



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	
Net Power		
ISO 9249	128.5 kW	172 hp
ISO 9249 (DIN)	175 hp (metric)	
Engine Power		
ISO 14396	129.4 kW	174 hp
ISO 14396 (DIN)	176 hp (metric)	
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in ³
Biodiesel capability	Up to B20 ⁽¹⁾	

- Meets U.S. EPA Tier 4 Final, EU Stage V, and Japan 2014 emission standards.
- 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 2,200 rpm.

⁽¹⁾Cat diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels** up to:

- ✓ 20% biodiesel FAME (fatty acid methyl ester)*
- ✓ 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

**Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel (for use of blends higher than 20% biodiesel, consult your Cat dealer).*

***Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.*

Swing Mechanism

Swing Speed	11.25 rpm	
Maximum Swing Torque	82 kN·m	60,300 lbf·ft

Weights

Operating Weight	22 600 kg	49,800 lb
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- Reach boom, R2.9 (9'6") stick, Heavy Duty (HD) 1.19 m³ (1.56 yd³) bucket 790 mm (31 in) triple grouser shoes, 4.2 mt (10,400 lb) counterweight.

Track

Track Shoe 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

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 – 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	4.7 in
Boom Cylinder – Stroke	1260 mm	49.6 in
Stick Cylinder – Bore	140 mm	5.5 in
Stick Cylinder – Stroke	1504 mm	59.2 in
Bucket Cylinder – Bore	120 mm	4.7 in
Bucket Cylinder – Stroke	1104 mm	43.5 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)	6 L	1.6 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
Diesel Exhaust Fluid (DEF) Tank	39 L	10.3 gal

Standards

Brakes	ISO 10265:2008
Cab/Rollover Protective Structure (ROPS)	ISO 12117-2:2008
Cab/Falling Object Guard System (FOGS) (optional)	ISO 10262:1998 Level II

Sound Performance

ISO 6395:2008 (external)	99 dB(A)
ISO 6396:2008 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 Weight and Ground Pressure

Base Machine Configurations	790 mm (31 in) Triple Grouser Shoes			
	Weight		Ground Pressure	
Base Frame with Track Rollers and Carrier Rollers				
4.2 mt (9,300 lb) Counterweight + Long Undercarriage Base Machine				
Reach Boom + R2.9 (9'6") Stick + 1.19 m ³ (1.56 yd ³) HD Bucket	22 600 kg	49,800 lb	35.7 kPa	5.2 psi
4.7 mt (10,400 lb) Counterweight + Long Undercarriage Base Machine				
HD Reach Boom + HD R2.9 (9'6") Thumb Ready Stick + 1.19 m ³ (1.56 yd ³) HD Bucket	24 300 kg	53,600 lb	38.4 kPa	5.6 psi
SLR Boom + SLR Stick + 0.53 m ³ (0.69 yd ³) GD Bucket	23 900 kg	52,700 lb	37.8 kPa	5.5 psi

