

# 323 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	117 kW	157 hp
ISO 9249 (DIN)	159 hp (me	tric)
Engine Power		
ISO 14396	118 kW	158 hp
ISO 14396 (DIN)	160 hp (me	tric)
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in <sup>3</sup>
Biodiesel capability	Up to B200	1)

- Meets Brazil MAR-1 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 (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.

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

<sup>\*\*</sup>Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Swing Mechanism		
Swing Speed	11.25 rpm	
Maximum Swing Torque	82 kN·m	60,300 lbf-ft
Weights		
Operating Weight	24 100 kg	53,100 lb

• HD Reach Boom, R2.9 (9'6") Stick, 1.30 m<sup>3</sup> (1.70 yd<sup>3</sup>) Heavy Duty (HD) bucket and 600 mm (24 in) HD triple grouser shoes.

Track		
Standard Track Shoes Width	600 mm	24 in
Optional Track Shoes Width	700 mm 790 mm	28 in 31 in
Number of Shoes (each side)	49	
Number of Track Rollers (each side)	8	
Number of Carrier Rollers (each side)	2	

Drive		
Gradeability	35°/70%	
Maximum Travel Speed	5.7 km/h	3.5 mph
Maximum Drawbar Pull – Long Undercarriage	204 kN	45,861 lbf

Hydraulic System		
Main System – Maximum Flow – Implement	429 L/min (215 ×	113 gal/min (57 ×
	2 pumps)	2 pumps)
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Heavy Lift Mode/Auto Dig Boost	38 000 kPa	5,510 psi
Maximum Pressure – Travel	34 300 kPa	4,974 psi
Maximum Pressure – Swing	27 500 kPa	3,998 psi
Boom Cylinder – Bore – Heavy Lift	125 mm	5 in
Boom Cylinder – Stroke – Heavy Lift	1260 mm	50 in
Stick Cylinder – Bore	140 mm	6 in
Stick Cylinder – Stroke	1504 mm	59 in
Bucket Cylinder – Bore	120 mm	5 in
Bucket Cylinder – Stroke	1104 mm	43 in

Service Refill Capacities		
Fuel Tank Capacity	345 L	86.6 gal
Cooling System	25 L	6.6 gal
Engine Oil	25 L	6.6 gal
Swing Drive	12 L	3.2 gal
Final Drive (each)	4 L	1.1 gal
Hydraulic System (including tank)	234 L	61.8 gal
Hydraulic Tank	115 L	30.4 gal

Sound Performance		
ISO 6395:2008 (external)	100 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.

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

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

		600 mm iple Gro	(24 in) user Sh	oes		700 mm iple Gro	(28 in) user Sh	oes		790 mm iple Gro	(31 in) user Sh	oes
	We	ight	Gro Pres	und sure	We	ight	Gro Pres		We	ight		und ssure
Base Machine Configurations	kg	lb	kPa	psi	kg	lb	kPa	psi	kg	lb	kPa	psi

#### **Base Frame with Track Rollers and Carrier Rollers**

#### 5.4 mt (11,900 lb) Counterweight + Long Undercarriage Base Machine

HD Reach Boom + R2.9 (9'6") Stick + 1.30 m<sup>3</sup> (1.70 yd<sup>3</sup>) HD Bucket

 $24\ 100\ (53{,}100)\ 50.1\ (7.3)\ 24\ 600\ (54{,}200)\ 43.9\ (6.4)\ 24\ 900\ (54{,}900)\ 39.3\ (5.7)$ 

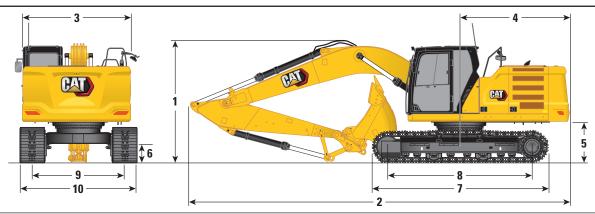
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

