

# **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 (met	ric)
Engine Power		
ISO 14396	118 kW	158 hp
ISO 14396 (DIN)	160 hp (met	ric)
Bore	105 mm	4 in
Stroke	135 mm	5 in
Displacement	7.01 L	428 in <sup>3</sup>
Biodiesel Capability	Up to B20 <sup>(1)</sup>	

- 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	24 600 kg	54,200 lb
		(0.00 H)

Long undercarriage, HD Reach boom, HD R2.5 m (8'2") stick,
 1.56 m³ (2.04 yd³) Severe Duty Spade (SDS) bucket, 600 mm (24") double grouser shoes, and 5.4 mt (11,900 lb) counterweight.

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

Drive		
	250/500/	
Gradeability	35°/70%	
Maximum Travel Speed	5.7 km/h	3.5 mph
Maximum Drawbar Pull	204 kN	45,861 lbf
Hydraulic System		
Main System – Maximum Flow (Implement)	429 L/min (215 × 2 pumps)	113 gal/min (57 × 2 pumps)
Swing System – Maximum Flow	No swing pu	ımp
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	120 mm	5 in
Boom Cylinder – Stroke	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)	5 L	1.3 gal
Hydraulic System (including tank)	234 L	61.8 gal
Hydraulic Tank	115 L	30.4 gal
Standards		
Brakes	ISO 10265:2	008
Cab/Rollover Protective Structure (ROPS)	ISO 12117-2	:2008
Operator Protective Guards (OPG) (optional)	ISO 10262-2	:1998 Level II
Sound Performance		
ISO 6395:2008 (external)	100 dB(A)	
TGO (20( 2000 (' ' 1 1 1)	70 ID(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.

70 dB(A)

ISO 6396:2008 (inside cab)

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

	Double	m (24") Grouser oes	ouser HD Triple Grouser HD S Shoes Ground Ground Iressure Weight Pressure Wei	<b>HD Triple Grouser</b>		700 mm (28") HD Triple Grouser Shoes		790 mm (31") HD Triple Grouser Shoes	
	Weight	Ground Pressure	Weight		Weight	Ground Pressure	Weight	Ground Pressure	
Base Machine Configurations	kg	kPa	kg	kPa	kg	kPa	kg	kPa	
	(lb)	(psi)	(lb)	(psi)	(lb)	(psi)	(lb)	(psi)	
Base Frame with Track Rollers and Carrier Rollers  5.4 mt (11,900 lb) Counterweight + Long Undercarriage Base Machine									
HD Reach Boom + HD R2.5 m (8'2") Stick + 1.56 m <sup>3</sup> (2.04 yd <sup>3</sup> ) SDS Bucket	24 600	51.2	24 600	51.2	25 000	44.6	25 300	40.0	
	(54,200)	(7.4)	(54,200)	(7.4)	(55,100)	(6.5)	(55,800)	(5.8)	
HD Reach Boom + HD R2.9 m (9'6") Stick + 1.56 m <sup>3</sup> (2.04 yd <sup>3</sup> ) SDS Bucket	24 600	51.2	24 600	51.2	25 000	44.6	25 400	40.1	
	(54,200)	(7.4)	(54,200)	(7.4)	(55,100)	(6.5)	(56,000)	(5.8)	

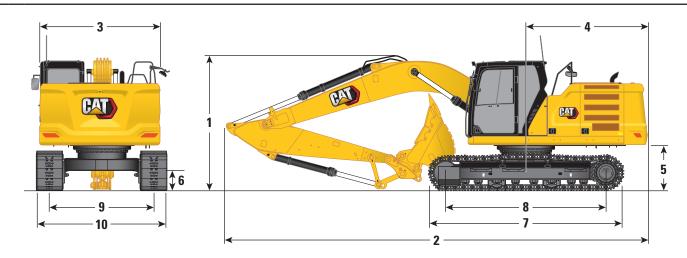
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

#### **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 – does not include boom, stick, bucket, boom cylinders, stick cylinder, bucket cylinder, tracks, 90% fuel tank and 75 kg [165 lb] operator).	16 400	36,100
Track Shoes:		
600 mm (24") Width, 13 mm (0.51") Thick Double Grouser Track Shoes	3080	6,800
600 mm (24") Width, 12.5 mm (0.49") Thick Triple Grouser HD Track Shoes	3080	6,800
700 mm (28") Width, 12.5 mm (0.49") Thick Triple Grouser HD Track Shoes	3490	7,700
790 mm (31") Width, 12.5 mm (0.49") Thick Triple Grouser HD Track Shoes with Step Extension	3800	8,400
Boom Cylinders	340	700
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	700
Counterweight:		
5.4 mt (11,900 lb) Counterweight	5400	11,900
Swing Frame:		
HD Swing Frame	2090	4,600
Undercarriages:		
HD Base Frame with SD Track Rollers and Standard Carrier Rollers	4470	9,900
SD Base Frame with SD Track Rollers and SD Carrier Rollers	4680	10,300
Boom (including lines, pins, stick cylinder):		
HD Reach Boom (5.7 m/18'8")	2010	4,400
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
HD Reach Stick (R2.9B1/9'6")	1210	2,700
HD Reach Stick (R2.5B1/8'2")	1180	2600
Buckets (without linkage):		
1.19 m³ (1.56 yd³) Severe Duty (SD)	1070	2,400
1.40 m³ (1.83 yd³) Heavy Duty (HD)	960	2,120
1.56 m³ (2.04 yd³) SDS	1290	2,800

#### **Dimensions**

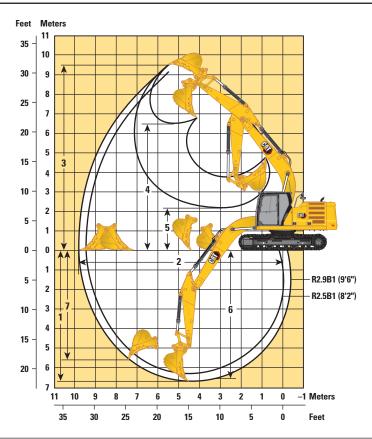
All dimensions are approximate and may vary depending on bucket selection.



