



# 330

## 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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オフロード法2014年  
基準適合

# 330 Hydraulic Excavator Specifications

## Engine

Engine Model	Cat C7.1	
Engine Power – ISO 9249	204 kW	273 hp
Engine Power – ISO 14396	205 kW	275 hp
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in <sup>3</sup>

- Meets U.S. EPA Tier 4 Final, EU 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).
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- Rating at 2,200 rpm.

## Swing Mechanism

Swing Speed	11.50 rpm	
Maximum Torque	110 kN·m	81,132 lb-ft

## Weights

Operating Weight	29 700 kg	65,477 lb
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- Long undercarriage, Reach boom, R3.2 m (10'6") stick, GDX 1.20 m<sup>3</sup> (1.57 yd<sup>3</sup>) bucket, 600 mm (24") triple grouser shoes and 6700 kg (14,770 lb) counterweight.

## Track

Optional Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	800 mm	31 in
Number of Shoes (each side)	50	
Number of Track Rollers (each side)	9	
Number of Carrier Rollers (each side)	2	

## Drive

Maximum 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 – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	29 800 kPa	4,320 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
DEF Tank	41 L	10.8 gal

## Standards

Brakes	ISO 10265:2008
Cab/ROPS	ISO 12117-2:2008
Cab	ISO 10262-1:1998
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.

# 330 Hydraulic Excavator Specifications

## Operating Weights and Ground Pressures

	600 mm (24") Triple Grouser Shoes		600 mm (24") Double Grouser Shoes		800 mm (31") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
<b>Base Machine with 6700 kg (14,770 lb) Counterweight and Long Undercarriage</b>						
Reach Boom + R3.2CB2 (10'6") Stick + 1.20 m <sup>3</sup> (1.57 yd <sup>3</sup> ) GDX Bucket	29 700 (65,477)	56 (8.1)	30 000 (66,100)	57 (8.3)	30 600 (67,600)	44 (6.4)
HD Reach Boom + R3.2CB2 (10'6") HD Stick + 1.20 m <sup>3</sup> (1.57 yd <sup>3</sup> ) GDX Bucket	29 900 (65,918)	57 (8.3)	30 300 (66,800)	58 (8.4)	30 900 (68,200)	44 (6.4)