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

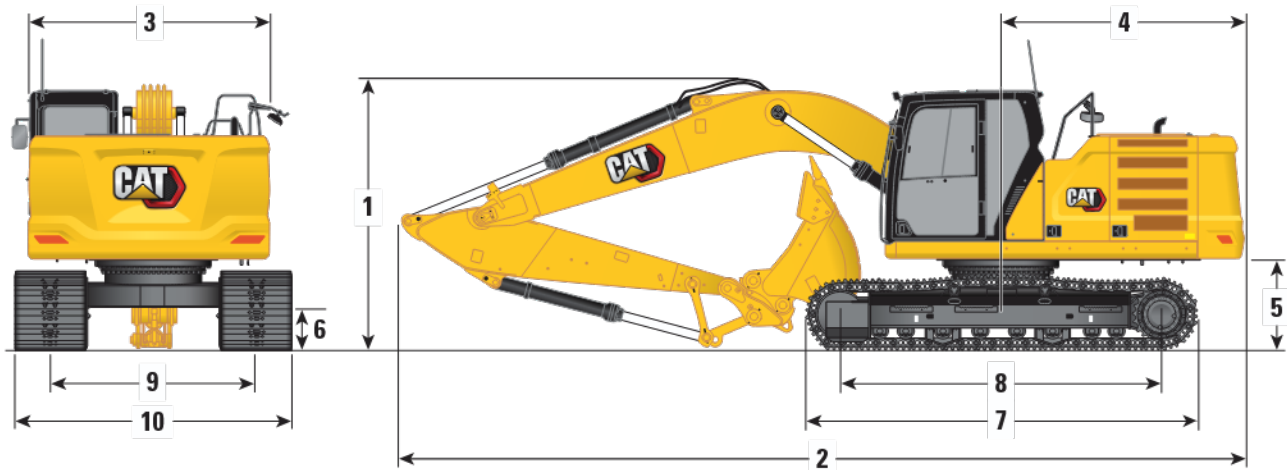
Major Component Weights

	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 – does not include boom, stick, bucket, boom cylinders, stick cylinder, bucket cylinder, tracks, 90% fuel tank and 75 kg [165 lb] operator)	14 800	32,600
Base Machine (with 4.7 mt [10,400 lb] counterweight, HD swing frame, HD base frame with SD track rollers and SD 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)	16 000	35,300
Track Shoes:		
790 mm (31 in) Width, 10 mm (0.39 in) Thick Triple Grouser Track Shoes with Step Extension	3370	7,400
Two Boom Cylinders	340	700
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	310	700
Counterweights:		
4.2 mt (9,300 lb) Counterweight	4200	9,300
4.7 mt (10,400 lb) Counterweight	4700	10,400
Swing Frame:		
Semi-HD Swing Frame	1910	4,210
Undercarriage:		
Standard Base Frame with HD Track Rollers and Standard Carrier Rollers	4390	9,700
Booms (including lines, pins, stick cylinder):		
Reach Boom 5.7 m (18'8")	1710	3,800
HD Reach Boom 5.7 m (18'8")	2010	4,400
Super Long Reach (SLR) Boom 8.85 m (29'0")	2170	4,800
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
Reach Stick R2.9B1 (9'6")	1080	2,400
HD Thumb Ready Reach Stick R2.9B1 (9'6")	1300	2,900
Super Long Reach Stick 6.28A (20'7")	1340	3,000
Buckets (without linkage):		
1.19 m ³ (1.56 yd ³) HD	960	2,100
0.57 m ³ (0.75 yd ³) Ditch Cleaning (DC)	390	900
Quick Couplers:		
Pin Grabber	390	900
Universal	230	500

320 Hydraulic Excavator Specifications

Dimensions

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



Boom Options

Reach/HD Reach Boom
5.7 m (18'8")

SLR Boom
8.85 m (29'0")

Stick Options

Reach/HD TR Reach Stick
R2.9B1 (9'6")

SLR Stick
6.28A (20'7")

1 Machine Height:

Top of Cab Height	2960 mm	9'9"	2960 mm	9'9"
Top of Antenna Height (if installed)	3000 mm	9'10"	3000 mm	9'10"
Top of FOGS 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"	3190 mm	10'6"
With Boom/Stick Installed	2910 mm	9'7"	3070 mm	10'1"
With Boom Installed	2480 mm	8'2"	2650 mm	8'8"

2 Machine Length:

With Boom/Stick/Bucket Installed	9530 mm	31'3"	12 750 mm	41'10"
With Boom/Stick Installed	9500 mm	31'2"	12 760 mm	41'10"
With Boom Installed	8450 mm	27'9"	8920 mm	29'3"

3 Upperframe Width

2780 mm	9'1"	2780 mm	9'1"
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4 Tail Swing Radius

2830 mm	9'3"	2830 mm	9'3"
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5 Counterweight Clearance

1050 mm	3'5"	1050 mm	3'5"
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6 Ground Clearance

470 mm	1'7"	470 mm	1'7"
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7 Track Length

4450 mm	14'7"	4450 mm	14'7"
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8 Length to Center of Rollers

3650 mm	12'0"	3650 mm	12'0"
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9 Track Gauge

2380 mm	7'9"	2380 mm	7'9"
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10 Undercarriage Width:

790 mm (31 in) Shoes	3170 mm	10'5"	3170 mm	10'5"
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Bucket Type

HD

DC

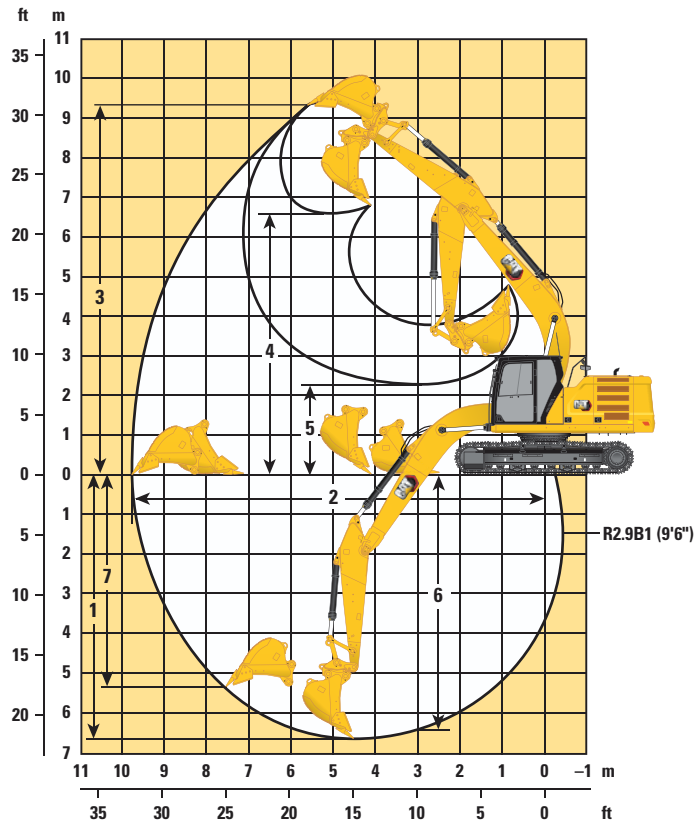
Bucket Capacity	1.14 m ³	1.50 yd ³	0.57 m ³	0.75 yd ³
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Bucket Tip Radius	1470 mm	4'10"	1070 mm	3'6"
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320 Hydraulic Excavator Specifications

Working Ranges

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



Boom Option

Reach/HD Reach Boom
5.7 m (18'8")