#### **Major Component Weights**

	kg	lb
Base Machine (with 5.4 mt [11,900 lb], counterweight, HD swing frame, HD base frame with SD track rollers and standard carrier rollers for long undercarriage, without boom cylinder – does not include 90% fuel and 75 kg [165 lb] operator)	16 400	36,100
Track Shoes:		
600 mm (24 in) Width, 12.5 mm (0.49 in) Thick Triple Grouser HD Track Shoes	3080	6,800
700 mm (28 in) Width, 12.5 mm (0.49 in) Thick Triple Grouser HD Track Shoes	3490	7,700
790 mm (31 in) Width, 12.5 mm (0.49 in) Thick Triple Grouser HD Track Shoes with Step Extension	3800	8,400
Boom Cylinders	340	750
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	680
Counterweight:		
5.4 mt (11,900 lb) Counterweight	5400	11,900
Swing Frame	2090	4,600
Undercarriage:		
HD Base Frame with SD Track Rollers and Standard Carrier Rollers	4470	9,900
Booms (including lines, pins, stick cylinder):		
HD Reach Boom (5.7 m/18'8")	2010	4,400
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick (R2.9B1/9'6")	1080	2,400
Reach Stick (R2.5B1/8'2")	1020	2,200
Buckets (without linkage):		
1.30 m³ (1.70 yd³) HD	930	2,000
Quick Couplers (QC):		
CW Dedicated	230	500
Pin Grabber QC	390	850

#### **Dimensions**

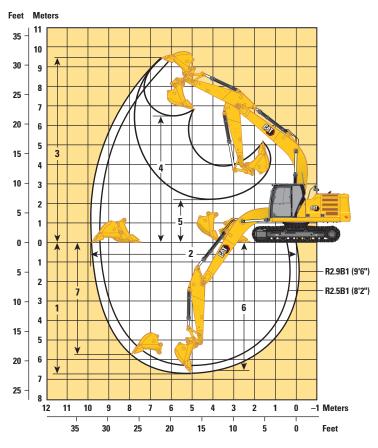
All dimensions are approximate and may vary depending on bucket selection.



Boom Options	HD Reach Boom 5.7 m (18'8")			
Stick Options	Reach R2.9B1		Reach Stick R2.5B1 (8'2")	
1 Machine Height:				
Top of Cab Height	2960 mm	9'9"	2960 mm	9'9"
Top of GNSS Antenna Height (if installed)	3000 mm	9'10"	3000 mm	9'10"
Top of OPG Height	3100 mm	10'2"	3100 mm	10'2"
Handrail Height	2950 mm	9'9"	2950 mm	9'9"
With Boom/Stick/Bucket Installed	3160 mm	10'4"	3080 mm	10'1"
With Boom/Stick Installed	2910 mm	9'7"	2910 mm	9'7"
With Boom Installed	2480 mm	8'2"	2480 mm	8'2"
2 Machine Length:				
With Boom/Stick/Bucket Installed	9530 mm	31'3"	9530 mm	31'3"
With Boom/Stick Installed	9500 mm	31'2"	9500 mm	31'2"
With Boom Installed	8450 mm	27'9"	8450 mm	27'9"
<b>3</b> Upperframe Width	2780 mm	9'1"	2780 mm	9'1"
4 Tail Swing Radius	2830 mm	9'3"	2830 mm	9'3"
5 Counterweight Clearance	1050 mm	3'5"	1050 mm	3'5"
<b>6</b> Ground Clearance	470 mm	1'7"	470 mm	1'7"
7 Track Length	4450 mm	14'7"	4450 mm	14'7"
8 Length to Center of Rollers	3650 mm	12'0"	3650 mm	12'0"
9 Track Gauge	2380 mm	7'9"	2380 mm	7'9"
10 Undercarriage Width:				
600 mm (24 in) Shoes	2980 mm	9'9"	2980 mm	9'9"
700 mm (28 in) Shoes	3080 mm	10'1"	3080 mm	10'1"
790 mm (31 in) Shoes	3170 mm	10'5"	3170 mm	10'5"
Bucket Type	Н	HD HD		D
Bucket Capacity	1.30 m <sup>3</sup>	1.70 yd³	1.30 m <sup>3</sup>	1.70 yd³
Bucket Tip Radius	1580 mm	5'2"	1580 mm	5'2"

