

**313 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	
Engine	Sound Performance
Swing Mechanism2	Operating Weights and Ground Pressures
Weights	Major Component Weights
Track	Dimensions4
Drive	Working Ranges and Forces5
Hydraulic System	Reach Boom Lift Capacities
Service Refill Capacities	Bucket Specifications and Compatibility10
Standards2	Attachments Offering Guide11
Standard and Optional Equipment	
Dealer Installed Kits and Attachments	
313 GC Environmental Declaration	



# **313 GC Hydraulic Excavator Specifications**

Engine		
Engine Model C	Cat <sup>®</sup> C3.6	
Net Power		
ISO 9249 5	4.3 kW	73 hp
ISO 9249 (DIN) 7	4 hp (metric)	
Engine Power		
ISO 14396 5	5.4 kW	74 hp
ISO 14396 (DIN) 7	'5 hp (metric)	
Bore 9	8 mm 4	4 in
Stroke 1	20 mm	5 in
Displacement 3	.6 L	220 in <sup>3</sup>
Biodiesel capability U	Jp to B20 <sup>(1)</sup>	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- · 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 2,400 rpm.
- No engine power derating required below 3000 m (9,840 ft) altitude.
- <sup>(1)</sup>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	35 kN∙m	25,888 lbf·ft

#### **Weights**

Operating	Weight
-----------	--------

12 700 kg 28.000 lb

• Standard undercarriage, Reach boom, R2.5 (8'2") stick, General Duty (GD) 0.53 m<sup>3</sup> (0.69 yd<sup>3</sup>) bucket, 500 mm (20") triple grouser shoes and 2140 kg (4,720 lb) counterweight.

Track		
Track Shoes Width	500 mm	20 in
Track Shoes Width	600 mm	24 in
Track Shoes Width	700 mm	28 in
Number of Shoes (each side)	46	
Number of Track Rollers (each side)	7	
Number of Carrier Rollers (each side)	1	

Number of Carrier Rollers (each side) 1

Drive		
Gradeability	35°/70%	
Maximum Travel Speed	5.4 km/h	3.4 mph
Maximum Drawbar Pull	117 kN	26,303 lbf

#### **Hydraulic System**

Main System – Maximum Flow – Implement	247 L/min	65 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	26 000 kPa	3,770 psi
Boom Cylinder – Bore	105 mm	4 in
Boom Cylinder – Stroke	1026 mm	40 in
Stick Cylinder – Bore	115 mm	5 in
Stick Cylinder – Stroke	1147 mm	45 in
Bucket Cylinder – Bore	95 mm	4 in
Bucket Cylinder – Stroke	939 mm	37 in

# **Service Refill Capacities**

258 L	68.2 gal
15 L	4.0 gal
8 L	2.1 gal
3 L	0.8 gal
85 L	22.5 gal
70 L	18.5 gal
	15 L 8 L 3 L 85 L

#### **Standards**

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

#### **Sound Performance**

ISO 6395:2008 (external)	99 dB(A)
ISO 6396:2008 (inside cab)	68 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**

		m (20") user Shoes		24") Triple er Shoes	•	28") Triple r Shoes
	Weight	Ground Pressure	Weight	Ground Pressure	Weight	Ground Pressure
Base Machine Configurations	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
Base Frame with Track Rollers and Carrier Rollers						
2140 kg (4,720 lb) Counterweight and Standard Undercarriage						
Reach Boom + R2.5 (8'2") Reach Stick + 0.53 m <sup>3</sup> (0.69 yd <sup>3</sup> ) GD Bucket	12 700 (28,000)	41.1 (6.0)	13 000 (28,700)	35.1 (5.1)	13 100 (28,900)	30.3 (4.4)

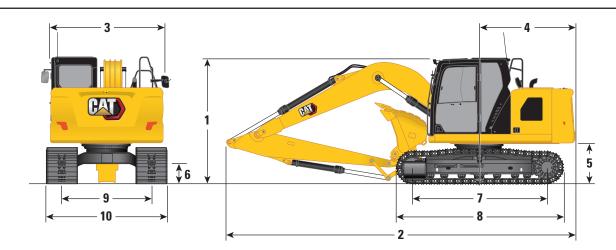
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

