



# 320

## 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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# 320 Hydraulic Excavator Specifications

## Engine

Engine Model	Cat® C4.4	
Engine Power (ISO 9249)	121 kW	162 hp
Engine Power (ISO 14396)	122 kW	164 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in <sup>3</sup>

- The 320 meets U.S. EPA Tier 4 Final and EU Stage IV equivalent emission standards.
- Recommended for use up to 4500 m (14,760 ft) altitude with engine power derate above 3000 m (9,840 ft).
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Rating at 1,800 rpm.

## Swing Mechanism

Swing Speed	11.3 rpm	
Maximum Swing Torque	82 kN·m	60,300 lbf-ft

## Weights

Operating Weight	21 800 kg	48,100 lb
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- Reach boom 5.7 m (18'8"), R2.9 (9'6") stick, 1.19 m<sup>3</sup> (1.56 yd<sup>3</sup>) HD bucket, 600 mm (24 in) triple grouser shoes, 4.2 mt (9,300 lb) counterweight.

## Track

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

## Drive

Maximum Gradeability	35°/70%	
Maximum Travel Speed	5.7 km/h	3.5 mph
Maximum Drawbar Pull – Long Undercarriage	205 kN	45,996 lbf

## Hydraulic System

Main System – Maximum Flow – Implement	429 L/min (214.5 × 2 pumps)	113 gal/min (56.5 × 2 pumps)
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Lift Mode	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	15 L	4.0 gal
Swing Drive (each)	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
DEF Tank	39 L	10.3 gal

## Standards

Brakes	ISO 10265:2008
Cab/ROPS	ISO 12117-2:2008
Cab	ISO 10262:1998 Level I
FOGS (optional)	ISO 10262:1998 Level II

## Sound Performance

ISO 6395 (external)	99 dB(A)
ISO 6396 (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.

# 320 Hydraulic Excavator Specifications

## Operating Weights and Ground Pressures

	600 mm (24 in) Triple Grouser Shoes		700 mm (28 in) Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure
<b>4.2 mt (9,300 lb) Counterweight + Long Undercarriage Base Machine</b>				
Reach Boom + R2.9 (9'6") Stick + 1.19 m <sup>3</sup> (1.56 yd <sup>3</sup> ) HD Bucket	21 800 kg	48,100 lb	45.3 kPa	6.6 psi
			22 200 kg	49,000 lb
			39.6 kPa	5.7 psi

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

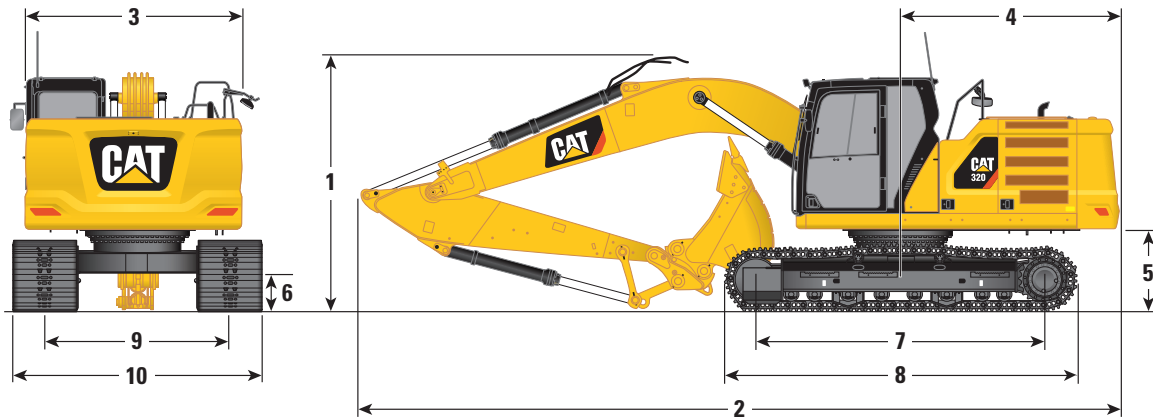
## Major Component Weights

	kg	lb
Base Machine (with 4.2 mt [9,300 lb] counterweight, semi-HD swing frame, standard base frame with HD track rollers and standard carrier rollers for long undercarriage, without boom cylinder – does not include 90% fuel and 75 kg [165 lb] operator)	14 800	32,600
Track Shoes:		
600 mm (24 in) Width, 10 mm (0.39 in) Thick Triple Grouser Track Shoes	2690	5,900
700 mm (28 in) Width, 10 mm (0.39 in) Thick Triple Grouser Track Shoes	3050	6,700
Two Boom Cylinders	340	750
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	680
Counterweights:		
4.2 mt (9,300 lb) Counterweight	4200	9,300
4.7 mt (10,400 lb) Counterweight (only for Super Long Reach)	4700	10,400
Swing Frame:		
Semi-HD Swing Frame	1910	4,210
Standard and Long Undercarriage:		
Standard Base Frame with HD Track Rollers and Standard Carrier Rollers for Long Undercarriage	4390	9,700
Booms (including lines, pins, stick cylinder):		
Reach Boom (5.7 m/18'8")	1710	3,800
Super Long Reach Boom (8.85 m/29'0")	2170	4,800
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick (R2.9B1/9'6")	990	2,200
Super Long Reach Stick (6.28A/20'7")	1340	3,000
Buckets (without linkage):		
1.19 m <sup>3</sup> (1.56 yd <sup>3</sup> ) HD	960	2,100
0.57 m <sup>3</sup> (0.75 yd <sup>3</sup> ) Ditch Cleaning	390	850
0.53 m <sup>3</sup> (0.69 yd <sup>3</sup> ) GD	410	900
Quick Couplers:		
CW Dedicated	230	500
Pin Grabber QC	390	850