#### **Working Ranges**

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

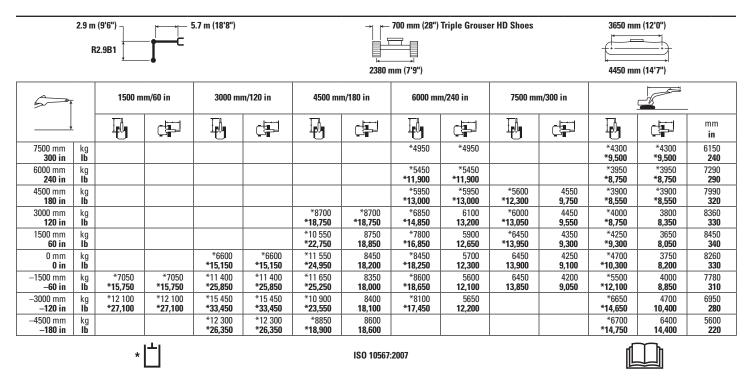


Boom Option	HD Reach Boom 5.7 m (18'8")				
Stick Options		1 Stick 1 (9'6")	Reach Stick R2.5B1 (8'2")		
1 Maximum Digging Depth	6730 mm	22'1"	6310 mm	20'8"	
2 Maximum Reach at Ground Line	9870 mm	32'4"	9470 mm	31'1"	
3 Maximum Cutting Height	9450 mm	31'1"	9250 mm	30'4"	
4 Maximum Loading Height	6480 mm	21'3"	6280 mm	20'7"	
5 Minimum Loading Height	2160 mm	7'1'''	2580 mm	8'6"	
<b>6</b> Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6560 mm	21'6"	6120 mm	20'1"	
7 Maximum Vertical Wall Digging Depth	5620 mm	18'5"	5230 mm	17'2"	
Bucket Digging Force (ISO)	140 kN	34,308 lbf	140 kN	31,505 lbf	
Stick Digging Force (ISO)	107 kN	26,094 lbf	118 kN	26,550 lbf	
Bucket Digging Force (ISO) – Auto Dig Boost	152 kN	34,205 lbf	152 kN	34,205 lbf	
Stick Digging Force (ISO) – Auto Dig Boost	116 kN	26,016 lbf	128 kN	28,826 lbf	
Bucket Type	Н	HD		ID	
Bucket Capacity	1.30 m <sup>3</sup>	1.70 yd³	1.19 m³	1.56 yd³	
Bucket Tip Radius	1580 mm	5'2"	1570 mm	5'2"	

#### Reach Boom Lift Capacities - Counterweight: 5.4 mt (11,900 lb) - without Bucket - Heavy Lift: On

2.9 m (9'6") 5.7 m (18'8")						600 mm (24")		3650 mm (12'0") 4450 mm (14'7")						
1500 mm/60 in		m/60 in	3000 mr	n/120 in	/120 in 4500 mm/1		mm/180 in 6000 mm/240 in		7500 mm/300 in					
	.	Į.		Į.		Į,				Į.		Į,		mm in
7500 mm <b>300 in</b>	kg <b>Ib</b>							*4950	*4950			*4300 <b>*9,500</b>	*4300 <b>*9,500</b>	6150 <b>240</b>
6000 mm <b>240 in</b>	kg <b>Ib</b>							*5450 <b>*11,900</b>	*5450 <b>*11,900</b>			*3950 <b>*8,750</b>	*3950 <b>*8,750</b>	7290 <b>290</b>
4500 mm <b>180 in</b>	kg <b>Ib</b>							*5950 <b>*13,000</b>	*5950 <b>*13,000</b>	*5600 <b>*12,300</b>	4500 <b>9,650</b>	*3900 <b>*8,550</b>	*3900 <b>*8,550</b>	7990 <b>320</b>
3000 mm <b>120 in</b>	kg <b>Ib</b>					*8700 <b>*18,750</b>	*8700 <b>*18,750</b>	*6850 <b>*14,850</b>	6050 <b>13,000</b>	*6000 <b>*13,050</b>	4400 <b>9,450</b>	*4000 <b>*8,750</b>	3750 <b>8,200</b>	8360 <b>330</b>
1500 mm <b>60 in</b>	kg <b>Ib</b>					*10 550 <b>*22,750</b>	8600 <b>18,550</b>	*7800 <b>*16,850</b>	5800 <b>12,500</b>	*6450 <b>13,900</b>	4250 <b>9,200</b>	*4250 <b>*9,300</b>	3600 <b>7,950</b>	8450 <b>340</b>
0 mm <b>0 in</b>	kg <b>Ib</b>			*6600 <b>*15,150</b>	*6600 <b>*15,150</b>	*11 550 <b>*24,950</b>	8350 <b>17,900</b>	*8450 <b>*18,250</b>	5600 <b>12,100</b>	6350 <b>13,700</b>	4200 <b>9,000</b>	*4700 <b>*10,300</b>	3700 <b>8,100</b>	8260 <b>330</b>
−1500 mm <b>−60 in</b>	kg <b>Ib</b>	*7050 <b>*15,750</b>	*7050 <b>*15,750</b>	*11 400 <b>*25,850</b>	*11 400 <b>*25,850</b>	*11 650 <b>*25,250</b>	8250 <b>17,700</b>	*8600 <b>*18,650</b>	5550 <b>11,950</b>	6350 <b>13,650</b>	4150 <b>8,950</b>	*5500 <b>*12,100</b>	3950 <b>8,700</b>	7780 <b>310</b>
−3000 mm <b>−120 in</b>	kg <b>Ib</b>	*12 100 <b>*27,100</b>	*12 100 <b>*27,100</b>	*15 450 <b>*33,450</b>	*15 450 <b>*33,450</b>	*10 900 <b>*23,550</b>	8300 <b>17,850</b>	*8100 <b>*17,450</b>	5550 <b>12,000</b>			*6650 <b>*14,650</b>	4650 <b>10,250</b>	6950 <b>280</b>
−4500 mm <b>−180 in</b>	kg <b>Ib</b>			*12 300 <b>*26,350</b>	*12 300 <b>*26,350</b>	*8850 <b>*18,900</b>	8500 <b>18,300</b>					*6700 <b>*14,750</b>	6300 <b>14,200</b>	5600 <b>220</b>