Boom Options			ch Boom (18'8")	
Stick Options	P0 0P4		ch Sticks	. (0.011)
	R2.9B1	1 (9'6")	R2.5B1	I (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	9'8"	2950 mm	9'8"
With Boom/Stick/Bucket Installed	3160 mm	10'4"	3090 mm	10'2"
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"
<b>5</b> 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"
<b>8</b> Length to Center of Rollers	3650 mm	12'0"	3650 mm	12'0"
9 Track Gauge	2380 mm	7'10"	2380 mm	7'10"
10 Undercarriage Width:				
600 mm (24") Shoes	2980 mm	9'9"	2980 mm	9'9"
700 mm (28") Shoes	3080 mm	10'1"	3080 mm	10'1"
790 mm (31") Shoes	3170 mm	10'5"	3170 mm	10'5"
Bucket Type	SI	OS	SI	OS
Bucket Capacity	1.56 m³	2.04 yd³	1.56 m³	2.04 yd³
Bucket Tip Radius	1593 mm	5'3"	1593 mm	5'3"

#### **Working Ranges**

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

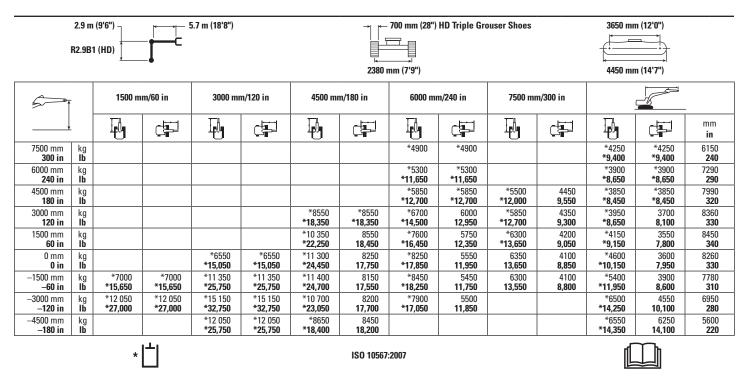


Boom Options		HD Read 5.7 m		
Stick Options		HD Read	h Sticks	
	R2.9B	1 (9'6")	R2.5B	1 (8'2")
1 Maximum Digging Depth	6740 mm	22'1"	6320 mm	20'9"
2 Maximum Reach at Ground Line	9880 mm	32'4"	9490 mm	31'2"
3 Maximum Cutting Height	9420 mm	30'9"	9220 mm	30'3"
4 Maximum Loading Height	6470 mm	21'2"	6270 mm	20'7"
5 Minimum Loading Height	2150 mm	7'1"	2570 mm	8'5"
<b>6</b> Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6570 mm	21'6"	6130 mm	20'1"
7 Maximum Vertical Wall Digging Depth	5410 mm	17'7"	5020 mm	16'6"
Bucket Digging Force (ISO)	149 kN	33,533 lbf	149 kN	33,497 lbf
Stick Digging Force (ISO)	106 kN	23,819 lbf	117 kN	26,303 lbf
Bucket Digging Force (ISO) – Auto Dig Boost	162 kN	36,407 lbf	162 kN	36,368 lbf
Stick Digging Force (ISO) – Auto Dig Boost	115 kN	25,860 lbf	127 kN	28,557 lbf
Bucket Type	SI	OS	SI	OS
Bucket Capacity	1.56 m³	2.04 yd³	1.56 m³	2.04 yd³
Bucket Tip Radius	1593 mm	5'3"	1593 mm	5'3"