Stick Option

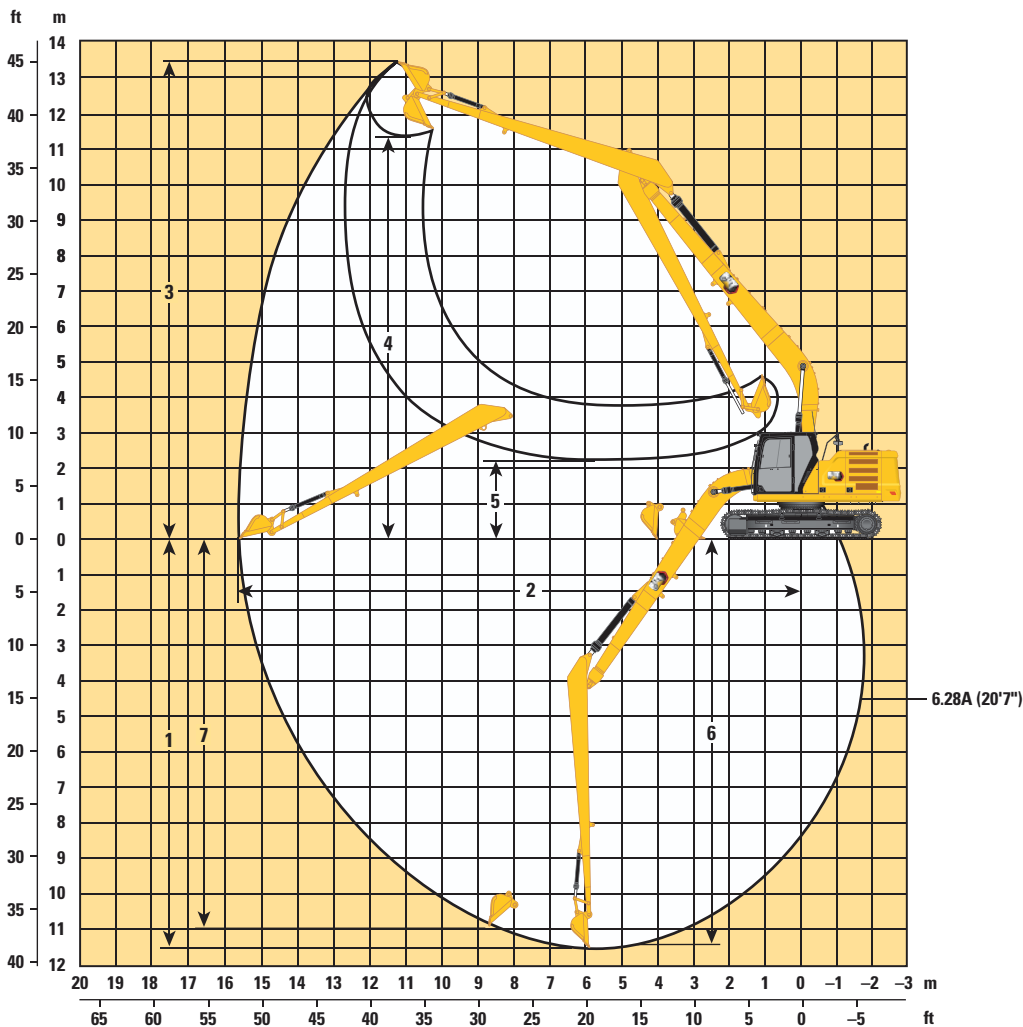
Reach/HD TR Reach Stick
R2.9B1 (9'6")

1 Maximum Digging Depth	6620 mm	21'9"
2 Maximum Reach at Ground Line	9760 mm	32'0"
3 Maximum Cutting Height	9330 mm	30'7"
4 Maximum Loading Height	6590 mm	21'7"
5 Minimum Loading Height	2270 mm	7'5"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6440 mm	21'2"
7 Maximum Vertical Wall Digging Depth	5360 mm	17'7"
Bucket Digging Force (ISO)	163 kN	36,711 lbf
Stick Digging Force (ISO)	109 kN	24,486 lbf
Bucket Digging Force (ISO) – Auto Dig Boost	177 kN	39,858 lbf
Stick Digging Force (ISO) – Auto Dig Boost	118 kN	26,585 lbf
Bucket Type	HD	
Bucket Capacity	1.14 m ³	1.50 yd ³
Bucket Tip Radius	1470 mm	4'10"

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")

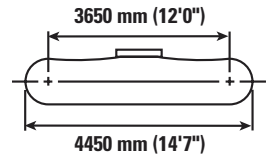
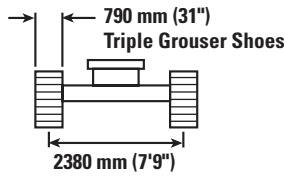
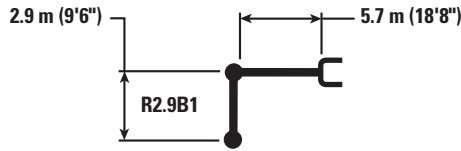
Stick Option

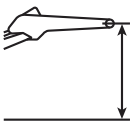
SLR Stick
6.28A (20'7")

1 Maximum Digging Depth	11 540 mm	37'10"
2 Maximum Reach at Ground Line	15 570 mm	51'1"
3 Maximum Cutting Height	13 540 mm	44'5"
4 Maximum Loading Height	11 440 mm	37'6"
5 Minimum Loading Height	2240 mm	7'4"
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	11 440 mm	37'6"
7 Maximum Vertical Wall Digging Depth	11 020 mm	36'2"
Bucket Digging Force (ISO)	62 kN	13,841 lbf
Stick Digging Force (ISO)	49 kN	10,966 lbf
Bucket Type	DC	
Bucket Capacity	0.57 m ³	0.75 yd ³
Bucket Tip Radius	1070 mm	3'6"