# **Major Component Weights**

	kg	lb
Base Machine Weight (with 2140 kg [4,720 lb] counterweight, upper frame, standard undercarriage with track rollers – does not include boom cylinders, boom, stick, bucket, stick cylinder, bucket cylinders, tracks, fuel tank and operator).	8660	19,100
Track Shoes:		
500 mm (20") Triple Grouser Track Shoes	1440	3,170
600 mm (24") Triple Grouser Track Shoes	1690	3,730
700 mm (28") Triple Grouser Track Shoes	1890	4,160
Two Boom Cylinders	240	530
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	270	600
Counterweight:		
2140 kg (4,720 lb) Counterweight	2140	4,720
Swing Frame	1240	2,730
Undercarriage:		
Base Frame with GD Track Rollers and Standard Carrier Rollers	2520	5,560
Boom (including lines, pins, stick cylinder):		
4.65 m (15'3") Reach Boom	1030	2,270
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
R2.5 (8'2") Reach Stick	590	1,310
R3.0 (9'10") Reach Stick	650	1,440
Buckets (without linkage, with tips and side cutters):		
0.53 m <sup>3</sup> (0.69 yd <sup>3</sup> ) GD Bucket	440	970
Two Bucket Pins	20	50
Quick Coupler:		
Pin Grabber Quick Coupler	210	470

# Dimensions

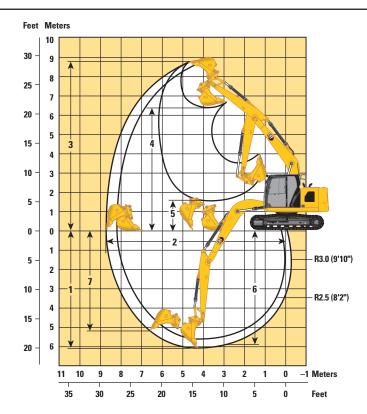
All dimensions are approximate and may vary depending on bucket selection.



	Reach Boom 4.65 m (15'3")						
Stick Options	Reach Stick						
	R2.5 m	(8'2")	R3.0 m	(9'10")			
1 Machine Height:	2810 mm	9'3"	2810 mm	9'3"			
Top of Cab Height	2950 mm	9'8"	2950 mm	9'8"			
Top of OPG Height	2810 mm	9'3"	2810 mm	9'3"			
Handrail Height	2880 mm	9'5"	3190 mm	10'6"			
With Boom/Stick/Bucket Installed	2880 mm	9'5"	3190 mm	10'6"			
With Boom/Stick Installed	2370 mm	7'9"	2370 mm	7'9''			
With Boom Installed							
<b>2</b> Machine Length:	7690 mm	25'3"	7780 mm	25'6"			
With Boom/Stick/Bucket Installed	7690 mm	25'3"	7780 mm	25'6"			
With Boom/Stick Installed	6890 mm	22'7"	6890 mm	22'7"			
With Boom Installed							
<b>3</b> Upperframe Width	2480 mm	8'2"	2480 mm	8'2"			
4 Tail Swing Radius	2190 mm	7'2"	2190 mm	7'2"			
5 Counterweight Clearance	916 mm	3'0"	916 mm	3'0"			
<b>6</b> Ground Clearance	446 mm	1'6"	446 mm	1'6"			
7 Track Length – Length to Center of Rollers	2780 mm	9'1"	2780 mm	9'1"			
8 Overall Track Length	3490 mm	11'5"	3490 mm	11'5"			
9 Track Gauge	1990 mm	6'6"	1990 mm	6'6"			
10 Undercarriage Width:							
500 mm (20") Shoes	2490 mm	8'2"	2490 mm	8'2"			
600 mm (24") Shoes	2590 mm	8'6"	2590 mm	8'6"			
700 mm (28") Shoes	2690 mm	8'10"	2690 mm	8'10"			
Bucket Type	G	D	G	D			
Bucket Capacity	0.53 m <sup>3</sup>	0.69 yd <sup>3</sup>	0.53 m <sup>3</sup>	0.69 yd <sup>3</sup>			
Bucket Tip Radius	1240 mm	4'1"	1240 mm	4'1"			

# **Working Ranges and Forces**

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



Boom Option	Reach Boom 4.65 m (15'3")							
Stick Options	Reach Stick							
	R2.5 n	n (8'2")	R3.0 m	(9'10")				
1 Maximum Digging Depth	5540 mm	18'2"	6040 mm	19'10"				
2 Maximum Reach at Ground Line	8190 mm	26'10"	8660 mm	28'5"				
<b>3</b> Maximum Cutting Height	8560 mm	28'1"	8830 mm	29'0"				
4 Maximum Loading Height	6150 mm	20'2"	6420 mm	21'1"				
5 Minimum Loading Height	2080 mm	6'10"	1600 mm	5'3"				
<b>6</b> Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5330 mm	17'6''	5860 mm	19'3"				
7 Maximum Vertical Wall Digging Depth	4760 mm	15'7"	5190 mm	17'0"				
Minimum Working Equipment Radius	2430 mm	8'0"	2570 mm	8'5"				
Bucket Digging Force (ISO)	98.45 kN	22,132 lbf	98.67 kN	22,182 lbf				
Stick Digging Force (ISO)	66.68 kN	14,990 lbf	59.29 kN	13,329 lbf				
Bucket Type	G	θD	G	D				
Bucket Capacity	0.53 m <sup>3</sup>	0.69 yd <sup>3</sup>	0.53 m <sup>3</sup>	0.69 yd <sup>3</sup>				
Bucket Tip Radius	1240 mm	4'1"	1240 mm	4'1"				