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

	2.9 m R2.9B1	(9'6")		5.7 m (18'8")					HD Triple Grou			3650 mr		
5		1500 m	m/60 in	3000 mn	n/120 in	4500 mr	n/180 in	6000 mr	m/240 in	7500 mr	n/300 in			-
	.	Į.		ĘĄ.		Į,		Į.		Į,		P		mm in
7500 mm <b>300 in</b>	kg <b>Ib</b>							*4900	*4900			*4250 <b>*9,400</b>	*4250 <b>*9,400</b>	6150 <b>240</b>
6000 mm <b>240 in</b>	kg <b>Ib</b>							*5300 <b>*11,650</b>	*5300 <b>*11,650</b>			*3900 <b>*8,650</b>	*3900 <b>*8,650</b>	7290 <b>290</b>
4500 mm <b>180 in</b>	kg <b>Ib</b>							*5850 <b>*12,700</b>	*5850 <b>*12,700</b>	*5500 <b>*12,000</b>	4400 <b>9,400</b>	*3850 <b>*8,450</b>	*3850 <b>*8,450</b>	7990 <b>320</b>
3000 mm <b>120 in</b>	kg <b>Ib</b>					*8550 <b>*18,350</b>	*8550 <b>*18,350</b>	*6700 <b>*14,500</b>	5950 <b>12,800</b>	*5850 <b>*12,700</b>	4300 <b>9,200</b>	*3950 <b>*8,650</b>	3650 <b>8,000</b>	8360 <b>330</b>
1500 mm <b>60 in</b>	kg <b>Ib</b>					*10 350 <b>*22,250</b>	8450 <b>18,200</b>	*7600 <b>*16,450</b>	5650 <b>12,200</b>	*6300 <b>*13,650</b>	4150 <b>8,950</b>	*4150 <b>*9,150</b>	3500 <b>7,700</b>	8450 <b>340</b>
0 mm <b>0 in</b>	kg <b>Ib</b>			*6550 <b>*15,050</b>	*6550 <b>*15,050</b>	*11 300 <b>*24,450</b>	8150 <b>17,500</b>	*8250 <b>*17,850</b>	5500 <b>11,800</b>	6250 <b>13,450</b>	4050 <b>8,750</b>	*4600 <b>*10,150</b>	3550 <b>7,850</b>	8260 <b>330</b>
−1500 mm <b>−60 in</b>	kg <b>Ib</b>	*7000 <b>*15,650</b>	*7000 <b>*15,650</b>	*11 350 <b>*25,750</b>	*11 350 <b>*25,750</b>	*11 400 <b>*24,700</b>	8050 <b>17,300</b>	*8450 <b>*18,250</b>	5400 <b>11,600</b>	6200 <b>13,400</b>	4000 <b>8,650</b>	*5400 <b>*11,950</b>	3850 <b>8,450</b>	7780 <b>310</b>
−3000 mm − <b>120 in</b>	kg <b>Ib</b>	*12 050 <b>*27,000</b>	*12 050 <b>*27,000</b>	*15 150 <b>*32,750</b>	*15 150 <b>*32,750</b>	*10 700 * <b>23,050</b>	8100 <b>17,450</b>	*7900 <b>*17,050</b>	5450 <b>11,700</b>			*6500 <b>*14,250</b>	4500 <b>10,000</b>	6950 <b>280</b>
−4500 mm <b>−180 in</b>	kg <b>lb</b>			*12 050 <b>*25,750</b>	*12 050 <b>*25,750</b>	*8650 <b>*18,400</b>	8350 <b>17,950</b>					*6550 <b>*14,350</b>	6200 <b>13,900</b>	5600 <b>220</b>

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



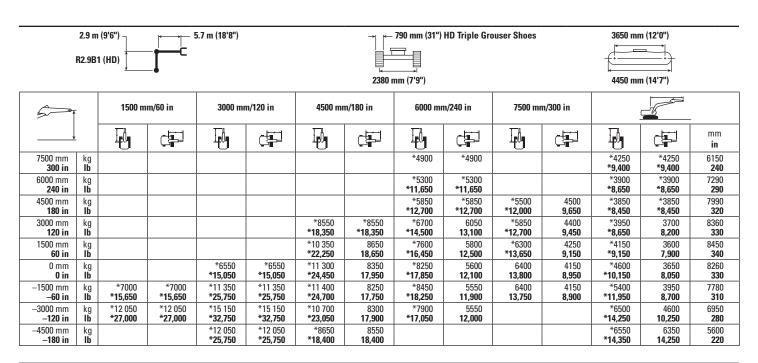
<sup>\*</sup> Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007.

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.

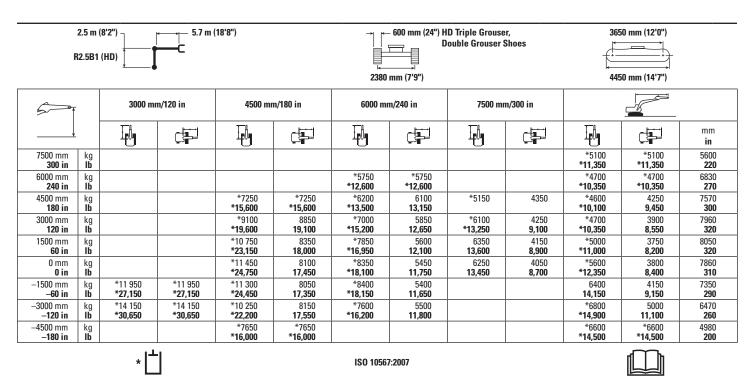
Lift capacity stays with ±5% for all available track shoes.

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



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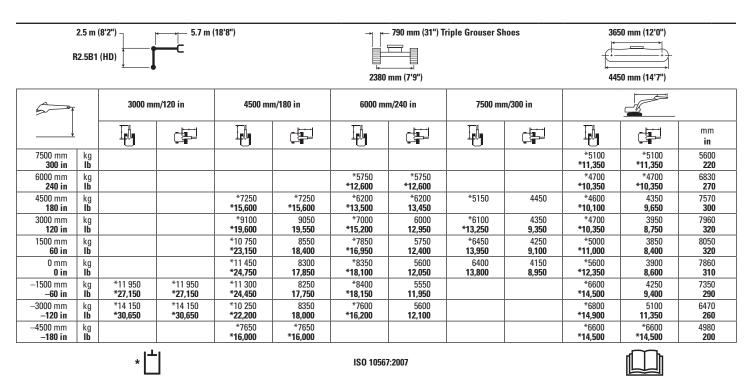
Lift capacity stays with ±5% for all available track shoes.