320 Hydraulic Excavator Specifications

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



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				m ft
														
7.5 m 25.0 ft	kg lb							*4950	*4950			*4300 *9,500	*4300 *9,500	6.15 20.00
6.0 m 20.0 ft	kg lb							*5450 *12,000	*5450 11,900			*3950 *8,750	*3950 *8,750	7.29 24.17
4.5 m 15.0 ft	kg lb							*6000 *13,050	5400 11,600	*5650 *12,400	3850 8,200	*3900 *8,550	3450 7,650	7.99 26.67
3.0 m 10.0 ft	kg lb					*8750 *18,900	7850 16,900	*6900 *14,950	5150 11,150	5750 12,350	3750 8,000	*4000 *8,750	3150 6,950	8.36 27.50
1.5 m 5.0 ft	kg lb					*10 650 *22,950	7350 15,850	7850 16,850	4950 10,650	5600 12,100	3600 7,800	*4250 *9,300	3050 6,700	8.45 28.33
0 m 0 ft	kg lb			*6600 *15,150	*6600 *15,150	*11 650 *25,200	7100 15,250	7650 16,450	4800 10,300	5550 11,900	3550 7,600	*4700 *10,300	3100 6,850	8.26 27.50
-1.5 m -5.0 ft	kg lb	*7050 *15,750	*7050 *15,750	*11 400 *25,850	*11 400 *25,850	*11 750 *25,500	7000 15,100	7550 16,250	4700 10,150	5500 11,850	3500 7,550	5250 11,550	3350 7,400	7.78 25.83
-3.0 m -10.0 ft	kg lb	*12 100 *27,100	*12 100 *27,100	*15 600 *33,800	13 650 29,200	*11 000 *23,800	7050 15,200	7600 16,350	4750 10,200			6200 13,700	3950 8,700	6.95 23.33
-4.5 m -15.0 ft	kg lb			*12 500 *26,700	*12 500 *26,700	*9000 *19,100	7250 15,650					*6800 *14,950	5400 12,150	5.60 18.33



ISO 10567:2007



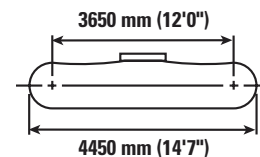
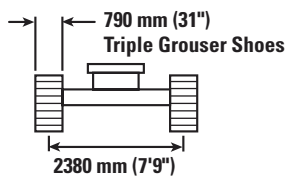
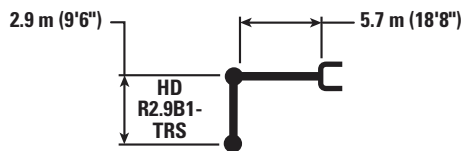
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

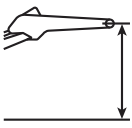
Lift capacity stays with $\pm 5\%$ for all available track shoes.

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

320 Hydraulic Excavator Specifications

HD Reach Boom Lift Capacities – Counterweight: 4.7 mt (10,400 lb) – without Bucket, Heavy Lift: On



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				m ft
														
7.5 m 25.0 ft	kg lb							*4900	*4900			*4250 *9,400	*4250 *9,400	6.15 20.00
6.0 m 20.0 ft	kg lb							*5350 *11,750	*5350 *11,750			*3900 *8,650	*3900 *8,650	7.29 24.17
4.5 m 15.0 ft	kg lb							*5900 *12,800	5700 12,200	*5500 *12,100	4000 8,600	*3850 *8,450	3600 8,000	7.99 26.67
3.0 m 10.0 ft	kg lb					*8600 *18,500	8300 17,850	*6750 *14,650	5450 11,700	*5900 *12,850	3900 8,400	*3950 *8,600	3300 7,250	8.36 27.50
1.5 m 5.0 ft	kg lb					*10 400 *22,450	7750 16,650	*7650 *16,600	5200 11,150	5900 12,650	3800 8,150	*4150 *9,150	3200 7,000	8.45 28.33
0 m 0 ft	kg lb			*6750 *15,450	*6750 *15,450	*11 400 *24,700	7450 16,000	8000 17,200	5000 10,750	5750 12,400	3700 7,950	*4600 *10,150	3250 7,100	8.26 27.50
-1.5 m -5.0 ft	kg lb	*7200 *16,050	*7200 *16,050	*11 650 *26,450	*11 650 *26,450	*11 500 *24,950	7350 15,800	7900 17,000	4900 10,600	5750 12,350	3650 7,900	*5400 *11,950	3500 7,700	7.78 25.83
-3.0 m -10.0 ft	kg lb	*12 350 *27,750	*12 350 *27,750	*15 300 *33,100	14 300 30,650	*10 800 *23,300	7400 15,950	7950 17,100	4950 10,650			6450 14,300	4100 9,100	6.95 23.33
-4.5 m -15.0 ft	kg lb			*12 150 *26,050	*12 150 *26,050	*8750 *18,600	7650 16,450					*6600 *14,500	5650 12,700	5.60 18.33



ISO 10567:2007



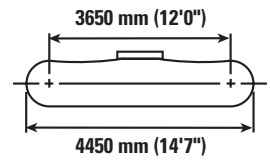
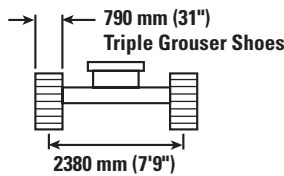
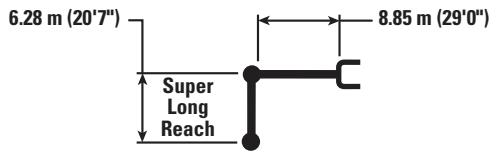
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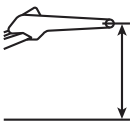
Lift capacity stays with $\pm 5\%$ for all available track shoes.