#### Reach Boom Lift Capacities - Counterweight: 5.4 mt (11,900 lb) - without Bucket - Heavy Lift: On



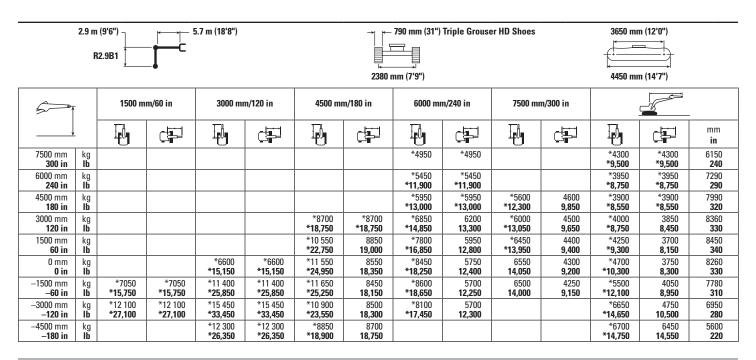
<sup>\*</sup>Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007.

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.

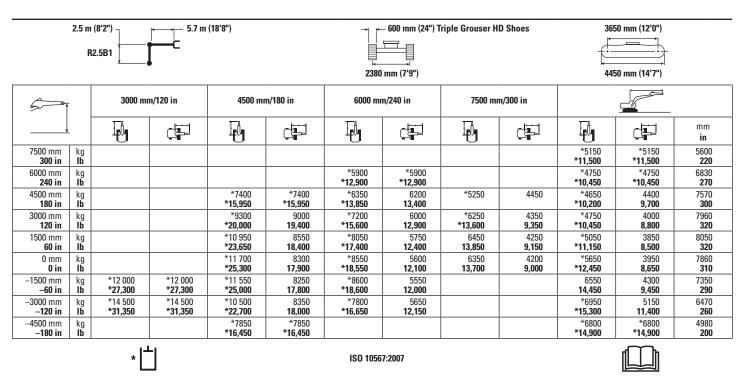
Lift capacity stays with ±5% for all available track shoes.

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

#### Reach Boom Lift Capacities - Counterweight: 5.4 mt (11,900 lb) - without Bucket - Heavy Lift: On



#### Reach Boom Lift Capacities – Counterweight: 5.4 mt (11,900 lb) – without Bucket – Heavy Lift: On



<sup>\*</sup>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.

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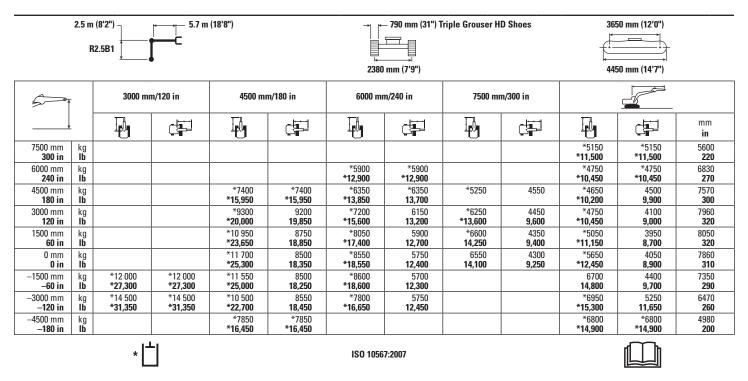
Lift capacity stays with ±5% for all available track shoes.