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

	2.5 m (	(8'2") (HD)		(18'8")		2380	- 700 mm (28") H	D Triple Grouse	r Shoes		50 mm (12'0") 50 mm (14'7")	
5		3000 mr	n/120 in	4500 mr	n/180 in	6000 mr	m/240 in	7500 mr	n/300 in			
		Į.		Ę.		Ę.		Į.		F.		mm in
7500 mm <b>300 in</b>	kg <b>Ib</b>									*5100 <b>*11,350</b>	*5100 <b>*11,350</b>	5600 <b>220</b>
6000 mm <b>240 in</b>	kg <b>Ib</b>					*5750 <b>*12,600</b>	*5750 <b>*12,600</b>			*4700 <b>*10,350</b>	*4700 <b>*10,350</b>	6830 <b>270</b>
4500 mm <b>180 in</b>	kg <b>Ib</b>			*7250 <b>*15,600</b>	*7250 <b>*15,600</b>	*6200 <b>*13,500</b>	6200 <b>13,350</b>	*5150	4400	*4600 <b>*10,100</b>	4300 <b>9,550</b>	7570 <b>300</b>
3000 mm <b>120 in</b>	kg <b>Ib</b>			*9100 <b>*19,600</b>	8950 <b>19,350</b>	*7000 <b>*15,200</b>	5950 <b>12,800</b>	*6100 <b>*13,250</b>	4300 <b>9,250</b>	*4700 <b>*10,350</b>	3950 <b>8,650</b>	7960 <b>320</b>
1500 mm <b>60 in</b>	kg <b>Ib</b>			*10 750 <b>*23,150</b>	8450 <b>18,200</b>	*7850 <b>*16,950</b>	5700 <b>12,250</b>	6400 <b>13,800</b>	4200 <b>9,000</b>	*5000 <b>*11,000</b>	3800 <b>8,350</b>	8050 <b>320</b>
0 mm <b>0 in</b>	kg <b>Ib</b>			*11 450 <b>*24,750</b>	8200 <b>17,650</b>	*8350 <b>*18,100</b>	5550 <b>11,900</b>	6350 <b>13,650</b>	4100 <b>8,850</b>	*5600 <b>*12,350</b>	3850 <b>8,500</b>	7860 <b>310</b>
−1500 mm <b>−60 in</b>	kg <b>Ib</b>	*11 950 <b>*27,150</b>	*11 950 <b>*27,150</b>	*11 300 <b>*24,450</b>	8150 <b>17,550</b>	*8400 <b>*18,150</b>	5500 <b>11,800</b>	·		6500 <b>14,350</b>	4200 <b>9,300</b>	7350 <b>290</b>
−3000 mm <b>−120 in</b>	kg <b>Ib</b>	*14 150 <b>*30,650</b>	*14 150 <b>*30,650</b>	*10 250 <b>*22,200</b>	8250 <b>17,800</b>	*7600 <b>*16,200</b>	5550 <b>12,000</b>			*6800 <b>*14,900</b>	5050 <b>11,250</b>	6470 <b>260</b>
–4500 mm <b>–180 in</b>	kg <b>Ib</b>			*7650 <b>*16,000</b>	*7650 <b>*16,000</b>					*6600 <b>*14,500</b>	*6600 <b>*14,500</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.

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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.