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

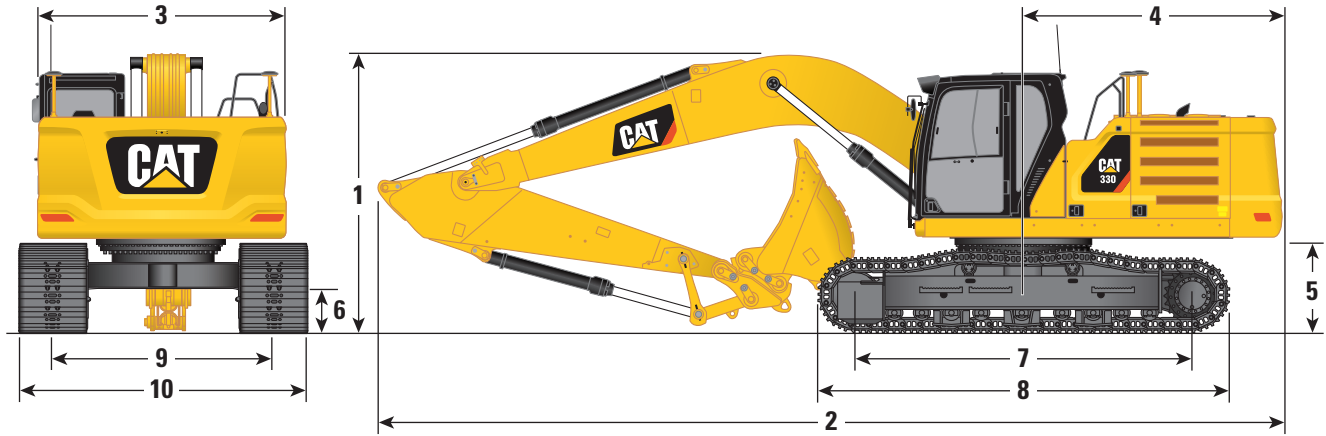
## Major Component Weights

	kg	lb
Base machine (6700 kg [14,770 lb] counterweight, upper frame, long undercarriage with HD rollers), with boom cylinders and weight of 90% fuel tank and 75 kg (165 lb) operator included.	21 200	46,700
Track Shoes:		
600 mm (24") Width, 11 mm (0.43") Thick, Triple Grouser Track Shoes	3620	7,980
600 mm (24") Width, 14.5 mm (0.57") Thick, Double Grouser Track Shoes	3960	8,700
800 mm (31") Width, 13 mm (0.51") Thick, Triple Grouser Track Shoes with Step Extension for ISO 2867	4590	10,120
Two Boom Cylinders	490	1,080
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	460	1,010
Counterweight:		
6700 kg (14,770 lb) Counterweight	6700	14,770
Undercarriage:		
Long Undercarriage with HD Rollers	6700	14,770
Booms (including lines, pins, stick cylinder):		
Reach Boom 6.15 m (20'2")	2310	5,090
HD Reach Boom 6.15 m (20'2")	2420	5,340
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R3.2CB2 (10'6")	1470	3,240
HD Reach Stick R3.2CB2 (10'6")	1610	3,550
Buckets (without linkage):		
1.50 m <sup>3</sup> (1.96 yd <sup>3</sup> ) GDX, CB Linkage	1157	2,552
1.20 m <sup>3</sup> (1.57 yd <sup>3</sup> ) GDX, CB Linkage	1070	2,358
1.10 m <sup>3</sup> (1.44 yd <sup>3</sup> ) GDX, CB Linkage	983	2,167
Quick Couplers:		
Pin Grabber QC CB with Pins	530	1,170
Pin Grabber QC CB without Pins	500	1,100
Dedicated QC	430	950

# 330 Hydraulic Excavator Specifications

## Dimensions

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

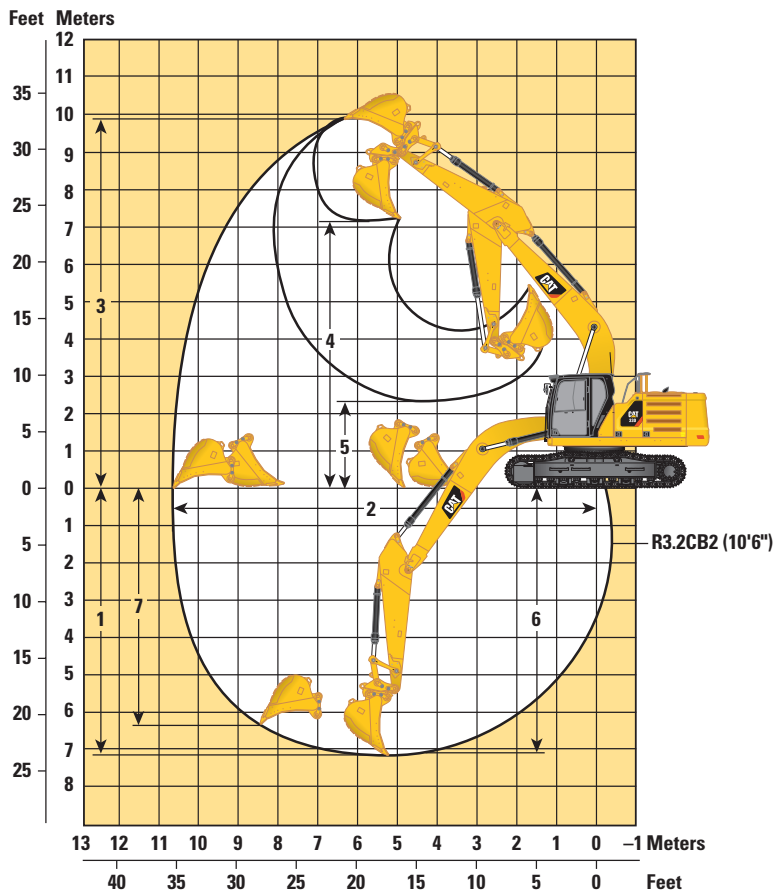


Boom Option	Reach Boom 6.15 m (20'2")	
Stick Option	Reach Stick R3.2CB2 (10'6")	
<b>1</b> Machine Height:		
Cab Height	3060 mm	10'0"
FOGS Height	3200 mm	10'6"
Handrails Height	3060 mm	10'0"
With Boom/Stick/Bucket Installed	3400 mm	11'2"
With Boom/Stick Installed	3380 mm	11'1"
With Boom Installed	3060 mm	10'0"
<b>2</b> 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"
<b>3</b> Upperframe Width without Walkways	2940 mm	9'8"
<b>4</b> Tail Swing Radius	3130 mm	10'3"
<b>5</b> Counterweight Clearance	1120 mm	3'8"
<b>6</b> Ground Clearance	490 mm	1'7"
<b>7</b> Length to Center of Rollers	3990 mm	13'1"
<b>8</b> Track Length	4860 mm	15'11"
<b>9</b> Track Gauge – Extended	2590 mm	8'6"
Track Width:		
600 mm (24") Shoes	600 mm	24"
800 mm (31") Shoes	800 mm	31"
<b>10</b> Undercarriage Width (with steps/without steps):		
600 mm (24") Shoes	3190 mm	10'6"
800 mm (31") Shoes	3390 mm	11'1"
Bucket Type	GD <sup>X</sup>	
Bucket Capacity	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>
Bucket Tip Radius	1580 mm	5'2"