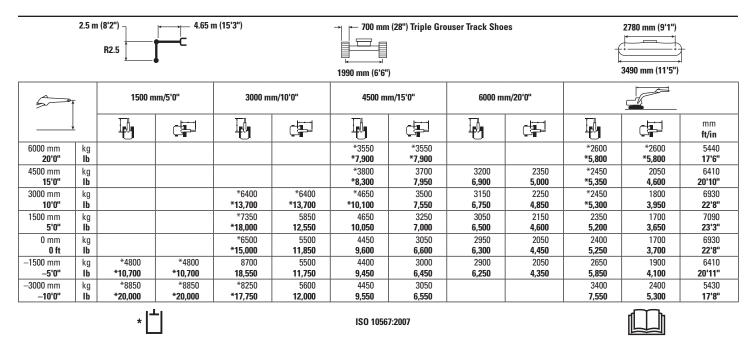
2.5 m (8'2") R2.5						→ - 500 mm (20") Triple Grouser Track Shoes				2780 mm (9'1") ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓		
	1500 mm/5'0" 3000 mm/10'0"			m/10'0"	4500 m	m/15'0"	6000 m	m/20'0"	20'0"			
,	<u> </u>	<b>I</b>		I.		I.		I.		- Po		mm <b>ft/in</b>
6000 mm <b>20'0''</b>	kg Ib					*3550 * <b>7,900</b>	*3550 <b>7,900</b>			*2600 <b>*5,800</b>	*2600 <b>*5,800</b>	5440 <b>17'6''</b>
4500 mm <b>15'0''</b>	kg Ib					*3800 <b>*8,300</b>	3600 <b>7,750</b>	3100 <b>6,650</b>	2250 <b>4,800</b>	*2450 <b>*5,350</b>	2000 <b>4,450</b>	6410 <b>20'10''</b>
3000 mm <b>10'0''</b>	kg Ib			*6400 <b>*13,700</b>	6400 * <b>13,700</b>	*4650 <b>*10,100</b>	3400 <b>7,300</b>	3050 <b>6,550</b>	2200 <b>4,700</b>	2400 <b>5,300</b>	1750 <b>3,800</b>	6930 <b>22'8''</b>
1500 mm <b>5'0''</b>	kg Ib			*7350 <b>*18,000</b>	5650 <b>12,150</b>	4500 <b>9,700</b>	3150 <b>6,750</b>	2950 <b>6,300</b>	2100 <b>4,450</b>	2300 <b>5,000</b>	1600 <b>3,550</b>	7090 <b>23'3''</b>
0 mm <b>0 ft</b>	kg Ib			*6500 <b>*15,000</b>	5350 <b>11,450</b>	4350 <b>9,300</b>	2950 <b>6,400</b>	2850 <b>6,100</b>	2000 <b>4,300</b>	2300 <b>5,100</b>	1650 <b>3,600</b>	6930 <b>22'8''</b>
–1500 mm – <b>5'0"</b>	kg Ib	*4800 <b>*10,700</b>	*4800 <b>*10,700</b>	8400 <b>17,900</b>	5300 <b>11,350</b>	4250 <b>9,100</b>	2900 6,250	2800 6,050	1950 <b>4,200</b>	2550 <b>5,650</b>	1800 <b>3,950</b>	6410 <b>20'11''</b>
–3000 mm – <b>10'0''</b>	kg Ib	*8850 <b>*20,000</b>	*8850 <b>*20,000</b>	*8250 <b>*17,750</b>	5400 <b>11,600</b>	4300 <b>9,200</b>	2950 <b>6,300</b>			3300 <b>7,300</b>	2300 <b>5,100</b>	5430 <b>17'8''</b>