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

		Wi	dth	Capa	acity	We	ight	Fill	Read	h HD
	Linkage	mm	in	m³	yd³	kg	lb	%	HD R2.5 (8'2")	HD R2.9 (9'6")
Pin-On (No Quick Coupler)										
General Duty	В	1050	42	1.00	1.31	737	1,624	100	•	•
	В	1050	42	1.16	1.52	848	1,869	100	•	•
Heavy Duty	В	1050	42	1.00	1.31	892	1,967	100	•	•
	В	1200	48	1.19	1.56	928	2,046	100	•	•
Heavy Duty Spade	В	1350	54	1.40	1.83	1025	2,260	100	•	•
Severe Duty	В	1200	48	1.19	1.56	1038	2,289	90	•	•
Severe Duty Spade	В	1200	48	1.20	1.57	1011	2,229	90	•	•
	В	1350	54	1.56	2.04	1213	2,674	90	•	θ
								kg	3825	3555
					1 54 1					
			N	laximum loa	ad with pin-	on (payload	I + bucket)	lb	8,433	7,837
		Wi	N dth		ad with pin- acity	., ,	l + bucket) · ight		,	7,837 <b>:h HD</b>
	Linkage	Wi mm			•	., ,	,	lb	,	,
With Cat Pin Grabber Coupler	Linkage		dth	Сара	acity	We	ight	lb <b>Fill</b>	Read	h HD
With Cat Pin Grabber Coupler General Duty	<b>Linkage</b>		dth	Сара	acity	We	ight	lb <b>Fill</b>	Read	h HD
		mm	<b>dth</b> in	Capa m <sup>3</sup>	acity yd³	We kg	ight lb	lb Fill %	Read HD R2.5 (8'2")	th HD R2.9 (9'6"
	В	mm 1050	dth in 42	<b>Cap</b> a m <sup>3</sup>	yd <sup>3</sup>	<b>We</b> kg	ight	Ib Fill %	Read HD R2.5 (8'2")	HD R2.9 (9'6"
General Duty	B B	mm 1050 1050	dth in 42 42	1.00	yd³  1.31  1.52	We kg 737 848	ight	1b Fill % 100 100	Read HD R2.5 (8'2")	HD R2.9 (9'6"
General Duty	B B B	mm 1050 1050 1050	dth in 42 42 42 42	1.00 1.16 1.00	yd³  1.31  1.52  1.31	We kg 737 848 892	ight   1b   1,624   1,869   1,967	1b Fill % 100 100 100	Read HD R2.5 (8'2")	HD R2.9 (9'6"
General Duty  Heavy Duty  Heavy Duty Spade	B B B B	mm  1050 1050 1050 1050 1200	42 42 42 48	1.00 1.16 1.00	yd³  1.31  1.52  1.31  1.56	737 848 892 928	1,624 1,869 1,967 2,046	100 100 100 100	Reac HD R2.5 (8'2")	HD R2.9 (9'6"
General Duty Heavy Duty	B B B B	1050 1050 1050 1050 1200 1350	42 42 42 42 48 54	1.00 1.16 1.00 1.19 1.40	yd³  1.31  1.52  1.31  1.56  1.83	737 848 892 928 1025	1,624 1,869 1,967 2,046 2,260	100 100 100 100 100	Reac HD R2.5 (8'2")	HD R2.9 (9'6"
General Duty  Heavy Duty  Heavy Duty Spade  Severe Duty	B B B B B B	mm  1050 1050 1050 1050 1200 1350 1200	42 42 42 42 48 54 48	1.00 1.16 1.00 1.19 1.40 1.19	yd³  1.31  1.52  1.31  1.56  1.83  1.56	We kg 737 848 892 928 1025 1038	1,624 1,869 1,967 2,046 2,260 2,289	1b Fill % 100 100 100 100 100 90	Read HD R2.5 (8'2")	HD R2.9 (9'6"
General Duty  Heavy Duty  Heavy Duty Spade  Severe Duty	B B B B B B B B	mm  1050 1050 1050 1050 1200 1350 1200 1200	42 42 42 42 48 54 48 48	1.00 1.16 1.00 1.19 1.40 1.19 1.20	1.31 1.52 1.31 1.56 1.83 1.56 1.57 2.04	We kg  737  848  892  928  1025  1038  1011  1213	1,624 1,869 1,967 2,046 2,260 2,289 2,229 2,674	1b Fill % 100 100 100 100 100 90 90	Read HD R2.5 (8'2")	HD R2.9 (9'6"

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 No Match

Boom Type		Read	ch HD
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6"
Hydraulic Hammers	H120 GC	✓ ✓	✓
,	H120 GC Side Mount	✓	✓
	H120 GC S	✓	✓
	H120 S	✓	✓
	H130 GC	✓	✓
	H130 GC S	✓	✓
	H130 S	✓	✓
Multi-Processors	MP318 Concrete Cutter Jaw	✓	✓
	MP318 Demolition Jaw	✓	✓
	MP318 Pulverizer Jaw	✓	✓
	MP318 Shear Jaw	✓	✓
	MP318 Universal Jaw	✓	✓
	MP324 Concrete Cutter Jaw	✓	✓
	MP324 Demolition Jaw	✓	✓
	MP324 Pulverizer Jaw	✓	
	MP324 Shear Jaw	✓	✓
	MP324 Tank Shear Jaw	✓	✓
	MP324 Universal Jaw	✓	✓
Demolition and Sorting Grapples	G318	✓	✓
G 11	G324	✓	✓
Mobile Scrap and Demolition Shears	S3025 Flat Top	✓	✓
Pulverizers	P218 Secondary Pulverizer	✓	✓
	P224 Secondary Pulverizer	✓	
	P318 Primary Pulverizer	✓	✓
	P324 Primary Pulverizer	✓	
Compactors (Vibratory Plate)	CVP110	✓	✓
Rotary Cutters	RC20	✓	✓
Mulchers	HM4015	✓	✓
	HM4815	✓	✓
Orange Peel Grapples	GSH420-500	•	•
	GSH420-600	•	•
	GSH420-750	•	•
	GSH425-750	•	•
	GSH425-950	•	•
	GSH425-1150	0	0
	GSH520-500	•	•
	GSH520-600	•	•
	GSH520-750	•	•
	GSH525-750	•	•
	GSH525-950	0	0
	GSH525-950 GSH525-1150	0	0

1	Attachments Offering Guide (continued)		
I	Not all Attachments are available in all regions. Consult your Cat	dea	ler for configurations available in your region.
	✓ Match		No Match

Boom Type		Reach HD	
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H120 GC	✓	✓
	H120 GC Side Mount	✓	✓
	H120 GC S	✓	✓
	H120 S	✓	✓
	H130 GC	✓	✓
	H130 GC S	✓	✓
	H130 S	✓	✓
Multi-Processors	MP318 Concrete Cutter Jaw	✓	✓
	MP318 Demolition Jaw	✓	✓
	MP318 Pulverizer Jaw	✓	✓
	MP318 Shear Jaw	✓	✓
	MP318 Universal Jaw	✓	✓
	MP324 Concrete Cutter Jaw	✓	
	MP324 Demolition Jaw	✓	
	MP324 Shear Jaw	✓	
Demolition and Sorting Grapples	G318	✓	✓
	G324	✓	
Mobile Scrap and Demolition Shears	S3025 Flat Top	✓	
Pulverizers	P218 Secondary Pulverizer	✓	✓
	P318 Primary Pulverizer	✓	✓
Compactors (Vibratory Plate)	CVP110	✓	✓
Rotary Cutters	RC20	✓	✓
Mulchers	HM4015	✓	✓
	HM4815	✓	✓