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

320 Hydraulic Excavator Specifications

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



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				m ft
														
12.0 m 40.0 ft	kg lb											*1450 *3,200	*1450 *3,200	10.35 33.25
10.5 m 35.0 ft	kg lb											*1350 *2,950	*1350 *2,950	11.66 37.75
9.0 m 30.0 ft	kg lb											*1300 *2,850	*1300 *2,850	12.66 41.17
7.5 m 25.0 ft	kg lb											*1250 *2,800	*1250 *2,800	13.41 43.75
6.0 m 20.0 ft	kg lb											*1250 *2,750	*1250 *2,750	13.97 45.67
4.5 m 15.0 ft	kg lb											*1300 *2,800	1250 2,700	14.34 46.92
3.0 m 10.0 ft	kg lb			*4700 *11,800	*4700 *11,800	*6050 *12,900	*6050 *12,900	*4450 *9,550	*4450 *9,550	*3600 *7,800	*3600 *7,800	*1300 *2,900	1150 2,550	14.55 47.67
1.5 m 5.0 ft	kg lb					*6750 *15,950	6500 14,100	*5250 *11,300	4500 9,700	*4100 *8,850	3350 7,200	*1400 *3,000	1150 2,450	14.60 47.83
0 m 0 ft	kg lb			*2000 *4,550	*2000 *4,550	*4650 *10,700	*4650 *10,700	*5900 *12,700	4050 8,750	*4550 *9,800	3050 6,550	*1450 *3,200	1100 2,400	14.49 47.50
-1.5 m -5.0 ft	kg lb	*2100 *4,600	*2100 *4,600	*2700 *6,050	*2700 *6,050	*4650 *10,500	*4650 *10,500	*6250 *13,550	3800 8,150	*4850 *10,450	2850 6,100	*1550 *3,450	1100 2,450	14.23 46.58
-3.0 m -10.0 ft	kg lb	*2850 *6,350	*2850 *6,350	*3500 *7,850	*3500 *7,850	*5200 *11,700	*5200 *11,700	*6400 *13,900	3650 7,850	4750 10,150	2700 5,800	*1750 *3,800	1150 2,550	13.79 45.17
-4.5 m -15.0 ft	kg lb	*3650 *8,150	*3650 *8,150	*4400 *9,900	*4400 *9,900	*6050 *13,700	5500 11,750	*6400 *13,800	3600 7,750	4650 10,050	2650 5,700	*1950 *4,300	1250 2,750	13.17 43.08
-6.0 m -20.0 ft	kg lb	*4550 *10,100	*4550 *10,100	*5400 *12,150	*5400 *12,150	*7200 *16,300	5600 12,000	*6150 *13,250	3650 7,850	4700 10,050	2650 5,750	*2300 *5,100	1400 3,050	12.34 40.25
-7.5 m -25.0 ft	kg lb	*5500 *12,250	*5500 *12,250	*6550 *14,800	*6550 *14,800	*7300 *15,650	5800 12,450	*5650 *12,150	3750 8,100	*4550 *9,750	2750 5,900	*2700 *5,950	1650 3,650	11.24 36.50
-9.0 m -30.0 ft	kg lb			*7950 *17,450	*7950 *17,450	*6150 *13,100	6050 *13,100	*4850 *10,350	3950 8,500	*3900 *8,300	2900 6,250	*2700 *5,900	2050 4,650	9.80 31.58



ISO 10567:2007



*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

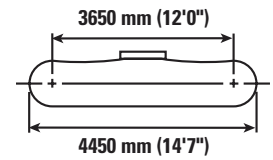
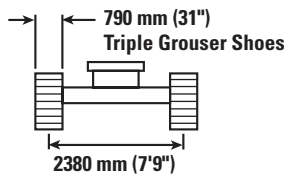
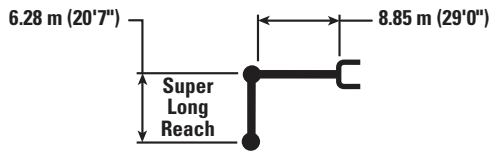
Lift capacity stays with $\pm 5\%$ for all available track shoes.

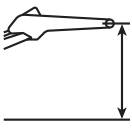
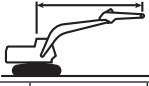
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

(continued on next page)

