63,960)	(8.1)	(66,400)	(6.4)
Reach Boom + R2.65CB2 (8'8") Stick + 1.54 m <sup>3</sup> (2.01 yd <sup>3</sup> )	28 780	55	29 150	56	30 010	43
HD Bucket	(63,500)	(7.9)	(64,300)	(8.1)	(66,200)	(6.2)

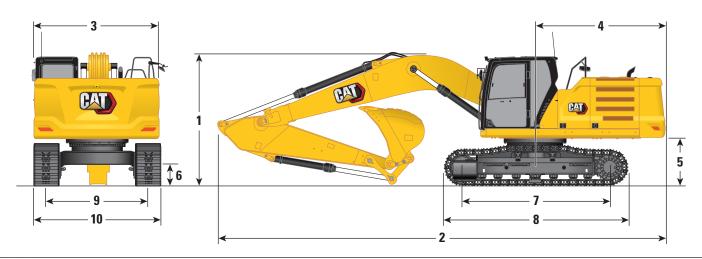
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

#### **Major Component Weights**

	kg	lb
Base machine (6700 kg [14,770 lb] counterweight, upper frame, Long undercarriage with rollers) with boom cylinders and weight of 90% fuel tank and 75 kg (165 lb) operator included	24 000	52,900
Track Shoes:		
600 mm (24") Width, 11 mm (0.43") Thick, Triple Grouser Track Shoes	3620	8,000
600 mm (24") Width, 13 mm (0.51") Thick, HD Triple Grouser Track Shoes	4200	9,300
800 mm (31") Width, 13 mm (0.51") Thick, Triple Grouser Track Shoes with Step Extension for ISO 2867	4590	10,100
Two Boom Cylinders	490	1,080
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	460	1,010
Counterweight:		
6.7 t (14,770 lb) Counterweight	6700	14,770
Undercarriage:		
Long Undercarriage with Rollers	5832	12,857
Boom (including lines, pins, stick cylinder):		
Reach Boom 6.15 m (20'2")	2300	5,070
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R3.2CB2 (10'6")	1440	3,170
Reach Stick R2.65CB2 (8'8")	1350	2,980
Buckets (without linkage, with tips and sidecutters):		
1.60 m³ (2.09 yd³) HD, CB Linkage	1320	2,910
1.54 m³ (2.01 yd³) SD, CB Linkage	1500	3,310
Quick Couplers:		
Pin Grabber QC CB with Pins	530	1,170
Pin Grabber QC CB without Pins	500	1,100
Dedicated QC	430	950

#### **Dimensions**

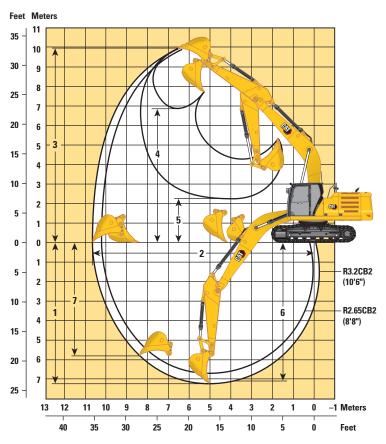
All dimensions are approximate and may vary depending on bucket selection.



Boom Option	Reach Boom 6.15 m (20'2")					
Stick Options		Reach Stick				
	R3.2CB2	2 (10'6")	R2.65CB	2 (8'8")		
1 Machine Height:						
Cab Height	3050 mm	10'0"	3050 mm	10'0"		
FOGS Height	3190 mm	10'6"	3190 mm	10'6"		
Handrails Height	3050 mm	10'0"	3050 mm	10'0"		
With Boom/Stick/Bucket Installed	3400 mm	11'2"	3450 mm	11'4"		
With Boom/Stick Installed	3380 mm	11'1"	3380 mm	11'1"		
With Boom Installed	3050 mm	10'0"	3050 mm	10'0"		
2 Machine Length:						
With Boom/Stick/Bucket Installed	10 420 mm	34'2"	10 420 mm	34'2"		
With Boom/Stick Installed	10 420 mm	34'2"	10 420 mm	34'2"		
With Boom Installed	9230 mm	30'3"	9230 mm	30'3"		
3 Upperframe Width without Walkways	2940 mm	9'8"	2940 mm	9'8"		
4 Tail Swing Radius	3130 mm	10'3"	3130 mm	10'3"		
5 Counterweight Clearance	1110 mm	3'8"	1110 mm	3'8"		
6 Ground Clearance	490 mm	1'7"	490 mm	1'7"		
7 Length to Center of Rollers	3990 mm	13'1"	3990 mm	13'1"		
8 Track Length	4850 mm	15'10"	4850 mm	15'10"		
9 Track Gauge	2390 mm	7'10"	2390 mm	7'10"		
10 Undercarriage Width:						
600 mm (24") Shoes	3190 mm	10'6"	3190 mm	10'6"		
800 mm (31") Shoes	3390 mm	11'1"	3390 mm	11'1"		
Bucket Type	H	HD		D		
Bucket Capacity	1.60 m³	2.09 yd³	1.60 m³	2.09 yd <sup>3</sup>		
Bucket Tip Radius	1662 mm	5'5"	1662 mm	5'5"		