# 320 Hydraulic Excavator Specifications

## Dimensions

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

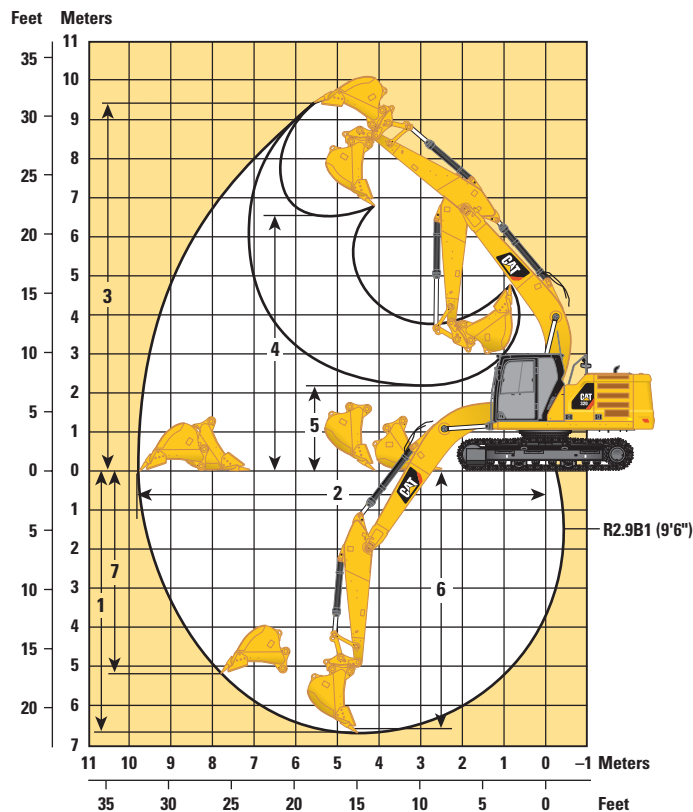


Boom Options	Reach Boom 5.7 m (18'8")		SLR Boom 8.85 m (29'0")			
Stick Options	Reach Stick R2.9B1 (9'6")		6.28A (20'7")		SLR Stick 6.28A (20'7")	
<b>1 Machine Height:</b>						
Top of Cab Height	2960 mm	9'9"	2960 mm	9'9"	2960 mm	9'9"
Top of FOGS Height	3100 mm	10'2"	3100 mm	10'2"	3100 mm	10'2"
Handrails Height	2950 mm	9'8"	2950 mm	9'8"	2950 mm	9'8"
With Boom/Stick/Bucket Installed	3160 mm	10'4"	3190 mm	10'6"	3190 mm	10'6"
With Boom/Stick Installed	2910 mm	9'7"	3070 mm	10'1"	3070 mm	10'1"
With Boom Installed	2480 mm	8'2"	2650 mm	8'8"	2650 mm	8'8"
<b>2 Machine Length:</b>						
With Boom/Stick/Bucket Installed	9530 mm	31'3"	12 750 mm	41'9"	12 750 mm	41'9"
With Boom/Stick Installed	9500 mm	31'2"	12 760 mm	41'9"	12 760 mm	41'9"
With Boom Installed	8450 mm	27'9"	8920 mm	29'3"	8920 mm	29'3"
<b>3 Upperframe Width without Walkways</b>	2780 mm	9'1"	2780 mm	9'1"	2780 mm	9'1"
<b>4 Tail Swing Radius</b>	2830 mm	9'3"	2830 mm	9'3"	2830 mm	9'3"
<b>5 Counterweight Clearance</b>	1050 mm	3'5"	1050 mm	3'5"	1050 mm	3'5"
<b>6 Ground Clearance</b>	470 mm	1'7"	470 mm	1'7"	470 mm	1'7"
<b>7 Length to Center of Rollers</b>	3650 mm	12'0"	3650 mm	12'0"	3650 mm	12'0"
<b>8 Track Length</b>	4450 mm	14'7"	4450 mm	14'7"	4450 mm	14'7"
<b>9 Track Gauge</b>	2380 mm	7'9"	2380 mm	7'9"	2380 mm	7'9"
Track Width:						
600 mm (24 in) Shoes	600 mm	24"	600 mm	24"	600 mm	24"
700 mm (28 in) Shoes	700 mm	28"	700 mm	28"	700 mm	28"
<b>10 Undercarriage Width (with steps/without steps):</b>						
600 mm (24 in) Shoes	2980 mm	9'9"	2980 mm	9'9"	2980 mm	9'9"
700 mm (28 in) Shoes	3080 mm	10'1"	3080 mm	10'1"	3080 mm	10'1"
Bucket Type	HD		Ditch Cleaning (DC)		GD	
Bucket Capacity	1.19 m <sup>3</sup>	1.56 yd <sup>3</sup>	0.57 m <sup>3</sup>	0.75 yd <sup>3</sup>	0.53 m <sup>3</sup>	0.69 yd <sup>3</sup>
Bucket Tip Radius	1570 mm	5'2"	1070 mm	3'6"	1220 mm	4'0"

# 320 Hydraulic Excavator Specifications

## Working Ranges

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



### Boom Option

Reach Boom  
5.7 m (18'8")