320 Hydraulic Excavator Specifications

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



		9.0 m/30.0 ft		10.5 m/35.0 ft		12.0 m/40.0 ft		13.5 m/45.0 ft				m ft
												
12.0 m 40.0 ft	kg lb									*1450 *3,200	*1450 *3,200	10.35 33.25
10.5 m 35.0 ft	kg lb			*2200 *4,850	*2200 *4,850					*1350 *2,950	*1350 *2,950	11.66 37.75
9.0 m 30.0 ft	kg lb			*2200 *4,800	*2200 *4,800	*2200 *4,200	1950 4,150			*1300 *2,850	*1300 *2,850	12.66 41.17
7.5 m 25.0 ft	kg lb			*2250 *4,900	*2250 *4,900	*2200 *4,850	1950 4,150			*1250 *2,800	*1250 *2,800	13.41 43.75
6.0 m 20.0 ft	kg lb			*2400 *5,200	*2400 *5,200	*2300 *5,000	1900 4,050	*2100 *3,700	1450 3,100	*1250 *2,750	*1250 *2,750	13.97 45.67
4.5 m 15.0 ft	kg lb	*2800 *6,050	*2800 *6,050	*2550 *5,550	2300 4,950	*2400 *5,200	1800 3,850	*2300 5,000	1450 3,000	*1300 *2,800	1250 2,700	14.34 46.92
3.0 m 10.0 ft	kg lb	*3100 *6,750	2800 6,000	*2800 *6,000	2200 4,650	*2550 *5,500	1700 3,650	2300 4,900	1350 2,900	*1300 *2,900	1150 2,550	14.55 47.67
1.5 m 5.0 ft	kg lb	*3450 *7,400	2550 5,500	*3000 *6,450	2050 4,350	*2700 5,750	1650 3,450	2250 4,750	1300 2,800	*1400 *3,000	1150 2,450	14.60 47.83
0 m 0 ft	kg lb	*3700 *8,050	2400 5,100	3150 6,800	1900 4,050	2600 5,550	1550 3,300	2150 4,650	1250 2,650	*1450 *3,200	1100 2,400	14.49 47.50
-1.5 m -5.0 ft	kg lb	3800 8,150	2250 4,750	3050 6,550	1800 3,850	2500 5,400	1450 3,150	2150 4,550	1200 2,600	*1550 *3,450	1100 2,450	14.23 46.58
-3.0 m -10.0 ft	kg lb	3700 7,900	2150 4,550	3000 6,400	1700 3,700	2500 5,300	1400 3,050	2100 *4,200	1200 2,550	*1750 *3,800	1150 2,550	13.79 45.17
-4.5 m -15.0 ft	kg lb	3650 7,800	2100 4,450	2950 6,300	1700 3,600	2450 5,300	1400 3,000			*1950 *4,300	1250 2,750	13.17 43.08
-6.0 m -20.0 ft	kg lb	3650 7,800	2100 4,500	2950 6,350	1700 3,650	2500 5,350	1450 3,100			*2300 *5,100	1400 3,050	12.34 40.25
-7.5 m -25.0 ft	kg lb	3700 7,950	2150 4,600	3000 *6,450	1750 3,800					*2700 *5,950	1650 3,650	11.24 36.50
-9.0 m -30.0 ft	kg lb	*3150 *6,500	2300 4,950							*2700 *5,900	2050 4,650	9.80 31.58



ISO 10567:2007



*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with $\pm 5\%$ 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

Counterweight									4.2 mt (9,300 lb)	4.7 mt (10,400 lb)	4.7 mt (10,400 lb)
	Linkage	Width		Capacity		Weight		Fill	Reach Boom	HD Reach Boom	SLR Boom
		mm	in	m³	yd³	kg	lb	%	R2.9 (9'6")	HD R2.9 (9'6") TRS	6.28A (20'7")
Pin-On (No Quick Coupler)											
General Duty Capacity	B	600	24	0.55	0.72	620	1,366	100	●	●	
	B	750	30	0.75	0.98	717	1,580	100	●	●	
	B	900	36	0.95	1.24	793	1,747	100	●	●	
	B	1050	42	1.16	1.52	848	1,869	100	⊙	●	
	B	1200	48	1.38	1.80	924	2,038	100	⊖	⊖	
	B	1350	54	1.59	2.08	1002	2,210	100	○	○	
General Duty Capacity – Wide Tip	B	600	24	0.55	0.72	617	1,360	100	●	●	
	B	750	30	0.75	0.98	715	1,576	100	●	●	
	B	900	36	0.95	1.24	791	1,743	100	●	●	
	B	1050	42	1.16	1.52	861	1,899	100	⊙	●	
	B	1200	48	1.38	1.80	938	2,069	100	⊖	⊖	
	B	1350	54	1.59	2.08	1016	2,241	100	○	○	
Heavy Duty	B	600	24	0.46	0.60	647	1,426	100	●	●	
	B	750	30	0.64	0.84	752	1,658	100	●	●	
	B	900	36	0.81	1.06	835	1,841	100	●	●	
	B	1050	42	1.00	1.31	892	1,967	100	●	●	
	B	1200	48	1.19	1.56	975	2,150	100	⊙	⊙	
	B	1350	54	1.38	1.81	1060	2,336	100	X	X	
Heavy Duty Power	B	1050	42	0.96	1.26	898	1,980	100	●	●	
	B	1200	48	1.14	1.49	983	2,167	100	X	X	
Severe Duty	B	600	24	0.46	0.61	683	1,506	90	●	●	
	B	750	30	0.64	0.84	795	1,753	90	●	●	
	B	900	36	0.81	1.06	885	1,950	90	●	●	
	B	1050	42	1.00	1.31	948	2,091	90	●	●	
	B	1200	48	1.19	1.56	1038	2,289	90	⊙	●	
Severe Duty Power	B	900	36	0.79	1.03	853	1,881	90	●	●	
Clean Up	B	1800	72	1.60	2.09	979	2,157	100	○	○	
	B	2000	78	1.76	2.31	1045	2,303	100	○	○	
Ditch Cleaning	B	1500	60	1.01	1.32	651	1,436	100	●	●	
	B	1800	72	1.24	1.62	739	1,630	100	⊙	●	
Ditch Cleaning Tilt	B	1500	60	0.90	1.18	948	2,090	100	●	●	
	B	1800	72	1.11	1.45	1063	2,344	100	⊙	⊙	
	B	1800	72	1.40	1.83	1105	2,437	100	○	⊖	
	B	2000	79	1.23	1.61	1132	2,496	100	⊖	⊙	
Tamping	B	2200	86	0.72	0.94	868	1,913	100	●	●	
	B	2200	86	0.90	1.18	891	1,965	100	●	●	
General Duty	312, A	900	36	0.53	0.69	403	888	100			◇
Ditch Cleaning	312, A	1200	48	0.57	0.74	386	851	100			◇
Maximum load with pin-on (payload + bucket)								kg	3010	3245	800
								lb	6,636	7,154	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/m³ (3,500 lb/yd³)
- ⊙ 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 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)