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

#### HD Reach Boom Lift Capacities – Counterweight: 5.4 mt (11,900 lb) – without Bucket – Heavy Lift: On

	2.5 m (8'2") –						– 700 mm (28") T	riple Grouser H	3650 mm (12'0")			
R2.5B1				2380	mm (7'9")		4450 mm (14'7")					
3000 mm/120 in 4500 mm/180 in			n/180 in	6000 mm/240 in 7500 mm/300 in								
	-			Į.								mm <b>in</b>
7500 mm <b>300 in</b>	kg <b>lb</b>									*5150 <b>*11,500</b>	*5150 <b>*11,500</b>	5600 <b>220</b>
6000 mm <b>240 in</b>	kg <b>Ib</b>					*5900 <b>*12,900</b>	*5900 <b>*12,900</b>			*4750 <b>*10,450</b>	*4750 <b>*10,450</b>	6830 <b>270</b>
4500 mm <b>180 in</b>	kg <b>Ib</b>			*7400 <b>*15,950</b>	*7400 <b>*15,950</b>	*6350 <b>*13,850</b>	6300 <b>13,550</b>	*5250	4500	*4650 <b>*10,200</b>	4450 <b>9,800</b>	7570 <b>300</b>
3000 mm <b>120 in</b>	kg <b>Ib</b>			*9300 <b>*20,000</b>	9150 <b>19,650</b>	*7200 <b>*15,600</b>	6050 <b>13,100</b>	*6250 <b>*13,600</b>	4400 <b>9,500</b>	*4750 <b>*10,450</b>	4050 <b>8,900</b>	7960 <b>320</b>
1500 mm <b>60 in</b>	kg <b>lb</b>			*10 950 <b>*23,650</b>	8650 <b>18,650</b>	*8050 <b>*17,400</b>	5850 <b>12,600</b>	6550 <b>14,100</b>	4300 <b>9,300</b>	*5050 <b>*11,150</b>	3900 <b>8,600</b>	8050 <b>320</b>
0 mm <b>0 in</b>	kg <b>Ib</b>			*11 700 <b>*25,300</b>	8450 <b>18,150</b>	*8550 <b>*18,550</b>	5700 <b>12,250</b>	6450 <b>13,950</b>	4250 <b>9,150</b>	*5650 <b>*12,450</b>	4000 <b>8,800</b>	7860 <b>310</b>
−1500 mm <b>−60 in</b>	kg <b>Ib</b>	*12 000 <b>*27,300</b>	*12 000 <b>*27,300</b>	*11 550 <b>*25,000</b>	8400 <b>18,050</b>	*8600 <b>*18,600</b>	5650 <b>12,150</b>			6650 <b>14,650</b>	4350 <b>9,600</b>	7350 <b>290</b>
−3000 mm <b>−120 in</b>	kg <b>Ib</b>	*14 500 <b>*31,350</b>	*14 500 <b>*31,350</b>	*10 500 <b>*22,700</b>	8500 <b>18,250</b>	*7800 <b>*16,650</b>	5700 <b>12,350</b>			*6950 <b>*15,300</b>	5200 <b>11,550</b>	6470 <b>260</b>
−4500 mm <b>−180 in</b>	kg <b>Ib</b>			*7850 <b>*16,450</b>	*7850 <b>*16,450</b>					*6800 <b>*14,900</b>	*6800 <b>*14,900</b>	4980 <b>200</b>

#### Reach Boom Lift Capacities - Counterweight: 5.4 mt (11,900 lb) - without Bucket - Heavy Lift: On



<sup>\*</sup>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.