### Stick Option

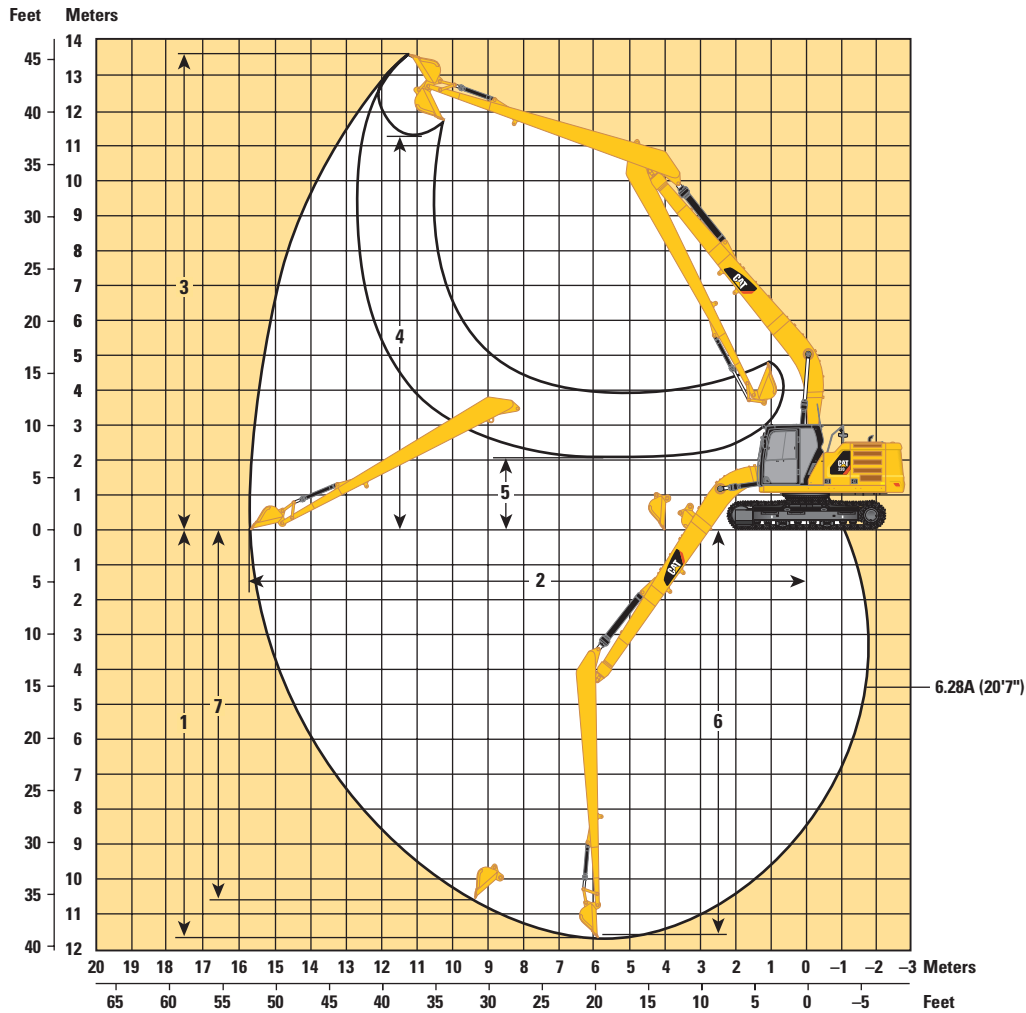
Reach Stick  
R2.9B1 (9'6")

1 Maximum Digging Depth	6720 mm	22'1"
2 Maximum Reach at Ground Line	9860 mm	32'4"
3 Maximum Cutting Height	9370 mm	30'9"
4 Maximum Loading Height	6490 mm	21'3"
5 Minimum Loading Height	2170 mm	7'1"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6550 mm	21'6"
7 Maximum Vertical Wall Digging Depth	5190 mm	17'0"
Bucket Digging Force (ISO)	150 kN	33,811 lbf
Stick Digging Force (ISO)	106 kN	23,911 lbf
Bucket Type	HD	
Bucket Capacity	1.19 m <sup>3</sup>	1.56 yd <sup>3</sup>
Bucket Tip Radius	1570 mm	5'2"

# 320 Hydraulic Excavator Specifications

## Working Ranges

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



### Boom Option

SLR Boom  
8.85 m (29'0")

### Stick Options

6.28A (20'7")

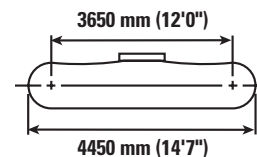
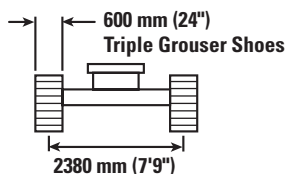
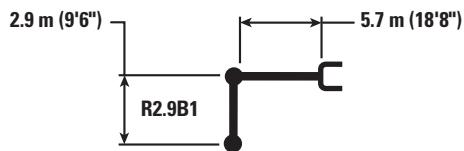
SLR Stick

6.28A (20'7")

1 Maximum Digging Depth	11 540 mm	37'10"	11 690 mm	38'4"
2 Maximum Reach at Ground Line	15 570 mm	51'1"	15 730 mm	51'7"
3 Maximum Cutting Height	13 540 mm	44'5"	13 610 mm	44'8"
4 Maximum Loading Height	11 440 mm	37'6"	11 290 mm	37'0"
5 Minimum Loading Height	2240 mm	7'4"	2080 mm	6'10"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	11 440 mm	37'6"	11 590 mm	38'0"
7 Maximum Vertical Wall Digging Depth	11 020 mm	36'2"	10 560 mm	34'8"
Bucket Digging Force (ISO)	62 kN	13,841 lbf	60 kN	13,549 lbf
Stick Digging Force (ISO)	49 kN	10,966 lbf	49 kN	10,935 lbf
Bucket Type	Ditch Cleaning (DC)		GD	
Bucket Capacity	0.57 m <sup>3</sup>	0.75 yd <sup>3</sup>	0.53 m <sup>3</sup>	0.69 yd <sup>3</sup>
Bucket Tip Radius	1070 mm	3'6"	1220 mm	4'0"

# 320 Hydraulic Excavator Specifications

## Reach Boom Lift Capacities – Counterweight: 4.2 mt (9,300 lb) – without Bucket



		1500 mm/60 in		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		mm in		
7500 mm 300 in	kg lb							*4950	*4950			*4300 *9,500	*4300 *9,500	6150 240
6000 mm 240 in	kg lb							*5450 *12,000	5450 11,650			*3950 *8,750	3950 *8,750	7290 290
4500 mm 180 in	kg lb							*6000 *13,050	5300 11,350	*5650 12,250	3750 8,050	*3900 *8,550	3400 7,450	7990 320
3000 mm 120 in	kg lb					*8750 *18,900	7700 16,550	*6900 *14,950	5050 10,900	5600 12,050	3650 7,850	*4000 *8,750	3100 6,800	8360 330
1500 mm 60 in	kg lb					*10 650 *22,950	7200 15,500	7650 16,450	4850 10,400	5500 11,800	3550 7,600	*4250 *9,300	3000 6,550	8450 340
0 mm 0 in	kg lb			*6600 *15,150	*6600 *15,150	*11 650 *25,200	6950 14,950	7450 16,050	4650 10,050	5400 11,600	3450 7,450	*4700 *10,300	3050 6,650	8260 330
-1500 mm -60 in	kg lb	*7050 *15,750	*7050 *15,750	*11 400 *25,850	*11 400 *25,850	11 700 25,000	6850 14,750	7400 15,850	4600 9,900	5350 11,550	3450 7,400	5100 11,250	3300 7,200	7780 310
-3000 mm -120 in	kg lb	*12 100 *27,100	*12 100 *27,100	*15 600 *33,800	13 350 28,550	*11 000 *23,800	6900 14,850	7400 15,950	4650 9,950			6050 13,350	3850 8,500	6950 280
-4500 mm -180 in	kg lb			*12 500 *26,700	*12 500 *26,700	*9000 *19,100	7100 15,300					*6800 *14,950	5250 11,850	5600 220