320 Hydraulic Excavator Specifications

Bucket Specifications and Compatibility *(continued)*

Counterweight									4.2 mt (9,300 lb)	4.7 mt (10,400 lb)	4.7 mt (10,400 lb)
	Linkage	Width		Capacity		Weight		Fill	Reach Boom	HD Reach Boom	SLR Boom
		mm	in	m³	yd³	kg	lb	%	R2.9 (9'6")	HD R2.9 (9'6") TRS	6.28A (20'7")
With Cat Pin Grabber Coupler											
General Duty Capacity	B	600	24	0.55	0.72	620	1,366	100	●	●	
	B	750	30	0.75	0.98	717	1,580	100	●	●	
	B	900	36	0.95	1.24	793	1,747	100	⊙	●	
	B	1050	42	1.16	1.52	848	1,869	100	⊖	⊖	
	B	1200	48	1.38	1.80	924	2,038	100	○	○	
	B	1350	54	1.59	2.08	1002	2,210	100	◇	○	
General Duty Capacity – Wide Tip	B	600	24	0.55	0.72	617	1,360	100	●	●	
	B	750	30	0.75	0.98	715	1,576	100	●	●	
	B	900	36	0.95	1.24	791	1,743	100	⊙	●	
	B	1050	42	1.16	1.52	861	1,899	100	⊖	⊖	
	B	1200	48	1.38	1.80	938	2,069	100	○	○	
	B	1350	54	1.59	2.08	1016	2,241	100	◇	◇	
Heavy Duty	B	600	24	0.46	0.60	647	1,426	100	●	●	
	B	750	30	0.64	0.84	752	1,658	100	●	●	
	B	900	36	0.81	1.06	835	1,841	100	●	●	
	B	1050	42	1.00	1.31	892	1,967	100	⊙	⊙	
	B	1200	48	1.19	1.56	975	2,150	100	○	⊖	
	B	1350	54	1.38	1.81	1060	2,336	100	◇	○	
Heavy Duty Power	B	1050	42	0.96	1.26	898	1,980	100	⊙	●	
	B	1200	48	1.14	1.49	983	2,167	100	⊖	⊖	
Heavy Duty Pin Grabber Performance	B	600	24	0.44	0.57	682	1,503	100	●	●	
	B	750	30	0.60	0.79	787	1,735	100	●	●	
	B	900	36	0.76	1.00	876	1,931	100	●	●	
	B	1050	42	0.93	1.22	940	2,072	100	⊙	●	
	B	1200	48	1.11	1.45	1031	2,272	100	⊖	⊖	
	B	1350	54	1.28	1.67	1122	2,474	100	○	○	
Severe Duty	B	600	24	0.46	0.61	683	1,506	90	●	●	
	B	750	30	0.64	0.84	795	1,753	90	●	●	
	B	900	36	0.81	1.06	885	1,950	90	●	●	
	B	1050	42	1.00	1.31	948	2,091	90	⊙	●	
	B	1200	48	1.19	1.56	1038	2,289	90	⊖	⊖	
	B	900	36	0.79	1.03	853	1,881	90	●	●	
Clean Up	B	1800	72	1.60	2.09	979	2,157	100	◇	○	
	B	2000	78	1.76	2.31	1045	2,303	100	◇	◇	
Ditch Cleaning	B	1500	60	1.01	1.32	651	1,436	100	⊙	●	
	B	1800	72	1.24	1.62	739	1,630	100	⊖	⊖	
Ditch Cleaning Tilt	B	1500	60	0.90	1.18	948	2,090	100	●	●	
	B	1800	72	1.11	1.45	1063	2,344	100	⊙	⊖	
	B	1800	72	1.40	1.83	1105	2,437	100	○	○	
	B	2000	79	1.23	1.61	1132	2,496	100	○	○	
Maximum load with coupler (payload + bucket)								kg	2636	2825	600
								lb	5,811	6,228	1,323

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)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 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)