## Attachments Offering Guide (continued) Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region. No Match

70 DEDICATED COUPLER ATTACHMENTS			
Boom Type		Reach HD	
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H120 GC S	✓	✓
	H120 S	✓	✓
	H130 S	✓	✓
Multi-Processors	MP318 Concrete Cutter Jaw	✓	✓
	MP318 Demolition Jaw	✓	✓
	MP318 Pulverizer Jaw	✓	✓
	MP318 Shear Jaw	✓	✓
	MP318 Universal Jaw	✓	✓
	MP324 Concrete Cutter Jaw	✓	
	MP324 Demolition Jaw	✓	
	MP324 Shear Jaw	✓	
	MP324 Tank Shear Jaw	✓	
	MP324 Universal Jaw	✓	
Demolition and Sorting Grapples	G318	✓	✓
	G324	✓	
Mobile Scrap and Demolition Shears	S3025 Flat Top	✓	✓
Pulverizers	P218 Secondary Pulverizer	✓	✓
	P318 Primary Pulverizer	✓	✓
	P324 Primary Pulverizer	✓	
Compactors (Vibratory Plate)	CVP110	✓	✓
Rotary Cutters	RC20	✓	✓

Boom Type		Read	h HD
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H120 S	✓	✓
	H130 S	✓	✓
Multi-Processors	MP318 Concrete Cutter Jaw	✓	✓
	MP318 Demolition Jaw	✓	✓
	MP318 Pulverizer Jaw	✓	✓
	MP318 Shear Jaw	✓	✓
	MP318 Universal Jaw	✓	✓
	MP324 Concrete Cutter Jaw	✓	
	MP324 Demolition Jaw	✓	
	MP324 Shear Jaw	✓	
Demolition and Sorting Grapples	G318	✓	✓
	G324	✓	
Mobile Scrap and Demolition Shears	S3025 Flat Top	✓	
Pulverizers	P218 Secondary Pulverizer	✓	✓
	P318 Primary Pulverizer	✓	✓
Compactors (Vibratory Plate)	CVP110	✓	✓
Rotary Cutters	RC20	✓	✓

## Attachments Offering Guide (continued) Not all Attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

✓ Match No Match

ICS70/55 DEDICATED COUPLER ATTACHMENTS				
Boom Type		Read	each HD	
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")	
Hydraulic Hammers	H120 S	✓	✓	
	H130 S	✓	✓	
Multi-Processors	MP318 Concrete Cutter Jaw	✓	✓	
	MP318 Demolition Jaw	✓	✓	
	MP318 Pulverizer Jaw	✓	✓	
	MP318 Shear Jaw	✓	✓	
	MP318 Universal Jaw	✓	✓	
	MP324 Concrete Cutter Jaw	✓		
	MP324 Shear Jaw	✓		
Demolition and Sorting Grapples	G318	✓	✓	
	G324	✓		
Mobile Scrap and Demolition Shears	S3025 Flat Top	✓		
Pulverizers	P218 Secondary Pulverizer	✓	✓	
	P318 Primary Pulverizer	✓	✓	
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.

Boom Type		Kead	ch HD
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H115 S	✓	✓
	H120 GC S	✓	✓
	H120 S	✓	✓
Compactors (Vibratory Plate)	CVP75	✓	✓
	CVP110	✓	✓

**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.

#### TRS18 (S70 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.

Boom Type		Read	ch HD
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H115 S	✓	✓
	H120 GC S	✓	✓
	H120 S	✓	✓
Compactors (Vibratory Plate)	CVP75	✓	✓
	CVP110	✓	✓

**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.

#### **Attachments Offering Guide (continued)**

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

✓ Match

#### TRS18 (PIN-ON TOP/HCS70 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.

Boom Type		Reach HD	
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H115 S	✓	✓
	H120 S	✓	✓
Compactors (Vibratory Plate)	CVP75	✓	✓
	CVP110	✓	✓

**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.

#### TRS18 (HCS70 TOP/HCS70 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.

Boom Type		Reach HD	
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H115 S	✓	✓
	H120 S	✓	✓
Compactors (Vibratory Plate)	CVP75	✓	✓
	CVP110	✓	✓

**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.

#### TRS18 (PIN-ON TOP/HCS70/55 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.

Boom Type		Reach HD	
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H115 S	✓	✓
	H120 S	✓	✓
Compactors (Vibratory Plate)	CVP75	✓	✓
	CVD110	./	./

**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.

Attachments Offering Guide (continued)			
Not all Attachments are available in all regions. C	Consult your Cat dealer for conf	igurations available in your region	
✓ Match	No Match		
TRS18 (HCS70/55 TOP/HCS70/55 BOTTOM) ATTACHME	NTS		
Some attachments require more hydraulic flow and a Check the hydraulic capability of your machine and ti			
Boom Type		Reac	h HD
Stick Length		HD R2.5 (8'2")	HD R2.9 (9'6")
Hydraulic Hammers	H115 S	✓	✓
	H120 S	✓	
Compactors (Vibratory Plate)	CVP75	✓	✓