ISO 10567



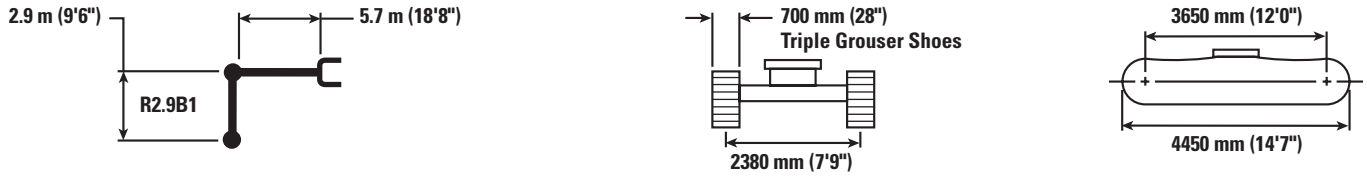
\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories 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.

# 320 Hydraulic Excavator Specifications

## Reach Boom Lift Capacities – Counterweight: 4.2 mt (9,300 lb) – without Bucket



		1500 mm/60 in		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		mm in		
7500 mm 300 in	kg lb							*4950	*4950			*4300	*4300	6150 240
6000 mm 240 in	kg lb							*5450	*5450			*3950	*3950	7290 290
4500 mm 180 in	kg lb							*6000	5350	*5650	3800	*3900	3400	7990 320
3000 mm 120 in	kg lb					*8750	7750	*6900	5100	5650	3700	*4000	3150	8360 330
1500 mm 60 in	kg lb					*10 650	7250	7750	4900	5550	3600	*4250	3000	8450 340
0 mm 0 in	kg lb			*6600	*6600	*11 650	7000	7550	4700	5450	3500	*4700	3050	8260 330
-1500 mm -60 in	kg lb	*7050	*7050	*11 400	*11 400	*11 750	6950	7450	4650	5400	3450	5150	3300	7780 310
-3000 mm -120 in	kg lb	*12 100	*12 100	*15 600	13 450	*11 000	7000	7500	4650			6100	3900	6950 280
-4500 mm -180 in	kg lb			*12 500	*12 500	*9000	7200					*6800	5300	5600 220
				*26,700	*26,700	*19,100	15,450					*14,950	11,950	



ISO 10567



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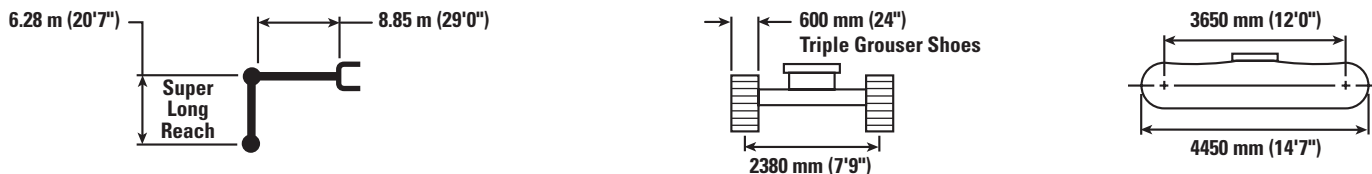
Lift capacity stays with ±5% for all available track shoes.

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



# 320 Hydraulic Excavator Specifications

## Super Long Reach Boom Lift Capacities – Counterweight: 4.7 mt (10,400 lb) – without Bucket



		1500 mm/60 in		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		mm in		
12 000 mm 480 in	kg lb											*1300 *2,850	*1300 *2,850	10 350 400
10 500 mm 420 in	kg lb											*1200 *2,600	*1200 *2,600	11 660 460
9000 mm 360 in	kg lb											*1150 *2,500	*1150 *2,500	12 660 500
7500 mm 300 in	kg lb											*1100 *2,450	*1100 *2,450	13 410 530
6000 mm 240 in	kg lb											*1100 *2,400	*1100 *2,400	13 970 550
4500 mm 180 in	kg lb											*1100 *2,450	*1100 *2,450	14 340 570
3000 mm 120 in	kg lb			*4700 *11,900	*4700 *11,900	*6050 *12,900	*6050 *12,900	*4450 *9,600	*4450 *9,600	*3600 *7,800	3600 7,800	*1150 *2,500	1150 2,500	14 550 580
1500 mm 60 in	kg lb					*6750 *16,000	6400 13,800	*5250 *11,300	4400 9,500	*4100 *8,900	3250 7,050	*1200 *2,600	1100 2,400	14 600 580
0 mm 0 in	kg lb			*2050 *4,550	*2050 *4,550	*4700 *10,750	*4700 *10,750	*5900 *12,700	3950 8,550	*4550 *9,800	3000 6,400	*1300 *2,800	1100 2,350	14 490 570
-1500 mm -60 in	kg lb	*2100 *4,600	*2100 *4,600	*2750 *6,100	*2750 *6,100	*4650 *10,550	*4650 *10,550	*6250 *13,550	3700 7,950	4750 10,200	2750 5,950	*1400 *3,000	1100 2,400	14 230 560
-3000 mm -120 in	kg lb	*2850 *6,350	*2850 *6,350	*3550 *7,900	*3550 *7,900	*5200 *11,750	*5200 11,400	6350 13,650	3550 7,650	4600 9,900	2650 5,700	*1500 *3,300	1150 2,500	13 790 550
-4500 mm -180 in	kg lb	*3700 *8,200	*3700 *8,200	*4450 *9,900	*4450 *9,900	*6100 *13,750	5350 11,500	6300 13,550	3500 7,550	4550 9,800	2600 5,550	*1700 *3,800	1200 2,650	13 170 520
-6000 mm -240 in	kg lb	*4550 *10,150	*4550 *10,150	*5450 *12,200	*5450 *12,200	*7250 *16,350	5450 11,750	*6150 *13,250	3550 7,650	4550 9,850	2600 5,600	*2000 *4,500	1350 3,000	12 340 490
-7500 mm -300 in	kg lb	*5500 *12,300	*5500 *12,300	*6600 *14,850	*6600 *14,850	*7300 *15,650	5650 12,150	*5650 *12,150	3650 7,900	*4550 *9,800	2700 5,750	*2550 *5,700	1600 3,550	11 240 440
-9000 mm -360 in	kg lb			*8000 *17,500	*8000 *17,500	*6150 *13,100	5950 12,800	*4850 *10,350	3850 8,350	*3950 *8,300	2800 6,100	*2700 *5,900	2000 4,550	9800 380