# 330 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	10 610 mm	34'9"
3 Maximum Cutting Height	9990 mm	32'9"
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	6320 mm	20'8"
Bucket Digging Force (SAE)	165 kN	37,093 lbf
Bucket Digging Force (ISO)	189 kN	42,488 lbf
Stick Digging Force (SAE)	124 kN	27,876 lbf
Stick Digging Force (ISO)	128 kN	28,775 lbf
Bucket Type	GDx	
Bucket Capacity	1.20 m <sup>3</sup>	1.57 yd <sup>3</sup>
Bucket Tip Radius	1580 mm	5'2"

# 330 Hydraulic Excavator Specifications

## Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill	6.7 t (14,770 lb) Counterweight		
		mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb		%	Reach Boom	HD Reach Boom
										R3.2 (10'6")	HD R3.2 (10'6")
<b>Pin-On (No Quick Coupler)</b>											
General Duty Excavation	CB	1300	51	1.10	1.44	983	2,167	100	●	●	
	CB	1350	54	1.20	1.57	1034	2,280	100	●	●	
	CB	1650	66	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	4605	4450	
								lb	10,152	9,811	
<b>With Pin Grabber Quick Coupler</b>											
General Duty Excavation	CB	1300	51	1.10	1.44	983	2,167	100	●	●	
	CB	1350	54	1.20	1.57	1034	2,280	100	●	●	
	CB	1650	66	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	4079	3924	
								lb	8,992	8,650	

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.

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.

### Maximum Material Density:

- 2100 kg/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>)
- ⊙ 1800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>)

# 330 Hydraulic Excavator Specifications

## Attachments Offering Guide

### PIN-ON ATTACHMENTS

Undercarriage		Long	Long
Counterweight		6.7 t (14,770 lb)	6.7 t (14,770 lb)
Boom Type		Reach Boom	HD Reach Boom
Stick Length		3.20 m (10'6")	HD 3.20 m (10'6")
Hydraulic Hammers	H120Es	✓	✓
	H130Es	✓	✓
	H140Es	✓	✓
Pulverizers	P225	✓	✓

### CAT PIN GRABBER COUPLER ATTACHMENTS

Undercarriage		Long	Long
Counterweight		6.7 t (14,770 lb)	6.7 t (14,770 lb)
Boom Type		Reach Boom	HD Reach Boom
Stick Length		3.20 m (10'6")	HD 3.20 m (10'6")
Hydraulic Hammers	H120Es	✓	✓
	H130Es	✓	✓
	H140Es	✓	✓
Pulverizers	P225	✓	✓

# 330 Standard and Optional Equipment

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>CAT TECHNOLOGY</b>			<b>ENGINE</b>		
Cat Product Link™	✓		Three selectable modes: Power, Smart, Eco	✓	
Work tool recognition	✓		Auto engine speed control	✓	
Work tool tracking*	✓		Auto engine idle-shutdown	✓	
Laser catcher		✓	4500 m (14,760 ft) altitude capability with engine power derate above 3000 m (9,840 ft)	✓	
Cat GRADE with 2D and offset memory	✓		52° C (125° F) high-ambient cooling capability with derate	✓	
Cat GRADE with Advanced 2D		✓	-18° C (0° F) cold start capability	✓	
Cat GRADE with 3D connectivity: – Virtual Reference Station** – Internet Base Service Station** – Trimble Connected Community**		✓	-32° C (-25° F) cold start capability		✓
Cat Assist: – Grade Assist – Boom Assist – Bucket Assist – Swing Assist	✓		Cold start block heaters		✓
Cat Payload: – Static weigh – Semiautomatic calibration – Payload/cycle information – USB reporting capability	✓		2 × 115 amp dual alternator	✓	
2D E-Fence: – E-ceiling – E-floor – E-swing – E-wall – E-cab avoidance	✓		Sealed double element air filter with integrated precleaner	✓	
Auto hammer stop	✓		Two-stage fuel filtration with water separator and indicator	✓	
Remote Services capability	✓		Electric fuel priming pump	✓	
			On-demand electric cooling fans with auto-reverse function	✓	
			<b>HYDRAULIC SYSTEM</b>		
			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	✓	
			Hammer return filter circuit		✓
			Advanced Tool Control (two pump, one/two way high-pressure flow)		✓
			Medium-pressure circuit		✓
			Common Quick Coupler Circuit for Cat Pin Grabber and CW Dedicated		✓
			Electronic Pattern Changer (requires activation)	✓	