#### **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 Options		Reach Stick				
	R3.2CB	2 (10'6")	R2.65CE	32 (8'8")		
1 Maximum Digging Depth	7260 mm	23'10"	6710 mm	22'0"		
2 Maximum Reach at Ground Line	10 690 mm	35'1"	10 210 mm	33'6"		
3 Maximum Cutting Height	10 020 mm	32'10"	9910 mm	32'6"		
4 Maximum Loading Height	6940 mm	22'9"	6790 mm	22'3"		
5 Minimum Loading Height	2280 mm	7'6"	2830 mm	9'3"		
6 Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	7100 mm	23'4"	6530 mm	21'5"		
7 Maximum Vertical Wall Digging Depth	6030 mm	19'9"	5720 mm	18'9"		
Bucket Digging Force (ISO)	179 kN	40,240 lbf	179 kN	40,240 lbf		
Stick Digging Force (ISO)	126 kN	28,330 lbf	145 kN	32,600 lbf		
Bucket Type	HD HD			D		
Bucket Capacity	1.60 m <sup>3</sup>	2.09 yd³	1.60 m <sup>3</sup>	2.09 yd <sup>3</sup>		
Bucket Tip Radius	1662 mm	5'5"	1662 mm	5'5"		

#### **Bucket Specifications and Compatibility**

							Under	carriage		ong
							Counterweight		6.7 mt (14,770 lb)	
		Width		Capacity		Weight		Fill	Reach	
	Linkage	mm	in	m³	yd³	kg	lb	%	R3.2 (10'6")	R2.65 (8'8"
Pin-On (No Quick Coupler)										
General Duty	СВ	1400	55	1.54	2.02	1125	2,480	100	•	•
Heavy Duty	СВ	1300	51	1.36	1.78	1173	2,587	100	•	•
	СВ	1350	53	1.45	1.90	1194	2,633	100	•	•
	СВ	1450	57	1.57	2.05	1280	2,822	100	•	•
	СВ	1450	57	1.60	2.09	1274	2,809	100	•	•
	СВ	1500	60	1.65	2.16	1308	2,884	100	•	•
	СВ	1600	63	1.80	2.36	1348	2,973	100	•	•
	СВ	1650	66	1.90	2.49	1369	3,019	100	$\Theta$	•
	СВ	1750	69	2.00	2.62	1397	3,081	100	$\Theta$	•
Severe Duty	СВ	1300	51	1.36	1.78	1321	2,911	90	•	•
	СВ	1350	54	1.45	1.90	1346	2,967	90	•	•
	СВ	1400	56	1.54	2.02	1421	3,133	90	•	•
				4	1 20 1	, ,		kg	4490	4915
			IV	1aximum loa	ad with pin-	on (payload	1 + DUCKET)	lb	9,899	10,836
With Pin Grabber Quick Co	upler						'	'		
General Duty	СВ	1400	55	1.54	2.02	1125	2,480	100	•	•
Heavy Duty	СВ	1300	51	1.36	1.78	1173	2,587	100	•	•
	СВ	1350	53	1.45	1.90	1194	2,633	100	•	•
	СВ	1450	57	1.57	2.05	1280	2,822	100	$\Theta$	•
	СВ	1450	57	1.60	2.09	1274	2,809	100	$\Theta$	•
	СВ	1500	60	1.65	2.16	1308	2,884	100	$\Theta$	•
	СВ	1600	63	1.80	2.36	1348	2,973	100	$\Theta$	$\Theta$
	СВ	1650	66	1.90	2.49	1369	3,019	100	0	$\Theta$
	СВ	1750	69	2.00	2.62	1397	3,081	100	0	$\Theta$
Severe Duty	СВ	1300	51	1.36	1.78	1321	2,911	90	•	•
Severe Duty	СВ	1350	54	1.45	1.90	1346	2,967	90	•	•
	СВ	1400	56	1.54	2.02	1421	3,133	90	• • • • • • • • • • • • • • • • • • •	•
	05	1	"	1.01	2.02	1	0,100	00		
							I	kg	3964	4389

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)
- $\ominus$  1500 kg/m³ (2,500 lb/yd³)
- O 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.

#### **Attachments Offering Guide**

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

✓ Match

Undercarriage		L		
Counterweight		6.7 mt (14,770 lb) Reach		
Boom Type				
Stick Lengths		2.6 m (8'8")	3.2 m (10'6")	
Hydraulic Hammers	H120 S	✓	✓	
	H130 GC	✓	✓	
	H130 GC Side Mount	✓	✓	
	H130 GC S	✓	✓	
	H130 S	✓	✓	
	H140 GC	✓	✓	
	H140 GC S	✓	✓	
	H160 GC	✓	✓	
	H160 GC S	✓	✓	
Compactors (Vibratory Plate)	CVP110	✓	✓	
CAT PIN GRABBER COUPLER ATTACHMENTS				
Hydraulic Hammers	H120 S	✓	✓	
	H130 GC	✓	✓	
	H130 GC Side Mount	✓	✓	
	H130 GC S	✓	✓	
	H130 S	✓	✓	
	H140 GC	✓	✓	
	H140 GC S	✓	✓	
	H160 GC	✓	✓	
	H160 GC S	✓	✓	
Compactors (Vibratory Plate)	CVP110	✓	✓	

<sup>\*</sup>Working range front only.