ISO 10567



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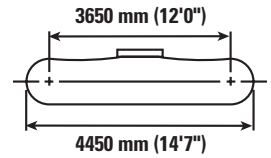
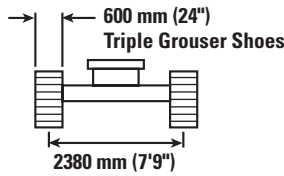
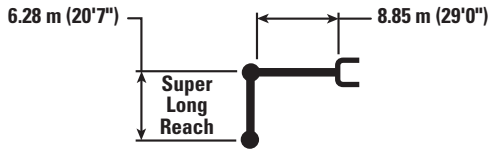
Lift capacity stays with  $\pm 5\%$  for all available track shoes.

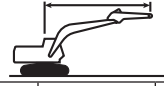










Always refer to the appropriate Operation and Maintenance Manual for specific product information.

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# 320 Hydraulic Excavator Specifications

## Super Long Reach Boom Lift Capacities – Counterweight: 4.7 mt (10,400 lb) – without Bucket (continued)



		9000 mm/360 in		10 500 mm/420 in		12 000 mm/480 in		13 500 mm/540 in				
												mm in
12 000 mm 480 in	kg lb									*1300 *2,850	*1300 *2,850	10 350 400
10 500 mm 420 in	kg lb			*2200 *4,750	*2200 *4,750					*1200 *2,600	*1200 *2,600	11 660 460
9000 mm 360 in	kg lb			*2200 *4,800	*2200 *4,800	*2000 *3,700	1950 *3,700			*1150 *2,500	*1150 *2,500	12 660 500
7500 mm 300 in	kg lb			*2250 *4,950	*2250 *4,950	*2250 *4,900	1900 4,050			*1100 *2,450	*1100 *2,450	13 410 530
6000 mm 240 in	kg lb			*2400 *5,200	*2400 5,150	*2300 *5,000	1850 3,950	*1850 *3,250	1450 3,050	*1100 *2,400	*1100 *2,400	13 970 550
4500 mm 180 in	kg lb	*2800 *6,050	*2800 *6,050	*2600 *5,600	2300 4,850	*2400 *5,250	1800 3,800	2300 *4,650	1400 2,950	*1100 *2,450	*1100 *2,450	14 340 570
3000 mm 120 in	kg lb	*3100 *6,750	2750 5,900	*2800 *6,050	2150 4,550	*2550 *5,550	1700 3,600	2250 4,750	1350 2,850	*1150 *2,500	1150 2,500	14 550 580
1500 mm 60 in	kg lb	*3450 *7,450	2500 5,400	*3000 *6,500	2000 4,250	2650 5,650	1600 3,400	2200 4,650	1300 2,700	*1200 *2,600	1100 2,400	14 600 580
0 mm 0 in	kg lb	*3750 *8,050	2350 5,000	3100 6,650	1850 3,950	2550 5,450	1500 3,200	2100 4,550	1250 2,600	*1300 *2,800	1100 2,350	14 490 570
-1500 mm -60 in	kg lb	3700 7,950	2200 4,650	3000 6,400	1750 3,750	2450 5,300	1450 3,050	2100 4,450	1200 2,550	*1400 *3,000	1100 2,400	14 230 560
-3000 mm -120 in	kg lb	3600 7,700	2100 4,450	2900 6,250	1700 3,600	2400 5,200	1400 2,950	2050 *3,700	1150 2,500	*1500 *3,300	1150 2,500	13 790 550
-4500 mm -180 in	kg lb	3550 7,600	2050 4,350	2850 6,150	1650 3,550	2400 5,150	1400 2,950			*1700 *3,800	1200 2,650	13 170 520
-6000 mm -240 in	kg lb	3550 7,600	2050 4,350	2900 6,200	1650 3,550	2450 *5,150	1400 3,000			*2000 *4,500	1350 3,000	12 340 490
-7500 mm -300 in	kg lb	3600 7,750	2100 4,500	2950 6,350	1700 3,700					*2550 *5,700	1600 3,550	11 240 440
-9000 mm -360 in	kg lb	*3150 *6,550	2250 4,850							*2700 *5,900	2000 4,550	9800 380



ISO 10567



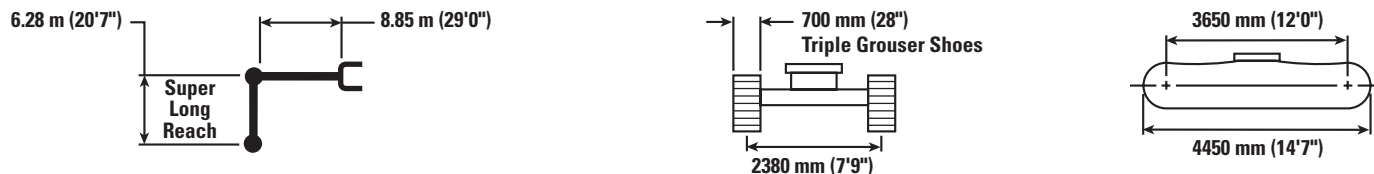
\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories 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.