### Reach Boom Lift Capacities – 2140 kg (4,720 lb) Counterweight – without Bucket

2.5 m (8'2") R2.5						→ ← 600 mm	•	user Track Shoe	?S	2780 mm (9'1") 		
5	Ŧ	1500 m	1m/5'0"	3000 m	m/10'0"	4500 mi	m/15'0"	6000 mi	n/20'0"			
	<u> </u>	P	(F	P	C -	Ð		Ð		P		mm ft/in
6000 mm <b>20'0''</b>	kg Ib					*3550 * <b>7,900</b>	*3550 <b>*7,900</b>			*2600 <b>*5,800</b>	*2600 <b>*5,800</b>	5440 <b>17'6''</b>
4500 mm <b>15'0''</b>	kg Ib					*3800 * <b>8,300</b>	3650 <b>7,900</b>	3200 <b>6,800</b>	2300 <b>4,900</b>	*2450 * <b>5,350</b>	2050 <b>4,500</b>	6410 <b>20'10''</b>
3000 mm <b>10'0''</b>	kg Ib			*6400 <b>*13,700</b>	*6400 <b>*13,700</b>	*4650 <b>*10,100</b>	3450 <b>7,450</b>	3100 <b>6,650</b>	2250 <b>4,750</b>	*2450 * <b>5,300</b>	1750 <b>3,850</b>	6930 <b>22'8''</b>
1500 mm <b>5'0''</b>	kg Ib			*7350 <b>*18,000</b>	5750 <b>12,400</b>	4600 <b>9,900</b>	3200 <b>6,900</b>	3000 <b>6,400</b>	2150 <b>4,550</b>	2350 <b>5,100</b>	1650 <b>3,600</b>	7090 <b>23'3''</b>
0 mm <b>0 ft</b>	kg Ib			*6500 <b>*15,000</b>	5450 <b>11,700</b>	4400 <b>9,450</b>	3050 <b>6,500</b>	2900 <b>6,200</b>	2050 <b>4,350</b>	2350 <b>5,200</b>	1650 <b>3,650</b>	6930 <b>22'8''</b>
–1500 mm – <b>5'0''</b>	kg Ib	*4800 * <b>10,700</b>	*4800 * <b>10,700</b>	8550 <b>18,250</b>	5400 <b>11,600</b>	4350 <b>9,300</b>	2950 <b>6,350</b>	2850 <b>6,150</b>	2000 <b>4,300</b>	2650 <b>5,750</b>	1850 <b>4,050</b>	6410 <b>20'11''</b>
–3000 mm – <b>10'0''</b>	kg Ib	*8850 <b>*20,000</b>	*8850 <b>*20,000</b>	*8250 <b>*17,750</b>	5500 <b>11,800</b>	4350 <b>9,400</b>	3000 <b>6,450</b>			3350 <b>7,450</b>	2350 <b>5,200</b>	5430 <b>17'8''</b>
		*[]				ISO 1056	7:2007					

\* 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.



\* 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.