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

		Wi	dth	Capa	Capacity Weight		Fill	HD Read	ch Boom	
	Linkage	mm	in	m³	yd³	kg	lb	%	R2.9 (9'6")	R2.5 (8'2")
Pin-On (No Quick Coupler)										
Utility Duty	В	600	24	0.39	0.51	503	1,108	100	•	•
	В	900	36	0.65	0.84	613	1,351	100	•	•
	В	1200	48	0.95	1.24	733	1,615	100	•	•
General Duty	В	600	24	0.46	0.60	550	1,212	100	•	•
	В	750	30	0.64	0.84	621	1,368	100	•	•
	В	1000	39	0.93	1.22	717	1,580	100	•	•
	В	1050	42	1.00	1.31	737	1,624	100	•	•
	В	1050	42	1.00	1.31	737	1,624	100	•	•
	В	1200	48	1.19	1.56	807	1,778	100	•	•
	В	1400	55	1.43	1.87	874	1,926	100	Х	Х
	В	1500	60	1.58	2.06	914	2,014	100	Х	Х
leavy Duty	В	600	24	0.46	0.61	635	1,400	100	•	•
	В	750	30	0.64	0.84	737	1,625	100	•	•
	В	900	36	0.81	1.06	818	1,804	100	•	•
	В	1050	42	1.00	1.31	872	1,923	100	•	•
	В	1200	48	1.19	1.56	929	2,048	100	•	•
	В	1350	54	1.38	1.81	1036	2,284	100	Х	•
	В	1500	60	1.58	2.06	1094	2,412	100	Х	Х
Clean Up	В	1800	72	1.60	2.09	979	2,157	100	•	•
	В	2000	78	1.76	2.31	1045	2,303	100	$\Theta$	•
	В	2000	78	1.76	2.31	1045	2,303	100	$\Theta$	•
Ditch Cleaning Tilt	В	1800	72	1.40	1.83	1105	2,437	100	•	•
	·		lovimum	lood with	nin on In	ayload +	huakat)	kg	3710	3980
		IV	iaxiiiiulli	ıodu Willi	μιιι-υιι (μ	Jayluau +	bucket)	lb	8,179	8,774

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)
- X Not Recommended

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.

(continued on next page)

#### **Bucket Specifications and Compatibility (continued)**

									5.4 mt (11,900 lb) Counterweight		
		Wi	dth	Cap	acity	We	Weight		HD Reach Boom		
	Linkage	mm	in	m³	yd³	kg	lb	%	R2.9 (9'6")	R2.5 (8'2")	
With Cat Pin Grabber Coupler											
Jtility Duty	В	600	24	0.39	0.51	503	1,108	100	•	•	
	В	900	36	0.65	0.84	613	1,351	100	•	•	
	В	1200	48	0.95	1.24	733	1,615	100	•	•	
General Duty	В	600	24	0.46	0.60	550	1,212	100	•	•	
	В	750	30	0.64	0.84	621	1,368	100	•	•	
	В	1000	39	0.93	1.22	717	1,580	100	•	•	
	В	1050	42	1.00	1.31	737	1,624	100	•	•	
	В	1050	42	1.00	1.31	737	1,624	100	•	•	
	В	1200	48	1.19	1.56	807	1,778	100	•	•	
	В	1400	55	1.43	1.87	874	1,926	100	•	•	
	В	1500	60	1.58	2.06	914	2,014	100	θ	•	
leavy Duty	В	600	24	0.46	0.61	635	1,400	100	•	•	
	В	750	30	0.64	0.84	737	1,625	100	•	•	
	В	900	36	0.81	1.06	818	1,804	100	•	•	
	В	1050	42	1.00	1.31	872	1,923	100	•	•	
	В	1200	48	1.19	1.56	929	2,048	100	•	•	
	В	1350	54	1.38	1.81	1036	2,284	100	•	•	
	В	1500	60	1.58	2.06	1094	2,412	100	θ	$\Theta$	
Clean Up	В	1800	72	1.60	2.09	979	2,157	100	$\Theta$	θ	
	В	2000	78	1.76	2.31	1045	2,303	100	0	θ	
	В	2000	78	1.76	2.31	1045	2,303	100	0	$\Theta$	
Ditch Cleaning Tilt	В	1800	72	1.40	1.83	1105	2,437	100	•	•	
	'		lma.com	ما سناها-	aunlar I		huakat\	kg	3401	3677	
		IVI	iximum l	oad with (	coupier (¢	ayload +	bucket)	lb	7,498	8,107	