# 320 Hydraulic Excavator Specifications

## Super Long Reach Boom Lift Capacities – Counterweight: 4.7 mt (10,400 lb) – without Bucket



Reach mm in	kg lb	1500 mm/60 in		3000 mm/120 in		4500 mm/180 in		6000 mm/240 in		7500 mm/300 in		mm in		
12 000 mm 480 in	kg lb											*1300 *2,850	*1300 *2,850	10 350 400
10 500 mm 420 in	kg lb											*1200 *2,600	*1200 *2,600	11 660 460
9000 mm 360 in	kg lb											*1150 *2,500	*1150 *2,500	12 660 500
7500 mm 300 in	kg lb											*1100 *2,450	*1100 *2,450	13 410 530
6000 mm 240 in	kg lb											*1100 *2,400	*1100 *2,400	13 970 550
4500 mm 180 in	kg lb											*1100 *2,450	*1100 *2,450	14 340 570
3000 mm 120 in	kg lb			*4700 *11,900	*4700 *11,900	*6050 *12,900	*6050 *12,900	*4450 *9,600	*4450 *9,600	*3600 *7,800	*3600 *7,800	*1150 *2,500	*1150 *2,500	14 550 580
1500 mm 60 in	kg lb					*6750 *16,000	6450 13,950	*5250 *11,300	4450 9,600	*4100 *8,900	3300 7,100	*1200 *2,600	1100 2,450	14 600 580
0 mm 0 in	kg lb			*2050 *4,550	*2050 *4,550	*4700 *10,750	*4700 *10,750	*5900 *12,700	4000 8,650	*4550 *9,800	3000 6,500	*1300 *2,800	1100 2,400	14 490 570
-1500 mm -60 in	kg lb	*2100 *4,600	*2100 *4,600	*2750 *6,100	*2750 *6,100	*4650 *10,550	*4650 *10,550	*6250 *13,550	3750 8,050	4800 10,350	2800 6,050	*1400 *3,000	1100 2,400	14 230 560
-3000 mm -120 in	kg lb	*2850 *6,350	*2850 *6,350	*3550 *7,900	*3550 *7,900	*5200 *11,750	*5200 11,550	6400 13,800	3600 7,750	4650 10,050	2700 5,750	*1500 *3,300	1150 2,500	13 790 550
-4500 mm -180 in	kg lb	*3700 *8,200	*3700 *8,200	*4450 *9,900	*4450 *9,900	*6100 *13,750	5400 11,600	6400 13,700	3550 7,650	4600 9,900	2650 5,650	*1700 *3,800	1250 2,700	13 170 520
-6000 mm -240 in	kg lb	*4550 *10,150	*4550 *10,150	*5450 *12,200	*5450 *12,200	*7250 *16,350	5500 11,850	*6150 *13,250	3600 7,750	4600 9,950	2650 5,700	*2000 *4,500	1400 3,050	12 340 490
-7500 mm -300 in	kg lb	*5500 *12,300	*5500 *12,300	*6600 *14,850	*6600 *14,850	*7300 *15,650	5700 12,300	*5650 *12,150	3700 8,000	*4550 *9,800	2700 5,850	*2550 *5,700	1600 3,600	11 240 440
-9000 mm -360 in	kg lb			*8000 *17,500	*8000 *17,500	*6150 *13,100	6000 12,950	*4850 *10,350	3900 8,450	*3950 *8,300	2850 6,200	*2700 *5,900	2050 4,600	9800 380



ISO 10567



\*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.

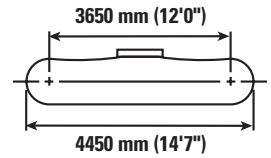
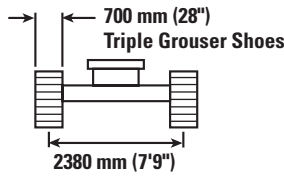
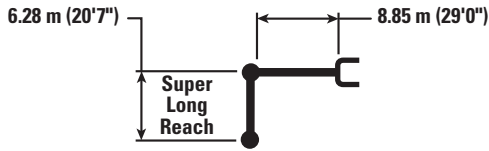
Lift capacity stays with ±5% for all available track shoes.

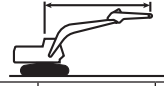










Always refer to the appropriate Operation and Maintenance Manual for specific product information.

(continued on next page)

# 320 Hydraulic Excavator Specifications

## Super Long Reach Boom Lift Capacities – Counterweight: 4.7 mt (10,400 lb) – without Bucket (continued)



		9000 mm/360 in		10 500 mm/420 in		12 000 mm/480 in		13 500 mm/540 in				mm in
												
12 000 mm 480 in	kg lb									*1300 *2,850	*1300 *2,850	10 350 400
10 500 mm 420 in	kg lb			*2200 *4,750	*2200 *4,750					*1200 *2,600	*1200 *2,600	11 660 460
9000 mm 360 in	kg lb			*2200 *4,800	*2200 *4,800	*2000 *3,700	1950 *3,700			*1150 *2,500	*1150 *2,500	12 660 500
7500 mm 300 in	kg lb			*2250 *4,950	*2250 *4,950	*2250 *4,900	1950 4,100			*1100 *2,450	*1100 *2,450	13 410 530
6000 mm 240 in	kg lb			*2400 *5,200	*2400 5,200	*2300 *5,000	1900 4,000	*1850 *3,250	1450 3,050	*1100 *2,400	*1100 *2,400	13 970 550
4500 mm 180 in	kg lb	*2800 *6,050	*2800 *6,050	*2600 *5,600	2300 4,900	*2400 *5,250	1800 3,850	*2300 *4,650	1400 3,000	*1100 *2,450	*1100 *2,450	14 340 570
3000 mm 120 in	kg lb	*3100 *6,750	2750 5,950	*2800 *6,050	2150 4,600	*2550 *5,550	1700 3,650	2250 4,850	1350 2,900	*1150 *2,500	*1150 *2,500	14 550 580
1500 mm 60 in	kg lb	*3450 *7,450	2550 5,450	*3000 *6,500	2000 4,300	2650 5,700	1600 3,450	2200 4,700	1300 2,750	*1200 *2,600	1100 2,450	14 600 580
0 mm 0 in	kg lb	*3750 *8,050	2350 5,050	3150 6,700	1900 4,000	2550 5,500	1550 3,250	2150 4,600	1250 2,650	*1300 *2,800	1100 2,400	14 490 570
-1500 mm -60 in	kg lb	3750 8,050	2200 4,750	3000 6,500	1800 3,800	2500 5,350	1450 3,100	2100 4,500	1200 2,550	*1400 *3,000	1100 2,400	14 230 560
-3000 mm -120 in	kg lb	3650 7,800	2100 4,500	2950 6,300	1700 3,650	2450 5,250	1400 3,000	2100 *3,700	1200 2,550	*1500 *3,300	1150 2,500	13 790 550
-4500 mm -180 in	kg lb	3600 7,700	2050 4,400	2900 6,250	1650 3,600	2450 5,250	1400 3,000			*1700 *3,800	1250 2,700	13 170 520
-6000 mm -240 in	kg lb	3600 7,700	2050 4,450	2900 6,300	1700 3,600	2450 *5,150	1400 3,050			*2000 *4,500	1400 3,050	12 340 490
-7500 mm -300 in	kg lb	3650 7,850	2100 4,550	3000 6,450	1750 3,750					*2550 *5,700	1600 3,600	11 240 440
-9000 mm -360 in	kg lb	*3150 *6,550	2250 4,900							*2700 *5,900	2050 4,600	9800 380



ISO 10567



\*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.