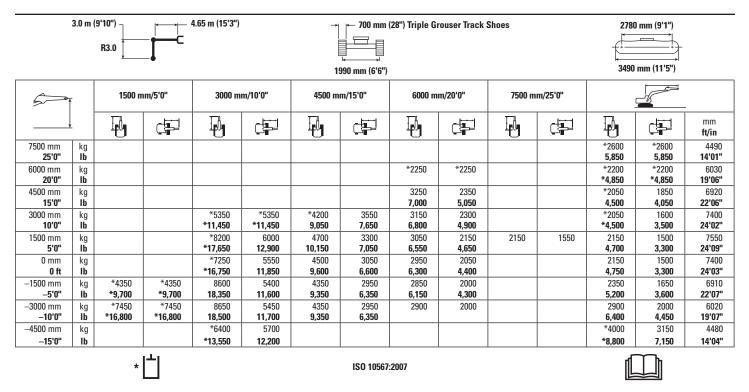
3.0 m (9'10") R3.0 R3.						(20") Triple G	rouser Track S	Shoes			0 mm (9'1")			
5	<del>.</del>	1500 n	1m/5'0"	3000 m	m/10'0"	4500 m	m/15'0"	6000 m	m/20'0"	7500 m	m/25'0"			
	<u>.</u>	I.		Ð		I.		Ð		I.		Ŀ		mm ft/in
7500 mm <b>25'0''</b>	kg Ib											*2600 <b>*5,850</b>	*2600 <b>*5,850</b>	4490 <b>14'01''</b>
6000 mm <b>20'0''</b>	kg Ib							*2250	*2250			*2200 <b>*4,850</b>	*2200 * <b>4,850</b>	6030 <b>19'06''</b>
4500 mm <b>15'0''</b>	kg Ib							3150 <b>6,750</b>	2300 <b>4,900</b>			*2050 * <b>4,500</b>	1800 <b>3,950</b>	6920 <b>22'06''</b>
3000 mm <b>10'0''</b>	kg Ib			*5350 * <b>11,450</b>	*5350 * <b>11,450</b>	*4200 <b>*9,050</b>	3450 <b>7,450</b>	3050 <b>6,600</b>	2200 <b>4,700</b>			*2050 * <b>4,500</b>	1550 <b>3,400</b>	7400 <b>24'02''</b>
1500 mm <b>5'0''</b>	kg Ib			*8200 * <b>17,650</b>	5800 <b>12,500</b>	4550 <b>9,800</b>	3200 <b>6,850</b>	2950 <b>6,300</b>	2100 <b>4,450</b>	2100	1450	2050 <b>4,500</b>	1450 <b>3,200</b>	7550 <b>24'09''</b>
0 mm <b>0 ft</b>	kg Ib			*7250 * <b>16,750</b>	5350 <b>11,500</b>	4350 <b>9,300</b>	2950 <b>6,350</b>	2850 <b>6,050</b>	2000 <b>4,250</b>			2100 <b>4,550</b>	1450 <b>3,200</b>	7400 <b>24'03''</b>
–1500 mm – <b>5'0''</b>	kg Ib	*4350 <b>*9,700</b>	*4350 <b>*9,700</b>	8300 <b>17,750</b>	5250 <b>11,200</b>	4200 <b>9,050</b>	2850 <b>6,150</b>	2750 <b>5,950</b>	1900 <b>4,100</b>			2300 <b>5,000</b>	1600 <b>3,500</b>	6910 <b>22'07''</b>
-3000 mm - <b>10'0''</b>	kg Ib	*7450 <b>*16,800</b>	*7450 <b>*16,800</b>	8350 <b>17,900</b>	5300 <b>11,300</b>	4200 <b>9,050</b>	2850 6,150	2800	1950			2800 6,150	1950 <b>4,300</b>	6020 <b>19'07''</b>
–4500 mm – <b>15'0''</b>	kg <b>Ib</b>			*6400 * <b>13,550</b>	5500 <b>11,800</b>							*4000 <b>*8,800</b>	3050 <b>6,950</b>	4480 <b>14'04''</b>

#### Reach Boom Lift Capacities – 2140 kg (4,720 lb) Counterweight – without Bucket

3.0 m (9'10") R3.0 R3.0 4.65 m (15'3") 									mm (9'1")					
5	<del>v</del>	1500 n	1m/5'0"	3000 m	m/10'0"	4500 m	m/15'0"	6000 m	m/20'0"	7500 m	m/25'0"			
	<u>r</u>	Ð	¢.	Ð		I.		Ð		Ð	C.	ŀ	Ē	mm ft/in
7500 mm 25'0"	kg Ib											*2600 * <b>5,850</b>	*2600 <b>*5,850</b>	4490 <b>14'01''</b>
6000 mm 20'0"	kg Ib							*2250	*2250			*2200 * <b>4,850</b>	*2200 * <b>4,850</b>	6030 <b>19'06''</b>
4500 mm <b>15'0''</b>	kg Ib							3200 <b>6,900</b>	2350 <b>5,000</b>			*2050 * <b>4,500</b>	1800 <b>4,000</b>	6920 <b>22'06''</b>
3000 mm <b>10'0''</b>	kg Ib			*5350 * <b>11,450</b>	*5350 * <b>11,450</b>	*4200 <b>*9,050</b>	3500 <b>7,550</b>	3150 <b>6,700</b>	2250 <b>4,800</b>			*2050 * <b>4,500</b>	1600 <b>3,450</b>	7400 <b>24'02''</b>
1500 mm <b>5'0"</b>	kg Ib			*8200 * <b>17,650</b>	5900 <b>12,750</b>	4650 <b>10,000</b>	3250 <b>7,000</b>	3000 <b>6,450</b>	2150 <b>4,550</b>	2150	1500	2100 <b>4,600</b>	1500 <b>3,250</b>	7550 <b>24'09''</b>
0 mm <b>0 ft</b>	kg Ib			*7250 * <b>16,750</b>	5450 <b>11,700</b>	4400 <b>9,450</b>	3050 <b>6,500</b>	2900 <b>6,200</b>	2000 <b>4,350</b>			2150 <b>4,650</b>	1500 <b>3,250</b>	7400 <b>24'03''</b>
–1500 mm – <b>5'0''</b>	kg Ib	*4350 <b>*9,700</b>	*4350 <b>*9,700</b>	8500 <b>18,100</b>	5350 <b>11,450</b>	4300 <b>9,200</b>	2900 <b>6,250</b>	2800 <b>6,050</b>	1950 <b>4,200</b>			2300 <b>5,100</b>	1650 <b>3,550</b>	6910 <b>22'07''</b>
-3000 mm - <b>10'0''</b>	kg Ib	*7450 <b>*16,800</b>	*7450 <b>*16,800</b>	8550 <b>18,250</b>	5400 <b>11,550</b>	4300 <b>9,200</b>	2900 <b>6,300</b>	2850	2000			2850 <b>6,300</b>	2000 <b>4,400</b>	6020 <b>19'07''</b>
-4500 mm - <b>15'0"</b>	kg Ib			*6400 <b>*13,550</b>	5600 <b>12,050</b>							*4000 <b>*8,800</b>	3100 <b>7,050</b>	4480 <b>14'04''</b>
		*	白				ISO 10567	:2007				Ĺ		

