

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	
Net Power		
ISO 9249	157.8 kW	212 hp
ISO 9249 (DIN)	215 hp (met	ric)
Engine Power		
ISO 14396	159 kW	213 hp
ISO 14396 (DIN)	216 hp (met	ric)
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in ³
Biodiesel Capability	Up to B20 ⁽¹⁾)

- Meets Brazil MAR-1 and China Nonroad Stage III emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- 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.
- Engine speed at 1,800 rpm.
- (1)Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 100% 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.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

Swing Mechanism		
Swing Speed	11.5 rpm	
Maximum Swing Torque	105 kN·m	77,370 lb-ft
Weights		
Operating Weight	30 300 kg	66,700 lb
• HD Long undercarriage, HD R		

HD 1.60 m³ (2.09 yd³) bucket, 600 mm (24") triple grouser shoes and 6700 kg (14,770 lb) counterweight.

Operating Weight 31 300 kg

• HD Long undercarriage, HD Reach boom, HD R2.65 (8'8") stick, HD 1.80 m³ (2.36 yd³) bucket, 800 mm (31") 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	

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	4,120 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				
Rollover Protective Structure (ROPS)	ISO 12117-2:2008				
Falling Object Guard System ISO 10262:1998 L (FOGS) (optional)					

Standards	
Brakes	ISO 10265:2008
Rollover Protective Structure (ROPS)	ISO 12117-2:2008
Falling Object Guard System (FOGS) (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.

Operating Weights and Ground Pressures

	600 mm (24")		600 mm (24")		800 mm (31")	
	Triple Grouser Shoes		HD Triple Grouser Shoes		Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure	Weight kg (lb)	Ground Pressure
	kg (lb)	kPa (psi)	kg (Ib)	kPa (psi)		kPa (psi)
Base Machine with 6700 kg (14,770 lb) Counterweight and HD Long Undercarriage						
HD Reach Boom + HD R2.65CB2 (8'8") Stick	30 300	58	30 500	58	31 200	45
+1.60 m ³ (2.09 yd ³) HD Bucket	(66,700)	(8.4)	(67,200)	(8.4)	(68,800)	(6.5)
HD Reach Boom + HD R2.65CB2 (8'8") Stick	30 300	58	30 500	58	31 300	45
+1.80 m ³ (2.36 yd ³) HD Bucket	(66,700)	(8.4)	(67,200)	(8.4)	(69,000)	(6.5)

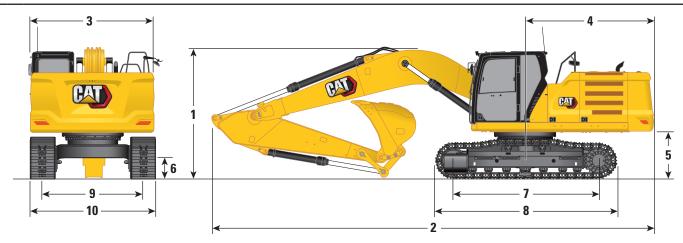
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

Major Component Weights

	kg	lb
Base machine (with 6700 kg [14,770 lb] counterweight, upper frame, HD long undercarriage, and two boom cylinders – does not include weight of 90% fuel tank and 75 kg [165 lb] operator).	21 000	46,300
Track Shoes:		
600 mm (24") Width, 11 mm (0.43") Thick, Triple Grouser Track Shoes	3620	7,980
600 mm (24") Width, 13 mm (0.51") Thick, HD Triple Grouser Track Shoes	3830	8,400
800 mm (31") Width, 13 mm (0.51") Thick, Triple Grouser Track Shoes with Step Extension	4590	10,100
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
Boom (including lines, pins, stick cylinder):		
HD Reach Boom 6.15 m (20'2")	2420	5,330
Stick (including lines, pins, bucket cylinder, bucket linkage):		
HD Reach Stick R2.65CB2 (8'8")	1460	3,220
Buckets (without linkage, with tips and side cutters):		
1.60 m³ (2.09 yd³) HD, CB Linkage	1290	2,800
1.80 m³ (2.36 yd³) HD, CB2 Linkage	1320	2,910
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