# 320 Hydraulic Excavator Specifications

## Bucket Specifications and Compatibility

	Linkage	Width		Capacity		Weight		Fill %	4.2 mt (9,300 lb) Counterweight	4.7 mt (10,400 lb) Counterweight	
		mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb		Reach Boom	SLR Boom	
									R2.9 (9'6")	6.28A (20'7")	
<b>Pin-On (No Quick Coupler)</b>											
General Duty	B	600	24	0.46	0.60	550	1,212	100	●		
	B	750	30	0.64	0.84	621	1,368	100	●		
	B	1000	39	0.93	1.22	717	1,580	100	●		
	B	1050	42	1.00	1.31	737	1,624	100	●		
	B	1050	42	1.00	1.31	737	1,624	100	●		
	B	1200	48	1.19	1.56	807	1,778	100	⊙		
	B	1400	55	1.43	1.87	874	1,926	100	X		
	B	1500	60	1.58	2.06	914	2,014	100	X		
Heavy Duty	B	600	24	0.46	0.61	635	1,400	100	●		
	B	750	30	0.64	0.84	737	1,625	100	●		
	B	900	36	0.81	1.06	818	1,804	100	●		
	B	1050	42	1.00	1.31	872	1,923	100	●		
	B	1200	48	1.19	1.56	929	2,048	100	⊙		
	B	1350	54	1.38	1.81	1036	2,284	100	X		
	B	1500	60	1.58	2.06	1094	2,412	100	X		
Cleanup	B	1800	72	1.60	2.09	979	2,157	100	○		
	B	2000	78	1.76	2.31	1045	2,303	100	○		
	B	2000	78	1.76	2.31	1045	2,303	100	○		
Ditch Cleaning Tilt	B	1800	72	1.40	1.83	1105	2,437	100	○		
General Duty	312	900	36	0.53	0.69	403	888	100		◇	
Ditch Cleaning	312	1200	48	0.57	0.74	386	851	100		◇	
Maximum load with pin-on (payload + bucket)									kg	3010	800
									lb	6,636	1,764

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>)
- 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)
- ◇ 900 kg/m<sup>3</sup> (1,500 lb/yd<sup>3</sup>)
- 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)

# 320 Hydraulic Excavator Specifications

## Bucket Specifications and Compatibility (continued)

	Linkage	Width		Capacity		Weight		Fill %	4.2 mt (9,300 lb) Counterweight	4.7 mt (10,400 lb) Counterweight	
		mm	in	m <sup>3</sup>	yd <sup>3</sup>	kg	lb		Reach Boom	SLR Boom	
									R2.9 (9'6")	6.28A (20'7")	
<b>With Cat Pin Grabber Coupler</b>											
General Duty	B	600	24	0.46	0.60	550	1,212	100	●		
	B	750	30	0.64	0.84	621	1,368	100	●		
	B	1,000	39	0.93	1.22	717	1,580	100	●		
	B	1,050	42	1.00	1.31	737	1,624	100	⊙		
	B	1,050	42	1.00	1.31	737	1,624	100	⊙		
	B	1,200	48	1.19	1.56	807	1,778	100	⊖		
	B	1,400	55	1.43	1.87	874	1,926	100	○		
	B	1,500	60	1.58	2.06	914	2,014	100	◇		
Heavy Duty	B	600	24	0.46	0.61	635	1,400	100	●		
	B	750	30	0.64	0.84	737	1,625	100	●		
	B	900	36	0.81	1.06	818	1,804	100	●		
	B	1,050	42	1.00	1.31	872	1,923	100	⊙		
	B	1,200	48	1.19	1.56	929	2,048	100	⊖		
	B	1,350	54	1.38	1.81	1036	2,284	100	○		
	B	1,500	60	1.58	2.06	1094	2,412	100	◇		
Cleanup	B	1,800	72	1.60	2.09	979	2,157	100	◇		
	B	2,000	78	1.76	2.31	1045	2,303	100	◇		
	B	2,000	78	1.76	2.31	1045	2,303	100	◇		
Ditch Cleaning Tilt	B	1,800	72	1.40	1.83	1105	2,437	100	○		
Maximum load with coupler (payload + bucket)									kg	2636	382
									lb	5,811	843

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/m<sup>3</sup> (2,500 lb/yd<sup>3</sup>)

○ 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)

◇ 900 kg/m<sup>3</sup> (1,500 lb/yd<sup>3</sup>)

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.

# 320 Hydraulic Excavator Specifications

## Attachments Offering Guide

### PIN-ON ATTACHMENTS

Undercarriage	Long Undercarriage	
Counterweight	4.2 mt (9,300 lb) Counterweight	
Boom Type	Reach Boom	
Stick Length	2.9 m (9'6")	
Hydraulic Hammers	H115E S	✓
	H120 GC	✓
	H120 GC S	✓
	H120E S	✓
	H130E S	✓†
Demolition and Sorting Grapples	G315B	✓
Compactors (Vibratory Plate)	CVP110	✓
Mobile Scrap and Demolition Shears	S3025	✓
Rippers		✓
Cat Pin Grabber Couplers		✓

### CAT PIN GRABBER COUPLER ATTACHMENTS

Undercarriage	Long Undercarriage	
Counterweight	4.2 mt (9,300 lb) Counterweight	
Boom Type	Reach Boom	
Stick Length	2.9 m (9'6")	
Hydraulic Hammers	H115E S	✓†
	H120 GC	✓†
	H120 GC S	✓†
	H120E S	✓†
	H130E S	✓†
Demolition and Sorting Grapples	G315B	✓
Compactors (Vibratory Plate)	CVP110	✓
Mobile Scrap and Demolition Shears	S3025	✓
Rippers		✓

### BOOM-MOUNT ATTACHMENTS

Undercarriage	Long Undercarriage	
Counterweight	4.2 mt (9,300 lb) Counterweight	
Boom Type	Reach Boom	
Mobile Scrap and Demolition Shears	S2050	✓
	S3035	✓