(continued on next page)



## Standard and Optional Equipment *(continued)*

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

	Standard	Optional		Standard	Optional
<b>BOOMS, STICKS AND LINKAGE</b>			<b>SERVICE AND MAINTENANCE</b>		
6.15 m (20'2") Reach boom		✓	Grouped location of engine oil and fuel filters	✓	
6.15 m (20'2") HD Reach boom		✓	Ground-level second dipstick for engine oil	✓	
3.2 m (10'6") Reach stick, CB2 Linkage		✓	Side entry to service platform	✓	
3.2 m (10'6") HD Reach stick, CB2 Linkage		✓	Scheduled Oil Sampling (S·O·S <sup>SM</sup> ) ports	✓	
Bucket Linkage, CB2 family, Cat Grade	✓		Radiator screen		✓
<b>UNDERCARRIAGE AND STRUCTURES</b>			<b>SAFETY AND SECURITY</b>		
Track guiding guard, full length		✓	Rearview camera	✓	
Track guiding guard, segmented three piece	✓		Right-hand-sideview camera	✓	
Swivel guard	✓		360° Visibility		✓
HD bottom guard	✓		Secure start with PIN code	✓	
HD travel motor guard	✓		Caterpillar One Key security system	✓	
Grease lubricated track	✓		Lockable external tool/storage box	✓	
Swing drive and motor, and swing bearing for higher swing torque	✓		Lockable door, fuel, and hydraulic tank locks	✓	
Base frame with HD rollers	✓		Lockable fuel drain compartment	✓	
Tie-down points on base frame	✓		Service platform with anti-skid plate and recessed bolts	✓	
6700 kg (14,770 lb) counterweight	✓		RH handrail and hand hold (ISO 2867:2011 compliant)	✓	
600 mm (24") triple grouser track shoes		✓	Cab mirror for RH track edge	✓	
600 mm (24") double grouser track shoes		✓	Signaling/warning horn	✓	
800 mm (31") triple grouser track shoes		✓	Ground-level secondary engine shutoff switch in cab	✓	
<b>ELECTRICAL SYSTEM</b>			Hydraulic lock out lever that neutralizes all controls	✓	
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	✓				

## Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

### CAB

- RH/LH electrical pedal (two-way) for tool control
- Radial lower wiper for two piece (70/30) windshield, with washer
- Rain protector plus cab light cover
- Polycarbonate roof hatch

### SAFETY AND SECURITY

- Bluetooth key fob

### GUARDS

- Side rubber bumper 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

### ELECTRICAL

- Premium lighting package
- Jump start wiring

## Cab Options

	Deluxe	Premium
ROPS, standard sound suppression	●	X
ROPS, advanced sound suppression	X	●
High-resolution 254 mm (10") LCD touchscreen monitor	●	●
High-resolution 254 mm (10") LCD touchscreen monitor + additional monitor (only for use with Cat GRADE with Advanced 2D or Cat GRADE with 3D)	○	○
Height-adjustable console, infinite with no tool	●	●
Tilt-up left-side console	●	●
Heated seat with air-adjustable suspension	●	X
Heated and cooled seat with automatic adjustable suspension	X	●
Automatic bi-level air conditioner	●	●
Jog dial and shortcut keys for monitor control	●	●
Keyless push-to-start engine control	●	●
51 mm (2") seat belt	●	●
Bluetooth® integrated radio with USB ports	●	●
12V DC outlets	●	●
Document storage	●	●
Rear head storage net and lunchbox storage net	●	●
Cup and bottle holders	●	●
Openable two-piece front window	●	●
Upper radial wiper with washer	●	X
Parallel wiper with washer	X	●
Openable polycarbonate skylight hatch	●	●
LED dome light	●	●
Floor welcome light	●	●
Roller rear sunscreen	○	●
Rear window emergency exit	●	●
Washable floor mat	●	●
Beacon ready	●	●

● Standard

○ Optional

X Not Available

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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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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.

AEXJ0087-02 (01-2020)  
Replaces AEXJ0087-01  
Build Number: 07B  
(Japan)