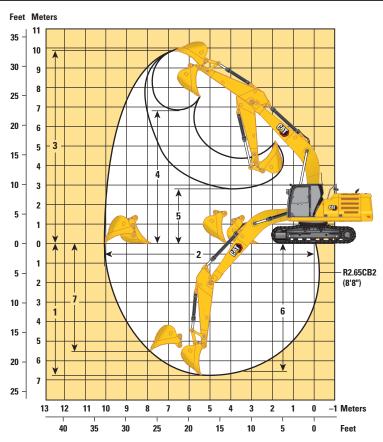
All dimensions are approximate and may vary depending on bucket selection.



Boom Option		HD Reach Boom 6.15 m (20'2")			
Stick Option	HD Reach R2.65CB2				
1 Machine Height:					
Cab Height	3050 mm	10'0"			
FOGS Height	3190 mm	10'6"			
Handrail Height	3050 mm	10'0"			
With Boom/Stick/Bucket Installed	3450 mm	11'4"			
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 9'8"				
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	3990 mm	13'1"			
8 Track Length	4850 mm	15'11"			
9 Track Gauge	2590 mm	8'6"			
Track Width:					
600 mm (24") Shoes	600 mm	24"			
700 mm (28") Shoes	700 mm	28"			
10 Undercarriage Width:					
600 mm (24") Shoes	3190 mm	10'6"			
800 mm (31") Shoes	3390 mm	11'1"			
Bucket Type	HD				
Bucket Capacity	1.80 m³	2.36 yd ³			
Bucket Tip Radius	1662 mm	5'5"			

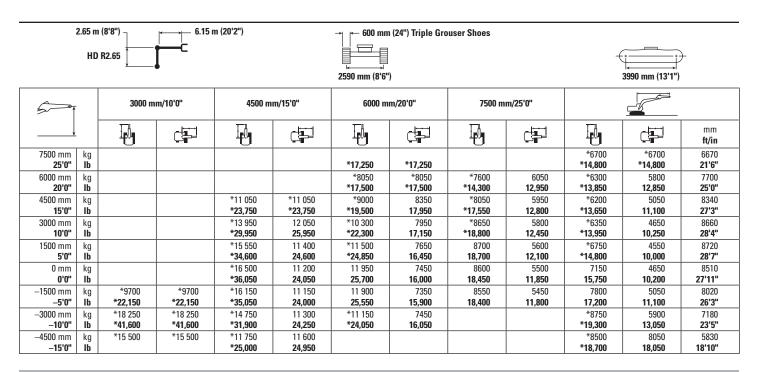
Working Ranges and Forces

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

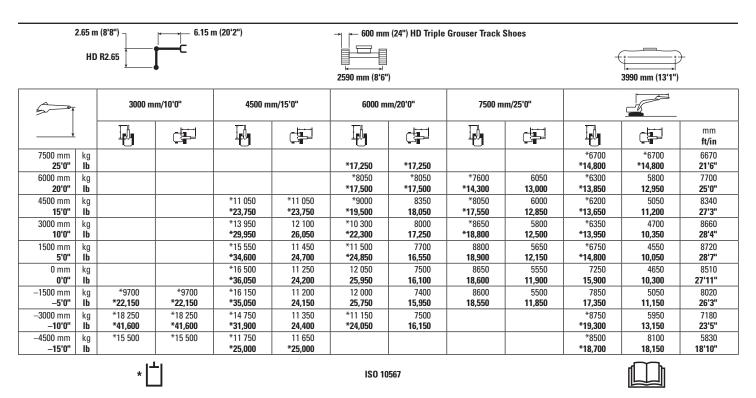


Boom Option	HD Reach Boom 6.15 m (20'2")			
Stick Options	HD Reach Stick R2.65CB2 (8'8")			
1 Maximum Digging Depth	6710 mm	22'0"		
2 Maximum Reach at Ground Line	10 210 mm	33'6"		
3 Maximum Cutting Height	9880 mm	32'5"		
4 Maximum Loading Height	6790 mm	22'3"		
5 Minimum Loading Height	2830 mm	9'3"		
6 Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	6530 mm	21'5"		
7 Maximum Vertical Wall Digging Depth	5510 mm	18'1"		
Bucket Digging Force (ISO)	179 kN	40,240 lbf		
Stick Digging Force (ISO)	145 kN	32,600 lbf		
Bucket Type	HD			
Bucket Capacity	1.80 m ³	2.36 yd ³		
Bucket Tip Radius	1662 mm	5'5"		