\* 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.



\* 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.

# **Bucket Specifications and Compatibility**

									Reac	h Boom
		mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb	%	R2.5 m (8'2")	R3.0 m (9'10"
Pin-On (No Quick Coupler)										
General Duty	312	600	24	0.31	0.40	320	706	100	•	•
	312	900	36	0.53	0.69	420	927	100	•	۲
	312	1100	43	0.68	0.89	474	1,045	100	۲	θ
Severe Duty	312	900	36	0.53	0.69	495	1,090	90	•	•
	312	1050	42	0.65	0.85	570	1,258	90	۲	θ
Ditch Cleaning	312	1200	48	0.57	0.74	388	855	100	•	۲
	312	1500	60	0.74	0.97	455	1,003	100	θ	0
Dtch Cleaning Tilt	312	1200	48	0.48	0.63	563	1,240	100	•	۲
				Maxim	um lood nin	an (naulaac	L . huakat)	kg	1660	1470
				iviaximi	im load pin-	on (payload	1 + DUCKET)	lb	3,668	3,240
								10	0,000	3,240
With Cat Pin Grabber Coupler								15	0,000	5,240
With Cat Pin Grabber Coupler General Duty	312	600	24	0.31	0.40	320	706	100	•	5,240
	312 312	600 900	24 36	0.31	0.40	320 420	706 927		,	· ·
								100	•	
	312	900	36	0.53	0.69	420	927	100 100	•	•
	312 312	900 1100	36 43	0.53 0.68	0.69 0.89	420 474	927 1,045	100 100 100	• •	
General Duty	312 312 312	900 1100 1200	36 43 48	0.53 0.68 0.76	0.69 0.89 1.00	420 474 508	927 1,045 1,119	100 100 100 100		
General Duty Severe Duty	312 312 312 312 312	900 1100 1200 900	36 43 48 36	0.53 0.68 0.76 0.53	0.69 0.89 1.00 0.69	420 474 508 495	927 1,045 1,119 1,090	100 100 100 100 90		
General Duty	312 312 312 312 312 312 312	900 1100 1200 900 1050	36 43 48 36 42	0.53 0.68 0.76 0.53 0.65	0.69 0.89 1.00 0.69 0.85	420 474 508 495 570	927 1,045 1,119 1,090 1,258	100 100 100 100 90 90		
General Duty Severe Duty Ditch Cleaning	312 312 312 312 312 312 312 312	900 1100 1200 900 1050 1200	36 43 48 36 42 48	0.53 0.68 0.76 0.53 0.65 0.57	0.69 0.89 1.00 0.69 0.85 0.74	420 474 508 495 570 388	927 1,045 1,119 1,090 1,258 855	100 100 100 100 90 90 100		
General Duty Severe Duty	312 312 312 312 312 312 312 312 312	900 1100 1200 900 1050 1200 1500	36 43 48 36 42 48 60	0.53 0.68 0.76 0.53 0.65 0.57 0.74 0.48	0.69 0.89 1.00 0.69 0.85 0.74 0.97 0.63	420 474 508 495 570 388 455	927 1,045 1,119 1,090 1,258 855 1,003 1,240	100 100 100 90 90 100 100		

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/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>)

1800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>)

⊖ 1500 kg/m³ (2,500 lb/yd³)
 ○ 1200 kg/m³ (2,000 lb/yd³)

◇ 900 kg/m³ (1,500 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.