# **330 GC Standard and Optional Equipment**

#### **Standard and Optional Equipment**

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

	Standard	Optional
CAB		
ROPS, standard sound suppression	✓	
High-resolution 203 mm (8")	✓	
LCD touchscreen monitor		
Automatic bi-level air conditioner	✓	
Jog dial and shortcut keys for monitor control	✓	
Keyless push-to-start engine control	✓	
Height-adjustable console, three steps with tool	✓	
Fixed left-side console	✓	
Mechanically adjustable seat suspension	✓	
51 mm (2") orange seat belt	✓	
Bluetooth® integrated radio (no USB, aux port or microphone)	✓	
12V DC outlets	✓	
Document storage	✓	
Cup and bottle holders	✓	
Openable two-piece front window	✓	
Upper radial wiper with washer	✓	
Openable steel hatch	✓	
LED dome light	✓	
Roller front sunscreen	✓	
Roller rear sunscreen		✓
Rear window emergency exit	✓	
Washable floor mat	✓	
Beacon ready	✓	
CAT TECHNOLOGY		
Cat Product Link™	✓	
Auto hammer stop	✓	

	Standard	Optional
ENGINE		
Two selectable modes: Power, Smart	✓	
Automatic engine speed control	✓	
Automatic engine idle-shutdown	✓	
4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓	
52° C (125° F) high-ambient cooling capability without derate	✓	
–18° C (0° F) cold start capability	✓	
−32° C (−25° F) cold start capability		✓
2 × 115 amp dual alternator	✓	
Sealed double element air filter with integrated precleaner	✓	
Two-stage fuel filtration with water separator and indicator	✓	
Electric fuel priming pump	✓	
On-demand electric cooling fans with auto-reverse function	✓	
Biodiesel capability up to B20	✓	
HYDRAULIC SYSTEM		
Electronic main control valve	✓	
Electric boom regeneration circuit	✓	
Stick regeneration circuit	✓	
Automatic hydraulic oil warm up	✓	
Automatic two-speed travel	✓	
Boom and stick drift reduction valve	✓	
High performance hydraulic return filter	✓	
Final drive with bio hydraulic oil capable travel motor	✓	
Advanced Tool Control (two pump, one/ two way high-pressure flow)		✓
Basic Tool Control (one pump, one way high-pressure flow)		✓
Quick Coupler circuit for Cat Pin Grabber and CW Dedicated		✓

(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
BOOM, STICKS AND LINKAGE		
6.15 m (20'2") reach boom	✓	
3.2 m (10'6") reach stick, CB2 Linkage		✓
2.65 m (8'8") reach stick, CB2 Linkage		✓
Bucket Linkage, CB2 family	✓	
UNDERCARRIAGE AND STRUCTURES		
Track guiding guard, center	✓	
Bottom guard	✓	
Travel motor guard	✓	
Grease lubricated track	✓	
Tie-down points on base frame	✓	
6700 kg (14,770 lb) counterweight	✓	
600 mm (24") triple grouser track shoes		✓
600 mm (24") HD triple grouser track shoes		✓
800 mm (31") triple grouser track shoes		✓
ELECTRICAL SYSTEM		
2 × Machine Electronic Control Module	✓	
Maintenance-free 1,000 CCA batteries (×2)	✓	
After engine shutdown, programmable time delay LED working lights: one chassis mounted, one LH boom mounted	✓	
Centralized electrical disconnect switch	✓	
LED chassis light, LH and RH boom lights, cab lights	✓	
Compatible with Electronic Technician	✓	

	Standard	Optional
SERVICE AND MAINTENANCE		
Grouped location of engine oil and fuel filters	✓	
Ground-level second dipstick for engine oil	✓	
Side entry to service platform	✓	
Scheduled Oil Sampling (S·O·S <sup>SM</sup> ) ports	✓	
Electric refueling pump with automatic shut off		✓
Radiator screen		✓
SAFETY AND SECURITY		
Rearview camera and right-side mirror	✓	
Right-hand-sideview camera		✓
Secure start with PIN code	✓	
Caterpillar One Key security system	✓	
Lockable external tool/storage box	✓	
Lockable door, fuel, and hydraulic tank locks	✓	
Lockable fuel drain compartment	✓	
Service platform with anti-skid plate and recessed bolts	✓	
RH handrail and hand hold (ISO 2867:2011 compliant)	✓	
Signaling/warning horn	✓	
Ground-level secondary engine shutoff switch in cab	✓	
Hydraulic lock out lever	✓	
Travel alarm		✓

#### 330 GC Attachments

#### **Dealer Installed Kits and Attachments**

Attachments may vary. Consult your Cat dealer for details.

#### **CAB**

• Polycarbonate roof hatch

#### **GUARDS**

- · Swivel guard
- Falling object guard system (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

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

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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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