**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.

BOOM-MOUNT ATTACHMENTS		
Boom Type		Reach HD
Mobile Scrap and Demolition Shears	S2050	✓
	S3035 Flat Top	✓

## **323 Standard and Optional Equipment**

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

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

	Standard	Optional
ENGINE		
Cat® C7.1 single turbo diesel engine	✓	
Three selectable power modes	✓	
Automatic engine speed control	✓	
Automatic 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	✓	
Reversible electric cooling fans	✓	
YDRAULIC SYSTEM		
Boom and stick regeneration circuits	✓	
Heavy lift configuration	✓	
Electronic main control valve	✓	
Auto Dig Boost <sup>1</sup>	✓	
Auto heavy lift <sup>1</sup>	✓	
Automatic warm up	✓	
Automatic 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		✓
Combined flow/high pressure auxiliary circuit		✓
Quick coupler circuit for Cat Pin Grabber and CW Dedicated		✓

<sup>1</sup>Not available for Super Long Reach.

UNDERCARRIAGE AND STRUCTURES  600 mm (24") double grouser shoes  600 mm (24") HD triple grouser shoes  700 mm (28") HD triple grouser shoes  790 mm (31") HD triple grouser shoes  Tie-down points on base frame  Segmented track guiding guards  Full-length track guiding guards  HD bottom guards  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  Bucket linkage, B1 type with lifting eye  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch  Programmable time-delay LED			
600 mm (24") double grouser shoes 600 mm (24") HD triple grouser shoes 700 mm (28") HD triple grouser shoes 790 mm (31") HD triple grouser shoes Tie-down points on base frame Segmented track guiding guards Full-length track guiding guards HD bottom guards Swivel guard HD travel motor guards Grease lubricated track links 5400 kg (11,900 lb) counterweight HD swing frame HD swing bearing HD base frame with SD track rollers and standard carrier rollers SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES 5.7 m (18"8") HD Reach boom 2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  W ELECTRICAL SYSTEM 1,000 CCA maintenance-free batteries (×2) Centralized electrical disconnect switch		Standard	Optional
600 mm (24") HD triple grouser shoes  700 mm (28") HD triple grouser shoes  790 mm (31") HD triple grouser shoes  Tie-down points on base frame  Segmented track guiding guards  Full-length track guiding guards  HD bottom guards  ✓  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing frame  ✓  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  ✓  2.5 m (8'2") HD Reach stick  ✓  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	UNDERCARRIAGE AND STRUCTURES		
700 mm (28") HD triple grouser shoes  790 mm (31") HD triple grouser shoes  Tie-down points on base frame  Segmented track guiding guards  Full-length track guiding guards  HD bottom guards  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  W  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	600 mm (24") double grouser shoes		✓
Tie-down points on base frame  Segmented track guiding guards  Full-length track guiding guards  Full-length track guiding guards  Who bottom guards  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing frame  HD swing bearing  Who base frame with SD track rollers  and standard carrier rollers  SD base frame with SD track rollers  and SD carrier rollers for long  undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  Who beach stick still s	600 mm (24") HD triple grouser shoes		✓
Tie-down points on base frame  Segmented track guiding guards  Full-length track guiding guards  HD bottom guards  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  7  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	700 mm (28") HD triple grouser shoes		✓
Segmented track guiding guards  Full-length track guiding guards  HD bottom guards  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  FLECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	790 mm (31") HD triple grouser shoes		✓
Full-length track guiding guards  HD bottom guards  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  HD swing bearing  W  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  W  2.5 m (8'2") HD Reach stick  W  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	Tie-down points on base frame	✓	
HD bottom guards  Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  HD swing bearing  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  Functional Reach Stick  W  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	Segmented track guiding guards		✓
Swivel guard  HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  WHD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  WHD swing bearing  WHD sach stick SD track rollers  WHD sach stolers  WHD swing bearing  WHD sw	Full-length track guiding guards		✓
HD travel motor guards  Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  HD base frame with SD track rollers and standard carrier rollers SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  W  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	HD bottom guards	✓	
Grease lubricated track links  5400 kg (11,900 lb) counterweight  HD swing frame  ∀  HD swing bearing  ∀  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  ₹  2.5 m (8'2") HD Reach stick  ✓  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	Swivel guard	✓	
5400 kg (11,900 lb) counterweight  HD swing frame  HD swing bearing  W  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  ✓  2.5 m (8'2") HD Reach stick  ✓  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	HD travel motor guards	✓	
HD swing frame  HD swing bearing  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  ✓  Bucket linkage, B1 type with lifting eye  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	Grease lubricated track links	✓	
HD swing bearing  HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  ✓  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	5400 kg (11,900 lb) counterweight	✓	
HD base frame with SD track rollers and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  ✓  Bucket linkage, B1 type with lifting eye  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	HD swing frame	✓	
and standard carrier rollers  SD base frame with SD track rollers and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  ✓  Bucket linkage, B1 type with lifting eye  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	HD swing bearing	✓	
and SD carrier rollers for long undercarriage  BOOMS, STICKS AND LINKAGES  5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  ✓  2.5 m (8'2") HD Reach stick  ✓  Bucket linkage, B1 type with lifting eye  FLECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch		✓	
5.7 m (18'8") HD Reach boom  2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  ✓  Bucket linkage, B1 type with lifting eye  ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	and SD carrier rollers for long		✓
2.9 m (9'6") HD Reach stick  2.5 m (8'2") HD Reach stick  ✓  Bucket linkage, B1 type with lifting eye  FLECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch	BOOMS, STICKS AND LINKAGES		
2.5 m (8'2") HD Reach stick  Bucket linkage, B1 type with lifting eye   ELECTRICAL SYSTEM  1,000 CCA maintenance-free  batteries (×2)  Centralized electrical disconnect switch	5.7 m (18'8") HD Reach boom	✓	
Bucket linkage, B1 type with lifting eye  ELECTRICAL SYSTEM  1,000 CCA maintenance-free  batteries (×2)  Centralized electrical disconnect switch  ✓	2.9 m (9'6") HD Reach stick		✓
ELECTRICAL SYSTEM  1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch  ✓	2.5 m (8'2") HD Reach stick		✓
1,000 CCA maintenance-free batteries (×2)  Centralized electrical disconnect switch ✓	Bucket linkage, B1 type with lifting eye	✓	
batteries (×2)  Centralized electrical disconnect switch ✓	ELECTRICAL SYSTEM		
Centralized electrical disconnect switch ✓	· · · · · · · · · · · · · · · · · · ·	✓	
	batteries (×2)		
Programmable time-delay LED ✓		✓	
working lights	Programmable time-delay LED working lights	✓	
LED chassis light, Left Hand (LH) and Right Hand (RH) boom lights, cab lights  ✓		✓	
LED chassis light, LH and RH boom ✓	LED chassis light, LH and RH boom		✓
lights, cab lights with cover and rain protector – for use with 360° visibility			
Premium surround lighting package			✓