# **313 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

No Match

Boom Type	Reach			
Stick Length		R2.5 (8'2")	R3.0 (9'10")	
Hydraulic Hammers	H110 GC	$\checkmark$	$\checkmark$	
	H110 GC Side Mount	$\checkmark$	$\checkmark$	
	H110 GC S	$\checkmark$	$\checkmark$	
	H110 S	$\checkmark$	$\checkmark$	
	H115 GC	$\checkmark$		
	H115 GC Side Mount	$\checkmark$	$\checkmark$	
	H115 GC S	$\checkmark$	$\checkmark$	
	H115 S	$\checkmark$	✓	
Compactors (Vibratory Plate)	CVP75	$\checkmark$	$\checkmark$	
Rotary Cutters	RC10	$\checkmark$	$\checkmark$	

#### **CAT PIN GRABBER COUPLER ATTACHMENTS**

Boom Type		Re	ach
Stick Length		R2.5 (8'2")	R3.0 (9'10")
Hydraulic Hammers	H110 GC	$\checkmark$	$\checkmark$
	H110 GC Side Mount	$\checkmark$	$\checkmark$
	H110 GC S	$\checkmark$	$\checkmark$
	H110 S	$\checkmark$	$\checkmark$
	H115 GC Side Mount	$\checkmark$	√*
	H115 GC S	√*	
	H115 S	$\checkmark$	√*
Compactors (Vibratory Plate)	CVP75	$\checkmark$	$\checkmark$
Rotary Cutters	RC10	$\checkmark$	$\checkmark$

#### **S60 DEDICATED COUPLER ATTACHMENTS**

Boom Type		Re	ach
Stick Length		R2.5 (8'2")	R3.0 (9'10")
Hydraulic Hammers	H110 GC	$\checkmark$	√*
	H110 GC S	$\checkmark$	✓
	H110 S	$\checkmark$	✓
	H115 GC	√*	
	H115 GC S	√*	
	H115 S	$\checkmark$	$\checkmark$
Compactors (Vibratory Plate)	CVP75	$\checkmark$	$\checkmark$
Rotary Cutters	RC10	$\checkmark$	√

(continued on next page)

# **313 GC Hydraulic Excavator Specifications**

# **Attachments Offering Guide** (continued)

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

$\checkmark$	Match
$\checkmark$	Match

✓\* Working range front only

No Match

HCS60 DEDICATED COUPLER ATTACHMENTS			
Boom Type Stick Length		Reach	
		R2.5 (8'2")	R3.0 (9'10")
Hydraulic Hammers	H110 GC	$\checkmark$	√
	H110 S	✓	√
	H115 S	✓	√*
Compactors (Vibratory Plate)	CVP75	$\checkmark$	$\checkmark$
Rotary Cutters	RC10	✓	√

#### **HCS65 DEDICATED COUPLER ATTACHMENTS**

Boom Type Stick Length		Reach	
		R2.5 (8'2")	R3.0 (9'10")
Hydraulic Hammers	H110 GC	$\checkmark$	√
	H110 S	$\checkmark$	$\checkmark$
	H115 S	✓	
Compactors (Vibratory Plate)	CVP75	✓	√
Rotary Cutters	RC10	✓	$\checkmark$

#### **BOOM-MOUNT ATTACHMENTS**

#### Boom Type

Mobile Scrap and Demolition Shears

S3025 Flat Top

Reach ✓

# **Standard and Optional Equipment**

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

	Standard	Optional
BOOMS AND STICKS		
4.65 m (15'3") Reach boom	$\checkmark$	
2.5 m (8'2") Reach stick		$\checkmark$
3.0 m (9'10") Reach stick		$\checkmark$
Bucket linkage, with lifting eye	$\checkmark$	
CAB		
ROPS	$\checkmark$	
Operator Protective Guards (OPG)		✓
High-resolution 203 mm (8") LCD touchscreen monitor	$\checkmark$	
Auto bi-level air conditioner	$\checkmark$	
Jog dial and shortcut keys for monitor control	$\checkmark$	
Keyless push-to-start engine control	$\checkmark$	
Height-adjustable console, three steps with tool	√	
Fixed lift-side console	$\checkmark$	
Air-suspension seat	$\checkmark$	
51 mm (2") seat belt	$\checkmark$	
Bluetooth <sup>®</sup> radio with USB/	$\checkmark$	
Auxiliary ports		
12V DC outlet	✓	
Document storage	$\checkmark$	
Beverage holder	$\checkmark$	
Cup holder	$\checkmark$	
Openable two-piece front window	$\checkmark$	
Rear window emergency exit	$\checkmark$	
Radial wiper with washer	$\checkmark$	
Openable polycarbonate skylight hatch	$\checkmark$	
LED dome light	$\checkmark$	
Roller front sunscreen	$\checkmark$	
Roller rear sunscreen		$\checkmark$
Washable floor mat	$\checkmark$	
Beacon ready	√	