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)
- 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. No Match Match **PIN-ON ATTACHMENTS** Counterweight 5.4 mt (11,900 lb) **Boom Type HD Reach** Stick Length R2.9 (9'6") R2.5 (8'2") Hydraulic Hammers H120 GC H120 GC S H120 S ✓ ✓ H130 GC H130 GC S **√ √** H130 S **Demolition and Sorting Grapples** G318 / G324 ✓ Mulchers HM4015 ✓ ✓ HM4815 ✓ Compactors (Vibratory Plate) CVP110 Rotary Cutters RC20 **CAT PIN GRABBER COUPLER ATTACHMENTS** Counterweight 5.4 mt (11,900 lb) **Boom Type HD Reach** R2.9 (9'6") Stick Length R2.5 (8'2") Hydraulic Hammers H120 GC H120 GC S H120 S H130 GC ✓ ✓ H130 GC S H130 S ✓ G318 **Demolition and Sorting Grapples** G324 Mobile Scrap and Demolition Shears S3035 Flat Top $\checkmark$ HM4015 Mulchers HM4815 Compactors (Vibratory Plate) CVP110 Rotary Cutters RC20 TRS18 (PIN-ON TOP/S70 BOTTOM) ATTACHMENTS Some attachments require more hydraulic flow and are best suited with a machine that has HP2 circuits and a tiltrotator with a high flow swivel. Check the hydraulic capability of your machine and tiltrotator and the requirements of your attachment to ensure a proper match. Counterweight 5.4 mt (11,900 lb) **Boom Type HD Reach** R2.9 (9'6") R2.5 (8'2") Stick Length Hydraulic Hammers H115 S H120 GC S ✓ H120 S CVP75 Compactors (Vibratory Plate) ✓

**NOTE:** Use hammers on tiltrotators less than 10% of working hours per year or maximum 200 hours per year. Refer to your Operation and Maintenance Manual for recommended hydraulic flow requirements.

CVP110

## **323 Standard and Optional Equipment**

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

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

	Standard	Optional
BOOMS, STICKS AND LINKAGES		
5.7 m (18'8") HD Reach boom	✓	
2.9 m (9'6") Reach stick	✓	
2.5 m (8'2") Reach stick		✓
Bucket linkage, B1-family with lifting eye	✓	
CAB		
ROPS	✓	
High-resolution 203 mm (8") LCD touchscreen monitor	✓	
High-resolution 254 mm (10") LCD touchscreen monitor		✓
Auto bi-level air conditioner	✓	
Jog dial and shortcut keys for monitor control	<b>√</b>	
Keyless push-to-start engine control	✓	
Height-adjustable console	✓	
Tilt-up left-side console	✓	
Heated air-suspension seat	✓	
51 mm (2") seat belt	✓	
Monitor integrated Bluetooth® radio with USB/Auxilary ports	✓	
12V DC outlets	✓	
Document storage	✓	
Overhead storage and rear storage with nets	✓	
Beverage holder	✓	
Cup holder	✓	
Openable two-piece front window	✓	
Rear window emergency exit	✓	
Radial wiper with washer	✓	
Openable polycarbonate skylight hatch	✓	
LED dome light	✓	
Floor welcome light	✓	
Roof sunscreen	✓	
Roller front sunscreen	✓	
Roller rear sunscreen		✓
Washable floor mat	✓	
Beacon ready	✓	
Cat Stick Steer		✓

	Standard	Optional
CAT TECHNOLOGY		
VisionLink®	<b>√</b> *	
VisionLink Productivity		✓
Remote Flash	✓	
Remote Troubleshoot	✓	
Cat Grade Connectivity		✓
Compatibility with radios and base stations from Trimble, Topcon, and Leica	✓	
Capability to install 3D grade systems from Trimble, Topcon, and Leica	✓	
Cat Grade 2D	✓	
Cat Grade 2D with Attachment Ready Option (ARO)		✓
Cat Grade 3D single GNSS		✓
Cat Grade 3D dual GNSS		✓
Laser catcher		✓
Cat Assist:  - Grade Assist  - Boom Assist  - Bucket Assist  - Swing Assist  - Lift Assist	<b>√</b>	
Cat Payload:  - Static weigh  - Semiautomatic calibration  - Payload/cycle information  - USB reporting capability	<b>√</b>	
Work tool recognition (PL161)	✓	
Work tool tracking (PL161)	✓	
Cat Tilt Rotator (TRS) Integration		✓
Operator Coaching		✓

<sup>\*</sup>Connect subscription only. Additional subscriptions are available. Contact your Cat dealer for availability.