## **323 Standard and Optional Equipment**

#### Standard and Optional Equipment (continued)

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

	Standard	Optional
CAT TECHNOLOGY		
VisionLink®	✓2	
VisionLink Productivity		✓
Remote Flash	✓	
Remote Troubleshoot	✓	
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 <sup>3</sup>	✓	
Cat Grade 2D with Attachment Ready Option (ARO)		✓
Cat Grade 3D single GNSS		✓
Cat Grade 3D dual GNSS		✓
Laser catcher		✓
Cat Assist:3  - Grade Assist  - Boom Assist  - Bucket Assist  - Swing Assist  - Lift Assist	✓	
Cat Payload: <sup>3</sup> — Static weigh  — Semiautomatic calibration  — Payload/cycle information  — USB reporting capability	<b>√</b>	
Work tool recognition (PL161) <sup>4</sup>	✓	
Work tool tracking (PL161) <sup>4</sup>	✓	
Cat Tilt Rotator (TRS) Integration		✓
Operator Coaching		✓

<sup>&</sup>lt;sup>2</sup>Connect subscription only. Additional subscriptions are available. Contact your Cat dealer for availability.

 $<sup>^4\</sup>mbox{Requires PL161}$  attachment locator on work tool and Bluetooth® receiver on machine.

	Standard	Optional
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	✓	
AFETY AND SECURITY		
Cat Command (remote control)		✓
2D E-Fence: <sup>3</sup> - E-ceiling  - E-floor  - E-swing  - E-wall  - E-cab avoidance	<b>✓</b>	
Auto hammer stop	<b>✓</b>	
Rearview camera and side RH mirror		
360° visibility (must be used with 254 mm [10 in] monitor and cab light with cover)	· ·	<b>√</b>
Neutral lever (lock out) for all controls	✓	
Anti-skid plate and countersunk bolts on service platform	<b>√</b>	
Ground-level accessible secondary engine shutoff switch in cab	✓	
Lockable disconnect switch	✓	
RH handrail and handhold	✓	
Swing alarm		✓
Inspection lighting		✓
Travel alarm	✓	
Handholds inside radiator compartment		✓

<sup>&</sup>lt;sup>3</sup>Optional on machines equipped with a Super Long Reach boom and stick.

#### **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
- Polycarbonate roof hatch (Comfort cab only)
- Sun visor, slider (Comfort cab only)
- 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
- Cat Command 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

#### **Cab Options**

	Comfort	Deluxe
ROPS	•	•
High-resolution 203 mm (8") LCD touchscreen monitor	•	•
High-resolution 254 mm (10") LCD touchscreen monitor	0	0
Auto bi-level air conditioner	•	•
Jog dial and shortcut keys for monitor control	•	•
Keyless push-to-start engine control	•	•
Height-adjustable console, infinite with no tool	X	•
Height-adjustable console, three steps with tool	•	Х
Tilt-up left-side console	Х	•
Fixed left-side console	•	Х
Mechanical-suspension seat	•	Х
Heated air-suspension seat	X	•
51 mm (2") seat belt	•	•
Monitor integrated Bluetooth radio with USB/Aux ports	•	•
12V DC outlets	•	•
Document storage	•	•
Overhead storage and rear storage with nets	X	•
Beverage holder	•	•
Cup holder	•	•
Openable two-piece front window	•	•
Rear window emergency exit	•	•
Radial wiper with washer	•	•
Openable polycarbonate skylight hatch	X	•
Openable steel hatch	•	Х
LED dome light	•	•
Roof sunscreen	X	•
Roller front sunscreen	•	•
Roller rear sunscreen	0	0
Washable floor mat	•	•
Beacon ready	•	•
Cat Stick Steer	0	0

Standard

O Optional

X Not available

#### 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)\*
  - $\checkmark$  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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AEXQ2220-05 (10-2023) Replaces AEXQ2220-04 Build Number: 07G (S Am [except Chile])