320 Hydraulic Excavator Specifications

Bucket Specifications and Compatibility *(continued)*

Counterweight								4.2 mt (9,300 lb)	
	Linkage	Width		Capacity		Weight		Fill	Reach Boom
		mm	in	m³	yd³	kg	lb	%	R2.9 (9'6")
Pin-On, TRS18 S70									
Heavy Duty Grading	B	1600	63	1.00	1.31	691	1,523	100	⊖
	B	1800	71	1.10	1.44	758	1,671	100	⊖
Heavy Duty Digging	B	1150	45	0.90	1.18	778	1,715	100	⊙
	B	1250	49	1.10	1.44	850	1,874	100	○
Heavy Duty Trenching	B	600	24	0.55	0.72	460	1,014	100	●
Maximum load with pin-on (payload + bucket)								kg	2376
								lb	5,237
With S70, TRS18 S70									
Heavy Duty Grading	B	1600	63	1.00	1.31	691	1,523	100	○
	B	1800	71	1.10	1.44	758	1,671	100	○
Heavy Duty Digging	B	1150	45	0.90	1.18	778	1,715	100	⊖
	B	1250	49	1.10	1.44	850	1,874	100	◇
Heavy Duty Trenching	B	600	24	0.55	0.72	460	1,014	100	●
Maximum load with pin-on (payload + bucket)								kg	2121
								lb	4,675

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)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

320 Hydraulic Excavator Specifications

Attachments Offering Guide

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

☒ Match
 ☐ * Working range front only
 ☐ † Allowed usage on machine less than 50%
 ☐ No Match
 ☒ 1800 kg/m³ (3,000 lb/yd³)
 ☐ 1200 kg/m³ (2,000 lb/yd³)

PIN-ON ATTACHMENTS

Counterweight		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
Hydraulic Hammers	H115 S	✓	✓
	H120 GC	✓	✓
	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	✓	✓
Demolition and Sorting Grapples	G318	✓	✓
	G318 WH-800	✓	✓
	G318 WH-1100	✓	✓
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	✓	✓
Orange Peel Grapples	GSH420-500	●	●
	GSH420-600	●	●
	GSH420-750	●	●
	GSH425-750	○	●
	GSH425-950	○	○
	GSH520-500	●	●
	GSH520-600	●	●
	GSH520-750	●	●
	GSH525-750	○	○

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320 Hydraulic Excavator Specifications

Attachments Offering Guide *(continued)*

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

☒ Match
 ☐ * Working range front only
 ☐ † Allowed usage on machine less than 50%
 ☐ No Match

CAT PIN GRABBER COUPLER ATTACHMENTS

Counterweight		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
Hydraulic Hammers	H115 S	✓	✓
	H120 GC	✓†	✓
	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	✓	✓
Demolition and Sorting Grapples	G318	✓	✓
	G318 WH-800	✓	✓
	G318 WH-1100	✓*	✓*
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	✓	✓

S70 DEDICATED COUPLER ATTACHMENTS

Counterweight		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
Hydraulic Hammers	H115 S	✓	✓
	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	✓	✓
Demolition and Sorting Grapples	G318	✓	✓
	G318 WH-800	✓	✓
	G318 WH-1100	✓	✓
Mobile Scrap and Demolition Shears	S3025 Flat Top	✓*	✓
Pulverizers	P218 Secondary Pulverizer	✓	✓
	P318 Primary Pulverizer	✓	✓
Compactors (Vibratory Plate)	CVP110	✓	✓
Rotary Cutters	RC20	✓	✓

(continued on next page)

320 Hydraulic Excavator Specifications

Attachments Offering Guide *(continued)*

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

☒ Match
 ☐ * Working range front only
 ☐ † Allowed usage on machine less than 50%
 ☐ No Match

HCS70 DEDICATED COUPLER ATTACHMENTS

Counterweight		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
Hydraulic Hammers	H115 S	✓	✓
	H120 S	✓†	✓
	H130 S	✓†	✓
Multi-Processors	MP318 Concrete Cutter Jaw	✓	✓
	MP318 Demolition Jaw	✓	✓
	MP318 Pulverizer Jaw	✓	✓
	MP318 Shear Jaw	✓	✓
	MP318 Universal Jaw	✓	✓
Demolition and Sorting Grapples	G318	✓	✓
	G318 WH-800	✓	✓
	G318 WH-1100	✓*	✓*
Mobile Scrap and Demolition Shears	S3025 Flat Top		
Pulverizers	P218 Secondary Pulverizer	✓	✓
	P318 Primary Pulverizer	✓	✓
Compactors (Vibratory Plate)	CVP110	✓	✓
Rotary Cutters	RC20	✓	✓

HCS70/55 DEDICATED COUPLER ATTACHMENTS

Counterweight		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
Hydraulic Hammers	H115 S	✓	✓
	H120 S	✓†	✓
	H130 S	✓†	✓
Multi-Processors	MP318 Concrete Cutter Jaw	✓	✓
	MP318 Demolition Jaw	✓	✓
	MP318 Pulverizer Jaw	✓*	✓
	MP318 Shear Jaw	✓	✓
	MP318 Universal Jaw	✓	✓
Demolition and Sorting Grapples	G318	✓	✓
	G318 WH-800	✓	✓
	G318 WH-1100	✓*	✓
Mobile Scrap and Demolition Shears	S3025 Flat Top		
Pulverizers	P218 Secondary Pulverizer	✓*	✓
	P318 Primary Pulverizer	✓*	✓
Compactors (Vibratory Plate)	CVP110	✓	✓
Rotary Cutters	RC20	✓	✓

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320 Hydraulic Excavator Specifications

Attachments Offering Guide (continued)

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

☒ Match
 ☐ * Working range front only
 ☐ † Allowed usage on machine less than 50%
 ☐ No Match

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		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
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.

Counterweight		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
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 (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.

Counterweight		4.2 mt (9,300 lb)	4.7 mt (10,400 lb)
Boom Type		Reach	HD Reach
Stick Length		R2.9 (9'6")	HD R2.9 (9'6") TRS
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.

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