Offerings not available in all areas. Matches are dependent on excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

†Allowed usage on machine less than 50%

# 320 Standard and Optional Equipment

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>ENGINE</b>			<b>UNDERCARRIAGE AND STRUCTURES</b>		
Cat C4.4 Twin Turbo diesel engine	✓		Tie-down points on base frame	✓	
Three selectable power modes	✓		Track guiding guard, segmented two pieces	✓	
Automatic engine speed control	✓		Track guiding guard, full length		✓
Automatic engine idle shutdown	✓		Heavy duty bottom guards		✓
Work up to 3000 m (9,840 ft) above sea level without engine power de-rating	✓		Heavy duty travel motor guards		✓
52° C (125° F) high-ambient cooling capacity	✓		Standard bottom guards	✓	
Cold starting capability for -32° C (-25° F)	✓		Standard swivel guard	✓	
Double element air filter with integrated precleaner	✓		Standard travel motor guards	✓	
Electric fuel priming pump	✓		Grease lubricated track links	✓	
On-demand electric cooling fans with auto-reverse function	✓		4200 kg (9,300 lb) counterweight	✓	
Biodiesel capability up to B20	✓		4700 kg (10,400 lb) counterweight for Super Long Reach		✓
<b>HYDRAULIC SYSTEM</b>			<b>BOOM, STICKS AND LINKAGES</b>		
Boom and stick regeneration circuits	✓		Semi-HD swing frame	✓	
Boom/stick lowering check valves	✓		Standard swing bearing	✓	
Electronic main control valve	✓		Standard base frame with HD track rollers and standard carrier rollers	✓	
Auto hydraulic oil warm up	✓		<b>600 mm (24") triple grouser track shoes</b>		
Automatic two-speed travel	✓		<b>700 mm (28") triple grouser track shoes</b>		
Boom and stick drift reduction valve	✓		<b>5.7 m (18'8") Reach boom</b>		
Element type main hydraulic filter	✓		<b>2.9 m (9'6") Reach stick</b>		
Slider joysticks	✓		<b>Super Long Reach 8.85 m (29'0") boom</b>		
Tandem type electronic main pump	✓		<b>Super Long Reach 6.28 m (20'7") stick</b>		
Hammer return filter circuit		✓	<b>Bucket linkage, B1-family with lifting eye</b>		
Advanced Tool Control (two pump, one/two way high-pressure flow)	✓		<b>Bucket linkage, A-family without lifting eye, SLR</b>		
Medium pressure auxiliary circuit		✓			
Quick coupler circuit for Cat Pin Grabber and CW Dedicated		✓			
Fine swing control	✓				

(continued on next page)



## Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
<b>ELECTRICAL SYSTEM</b>			<b>SERVICE AND MAINTENANCE</b>		
Machine electronic control module (×2)	✓		Sampling ports for Scheduled Oil Sampling (S·O·S <sup>SM</sup> )	✓	
1,000 CCA maintenance-free batteries (×2)	✓		QuickEvac <sup>TM</sup> maintenance ready		✓
Centralized electrical disconnect switch	✓		Grouped location for engine oil and fuel filters	✓	
Programmable time-delay LED working lights	✓		Ground-level second dipstick for engine oil	✓	
LED chassis light, LH and RH boom lights, cab lights with cover and rain protector – for use with 360° visibility		✓	Radiator screen		✓
LED chassis light, LH and RH boom lights, cab lights	✓		<b>SAFETY AND SECURITY</b>		
<b>CAT TECHNOLOGY</b>			Rearview and right-hand-sideview cameras	✓	
Cat Product Link <sup>TM</sup>	✓		360° visibility		✓
Work tool recognition	✓		Neutral lever (lock out) for all controls	✓	
Work tool tracking*	✓		Anti-skid plate and countersunk bolts on service platform	✓	
Laser catcher		✓	Ground-level accessible secondary engine shutoff switch in cab	✓	
Cat GRADE with 2D and offset memory	✓		RH handrail and hand hold (ISO 2867:2011 compliant)	✓	
Cat GRADE with Advanced 2D		✓	Travel alarm	✓	
Cat GRADE with 3D connectivity: – Virtual Reference Station** – Internet Base Service Station** – Trimble Connected Community**		✓			
Cat Assist: – Grade Assist – Boom Assist – Bucket Assist – Swing Assist – Lift Assist	✓				
Cat PAYLOAD: – Static weigh – Semiautomatic calibration – Payload/cycle information – USB reporting capability	✓				
2D E-Fence: – E-ceiling – E-floor – E-swing – E-wall – E-cab avoidance	✓				
Auto hammer stop	✓				
Remote Services capability	✓				

\*Paired with PL161 attachment locator.

\*\*Subscription required.

# 320 Attachments

## Dealer Installed Kit and Attachments

Attachments may vary. Consult your Cat dealer for details.

### CAB

- Radial lower wiper for 70/30 with washer
- RH electrical pedal for tool control
- Rain protector plus cab light cover
- 75 mm (3") retractable seat belt

### SAFETY AND SECURITY

- Bluetooth® key fob

### ELECTRICAL

- Jump start wiring
- Premium lighting package

### GUARDS

- Side rubber bumper
- Falling object guard system (not compatible with cab light cover, rain protector)
- Mesh guard full front (not compatible with cab light cover, rain protector)
- Full protecting vandalism guard

## Cab Options

	Deluxe
ROPS, standard sound suppression	●
High-resolution 254 mm (10 in) LCD touchscreen monitor	●
High-resolution 254 mm (10 in) LCD touchscreen monitor + additional monitor (for Cat GRADE Advanced 2D and 3D)	○
Automatic 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	●
Heated seat with air-adjustable suspension	●
51 mm (2 in) seat belt	●
Tilt-up left-side console	●
Bluetooth integrated radio with USB ports	●
12V DC outlets	●
Document storage	●
Rear head storage net and lunchbox storage net	●
Cup and bottle holders	●
Openable two-piece front window	●
Upper radial wiper with washer	●
Openable skylight hatch	●
LED dome light	●
Floor welcome light	●
Roller front sunscreen	●
Roller rear sunscreen	○
Washable floor mat	●
Beacon ready	●

● Standard

○ Optional

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://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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Build Number: 07C  
(ANZ)