HD Reach Boom Lift Capacities – Counterweight: 6700 kg (14,770 lb) – without Bucket



HD Reach Boom Lift Capacities – Counterweight: 6700 kg (14,770 lb) – without Bucket



^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007.

They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

HD Reach Boom Lift Capacities – Counterweight: 6700 kg (14,770 lb) – without Bucket

2.65 m (8'8") HD R2.65 6.15 m (20'2") 2590 mm (8'6") 7 Triple Grouser Track Shoes 3990 mm (13'1"))					
5	3000 r		m/10'0"	4500 mm/15'0"		6000 mm/20'0"		7500 m	7500 mm/25'0"				
						F.						mm ft/in	
7500 mm 25'0 "	kg Ib					*17,250	*17,250			*6700 *14,800	*6700 *14,800	6670 21'6"	
6000 mm 20'0 "	kg Ib					*8050 *17,500	*8050 *17,500	*7600 *14,300	6200 13,300	*6300 *13,850	5950 13,200	7700 25'0"	
4500 mm 15'0 "	kg Ib			*11 050 *23,750	*11 050 *23,750	*9000 *19,500	8550 18,400	*8050 *17,550	6100 13,150	*6200 *13,650	5150 11,450	8340 27'3"	
3000 mm 10'0"	kg Ib			*13 950 *29,950	12 350 26,600	*10 300 *22,300	8150 17,600	*8650 *18,800	5950 12,800	*6350 *13,950	4800 10,550	8660 28'4"	
1500 mm 5'0 "	kg Ib			*15 550 *34,600	11 750 25,250	*11 500 *24,850	7850 16,900	9000 19,300	5750 12,450	*6750 *14,800	4700 10,300	8720 28'7"	
0 mm	kg Ib			*16 500 *36,050	11 500 24,700	*12 150 *26,300	7650 16,500	8850 19,050	5650 12,200	7400 16,300	4800 10,500	8510 27'11"	
−1500 mm − 5'0"	kg Ib	*9700 *22,150	*9700 *22,150	*16 150 *35,050	11 500 24,650	*12 100 *26,200	7600 16,350	8800 19,000	5650 12,150	8050 17,750	5200 11,400	8020 26'3"	
-3000 mm - 10'0 "	kg Ib	*18 250 *41,600	*18 250 *41,600	*14 750 *31,900	11 600 24,950	*11 150 *24,050	7650 16,500			*8750 *19,300	6050 13,450	7180 23'5"	
-4500 mm - 15'0 "	kg Ib	*15 500	*15 500	*11 750 *25,000	*11 750 *25,000					*8500 *18,700	8250 18,550	5830 18'10"	
		* [_]			ISO 10	9567						

^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007.

They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with $\pm 5\%$ for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Bucket Specifications and Compatibility

		Width		Capacity		Weight		Fill	HD Reach Boom
	Linkage	mm	in	m³	yd ³	kg	lb	%	HD R2.65 (8'8")
Pin-On (No Quick Coupler)									
Heavy Duty	СВ	1450	57	1.60	2.09	1274	2,809	100	•
	СВ	1600	63	1.80	2.36	1348	2,973	100	•
Marian van land viith win on (navdend v horstet)					kg	4813			
			ı	Maximum load with pin-on (payload + bucket)				lb	10,611
With Pin Grabber Quick Coupler									
Heavy Duty	СВ	1450	57	1.60	2.09	1274	2,809	100	•
	СВ	1600	63	1.80	2.36	1348	2,973	100	Θ
Maximum load with acural valued a bucket					d . buokat)	kg	4287		
			Maximum load with coupler (payload + bucket)				lb	9,451	