(continued on next page)

## **323 Standard and Optional Equipment**

#### Standard and Optional Equipment (continued)

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

	Standard	Optional
ELECTRICAL SYSTEM		
1,000 CCA maintenance-free batteries (×2)	✓	
Centralized electrical disconnect switch	✓	
Programmable time-delay LED working lights	✓	
LED chassis light, Left Hand (LH) and Right Hand (RH) boom lights, cab lights	✓	
Premium surround lighting package		✓
ENGINE		
Cat® C7.1 single turbo diesel engine	✓	
Three selectable power modes	✓	
Auto engine speed control	✓	
Auto engine idle shutdown	✓	
Work up to 3000 m (9,840 ft) above sea level without engine power de-rating	✓	
52° C (125° F) high-ambient cooling capacity	✓	
Cold starting capability for –18° C (0° F)	✓	
Double element air filter with integrated pre-cleaner	✓	
Electric fuel priming pump	✓	
Electric cooling fans with auto-reverse function	✓	
HYDRAULIC SYSTEM		
Boom and stick regeneration circuits	✓	
Boom and stick lowering check valves	✓	
Heavy lift configuration	✓	
Electronic main control valve	✓	
Auto Dig Boost	✓	
Auto heavy lift	✓	
Auto warm up	✓	
Auto two-speed travel	✓	
Boom and stick drift reduction valve	✓	
Element type main hydraulic filter	✓	
Slider joysticks	✓	
Tandem type electronic main pump	✓	
Hammer return filter circuit		✓
Hydraulic efficiency monitoring		✓
Advanced Tool Control (two pump, one/two way high-pressure flow)	✓	
Medium pressure auxiliary circuit		✓
Quick coupler circuit for Cat Pin Grabber and CW Dedicated		✓
Fine swing control	✓	

	Standard	Optional
SAFETY AND SECURITY		
Cat Command (remote control)		✓
2D E-Fence:	$\checkmark$	
<ul><li>E-ceiling</li><li>E-floor</li></ul>		
- E-swing		
– E-wall		
– E-cab avoidance		
Auto hammer stop	✓	
Rearview and right-hand-sideview cameras	✓	
Neutral lever (lock out) for all controls	✓	
Anti-skid plate and countersunk bolts on service platform	✓	
Ground-level accessible secondary engine shutoff switch in cab	✓	
Lockable disconnect switch	✓	
RH handrail and handhold	✓	
Swing alarm		✓
Travel alarm	✓	
Inspection lighting		✓
SERVICE AND MAINTENANCE		
Scheduled Oil Sampling (S·O·S <sup>SM</sup> ) ports	✓	
QuickEvac™ maintenance ready		✓
Grouped location for engine oil and fuel filters	✓	
Ground-level second dipstick for engine oil	✓	
Radiator screen		✓
Integrated vehicle health management system	✓	
INDERCARRIAGE AND STRUCTURES		
600 mm (24 in) HD triple grouser track shoes	✓	
700 mm (28 in) HD triple grouser track shoes		✓
790 mm (31 in) HD triple grouser track shoes		✓
Tie-down points on base frame	✓	
Segmented track guiding guards	✓	
Full-length track guiding guards		✓
HD bottom guard	✓	
Swivel guard		✓
HD travel motor guards	✓	
Grease lubricated track links	✓	
5400 kg (11,900 lb) counterweight	✓	

#### **323 Attachments**

#### **Dealer Installed Kit and Attachments**

Attachments may vary. Consult your Cat dealer for details.

#### CAB

- · Lower radial wiper
- Rain protector plus cab light cover
- Laminated P5A glass front windshield
- LH/RH electrical pedal for tool control
- Armrest kit
- Seat with 4-point seatbelt capability
- Dual exit rear window kit
- Tool box
- · Auxiliary relay

#### **ELECTRICAL**

• Premium surround working lights

#### **GUARDS**

- · Swivel guard
- Side rubber bumper guard
- Operator Protective Guards
- Mesh guard full front
- · Mesh guard half front

#### MAINTENANCE

- Jump start wiring
- Duct ready kit

#### **SAFETY AND SECURITY**

- Cat Detect People Detection
- Remote control kit
- Seat belt indicator
- · Bluetooth receiver
- Bluetooth key fob

#### **OTHER ATTACHMENTS**

- Delayed engine shutdown kit
- Upper cover for antennae
- Removable mast for antennae
- · Power clam kit

#### 323 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 <a href="https://www.caterpillar.com/en/company/sustainability">https://www.caterpillar.com/en/company/sustainability</a>.

#### **Engine**

- Cat C7.1 engine meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- 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.

\*\*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<sub>2</sub> 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) – 100 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
- Increase operating efficiency up to 45% with standard Cat technologies
- Cut maintenance costs with extended service intervals
- The latest hydraulic oil filter provides longer life with a 3,000-hour replacement interval

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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AEXQ3361-02 (09-2023) Replaces AEXQ3361-01 Build Number: 07G (Aus-NZ)