	Standard	Optional
CAT TECHNOLOGY		
Cat Equipment Management:		
- VisionLink®	$\checkmark^1$	
-VisionLink Productivity		<b>√</b> <sup>2</sup>
– Remote Flash	$\checkmark$	
ELECTRICAL SYSTEM		
Maintenance-free battery	$\checkmark$	
Electrical disconnect switch	$\checkmark$	
LED chassis light, left-side boom light, cab lights	$\checkmark$	
LED right-side boom light		√
360° lighting		√
ENGINE		
Cat C3.6 single turbo diesel engine	$\checkmark$	
Two selectable modes: Power, Smart	$\checkmark$	
52° C (125° F) high-ambient cooling capability	$\checkmark$	
-18° C (0° F) cold start capability	$\checkmark$	
Electric fuel priming pump	$\checkmark$	
Variable speed fan	$\checkmark$	
Two-stage fuel filtration system	$\checkmark$	
Double-element air filter with pre-cleaner	$\checkmark$	

(continued on next page)

<sup>1</sup>Provides core telematics data to manage health, maintenance insights, and condition monitoring. Other plans available for more comprehensive data reporting. Consult your Cat dealer for details.

<sup>2</sup>VisionLink subscription required. Consult your Cat dealer for details.

# **Standard and Optional Equipment** (continued)

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

	Standard	Optional
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	$\checkmark$	
Automatic hydraulic oil warm up	$\checkmark$	
Automatic two-speed travel	$\checkmark$	
Single type electronic main pump	$\checkmark$	
Electronic main control value	$\checkmark$	
Boom and stick drift reduction valve	$\checkmark$	
Boom and stick lowering check valves		$\checkmark$
Medium-pressure line		$\checkmark$
HIgh-pressure line		$\checkmark$
Quick coupler line		$\checkmark$
SAFETY AND SECURITY		
Rear and right-side-view cameras	$\checkmark$	
Hydraulic lockout lever	$\checkmark$	
Ground-level engine shutoff switch	$\checkmark$	
Service platform with anti-skid plate and countersunk bolts	$\checkmark$	
Signaling/warning horn	$\checkmark$	
Travel alarm with cancel switch		$\checkmark$
Lockable disconnect switch	$\checkmark$	
Auto Hammer Stop	$\checkmark$	

	Standard	Optional
SERVICE AND MAINTENANCE		
Grouped engine oil and fuel filters	$\checkmark$	
Side entry to service platform	$\checkmark$	
Ground level engine oil dipstick	$\checkmark$	
Scheduled Oil Sampling (S·O·S <sup>SM</sup> ) ports	$\checkmark$	
Integrated vehicle health management system	$\checkmark$	
UNDERCARRIAGE AND STRUCTURES		
Standard undercarriage	$\checkmark$	
500 mm (20") triple grouser track shoes		$\checkmark$
600 mm (24") triple grouser track shoes		√
700 mm (28") triple grouser track shoes		$\checkmark$
Grease lubricated track links	$\checkmark$	
Center track guiding guard	$\checkmark$	
Bottom guards	$\checkmark$	
Travel motor guards	$\checkmark$	
2140 kg (4,720 lb) counterweight	$\checkmark$	
Tie-down points	$\checkmark$	

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

Attachments may vary. Consult your Cat dealer for details.

#### CAB

- Radial lower wiper
- Left-hand and right-hand electrical pedal (two-way) for tool control
- Dual exit rear window kit
- Rain protector plus cab light cover
- Polycarbonate roof hatch
- Front windshield laminated glass (P5A glass, EU demolition regulation)
- Key fob (for use with Bluetooth receiver)

#### **GUARDS**

- Operator Protective Guards (OPG) (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
- Full protecting vandalism guard

#### **SAFETY AND SECURITY**

- 76 mm (3") retractable seat belt
- Bluetooth receiver

# **313 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.

#### Engine

- The Cat<sup>®</sup> C3.6 engine meets U.S. EPA Tier 4 Final, EU 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  $CO_2$  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)	99 dB(A)
ISO 6396:2008 (inside cab)	68 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
- Eco mode supports reduced fuel consumption for light applications
- One-touch low idle with automatic engine speed control
- Extended service intervals help decrease maintenance costs
- Remote Flash

#### 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	82.77%
Iron	4.18%
Nonferrous Metal	1.88%
Mixed Metal	0.30%
Mixed-Metal and Nonmetal	2.50%
Plastic	0.16%
Rubber	3.30%
Mixed Nonmetallic	0.85%
Fluid	2.47%
Other	1.59%
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 - 95%

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

© 2024 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. AEXQ4093-00 (11-2024) Build Number: 07H (Chile, Colombia)