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)

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

IN-ON ATTACHMENTS		
Boom Type		HD Reach Boom
Stick Length		HD R2.65 (8'8")
Hydraulic Hammers	H120 S	✓
	H130 GC	✓
	H130 GC S	✓
	H130 S	✓
	H140 GC	✓
	H140 GC S	✓
	H140 S	✓
	H160 GC	✓
	H160 GC S	✓
Compactors (Vibratory Plate)	CVP110	✓

330 GC Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional
BOOM, STICKS AND LINKAGES		
6.15 m (20'2") HD Reach boom	✓	
2.65 m (8'8") HD Reach stick		✓
Bucket Linkage, CB2 type with lifting eye	✓	
CAB		
ROPS	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓	
Automatic bi-level air conditioner	✓	
Keyless push-to-start engine control	✓	
Height-adjustable	✓	
Fixed left-side console	✓	
Mechanical-suspension seat	✓	
51 mm (2") seat belt	✓	
Console mounted radio (with Bluetooth® pairing and USP port)	✓	
24V DC outlet	✓	
Console storage	✓	
Cup and bottle holders	✓	
Openable two-piece front window	✓	
Rear window emergency exit	✓	
Upper radial wiper with washer	✓	
Openable steel hatch	✓	
LED dome light	✓	
Roller front sunscreen	✓	
Roller rear sunscreen		✓
Washable floor mat	✓	
Beacon ready	✓	
CAT TECHNOLOGY		
Cat Product Link TM	✓	
Remote Flash	✓	
Remote Troubleshoot	✓	
Auto hammer stop	√	

	Standard	Optional
ELECTRICAL SYSTEM		
Maintenance-free 1,000 CCA batteries (×2)	✓	
Programmable time-delay LED working lights	✓	
Centralized electrical disconnect switch	✓	
LED chassis light, LH boom light	✓	
LED cab light, RH boom light		✓
NGINE		
Cat C7.1 single turbo diesel engine	✓	
Two selectable modes: Power, Smart	✓	
Automatic engine speed control	✓	
Auto 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	✓	
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	✓	
Electric cooling fans with auto-reverse function	✓	
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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
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	✓	
Boom lowering check valve	✓	
Stick lowering check valve	✓	
High performance hydraulic return filter	✓	
Final drive with bio hydraulic oil capable travel motor	✓	
Fine swing control	✓	
Hammer return filter circuit		✓
Tool Control (two pump, one/two way high-pressure flow)		✓
Common Quick Coupler Circuit for Cat Pin Grabber and CW Dedicated		✓
Electronic Pattern Changer (requires activation)	✓	
SAFETY AND SECURITY		
Rearview camera	✓	
Right-hand-side view camera		✓
Right-hand-side view mirror		✓
Secure start with PIN code	✓	
Caterpillar One Key security system	✓	
Inspection lighting		✓
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)	✓	
Cab mirror for RH track edge	✓	
Signaling/warning horn	✓	
Ground-level secondary engine shutoff switch in cab	✓	
Hydraulic lock out lever that neutralizes all controls	✓	
Travel alarm		✓
Swing alarm		✓

	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 SM) ports	✓	
Preventative maintenance ready (QuickEvac TM)		✓
Radiator screen		✓
Integrated vehicle health management system		✓
UNDERCARRIAGE AND STRUCTURES		
HD long undercarriage	✓	
Three-piece segmented track guiding guards	✓	
Bottom guards	✓	
Travel motor guards	✓	
Swivel 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		✓

330 GC Attachments

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- RH 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
- P5A laminated glass front windshield and roof hatch (for EU demolition regulation)

SAFETY AND SECURITY

- 75 mm (3") retractable seat belt
- · Bluetooth receiver

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)
- Full protecting vandalism guard (not compatible with cab light cover, rain protector)
- · Vandalism guard

ELECTRICAL

• Jump start wiring

SERVICE AND MAINTENANCE

· Grease gun holder

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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AEXQ3527 (11-2022) Build Number: 07E (India)

