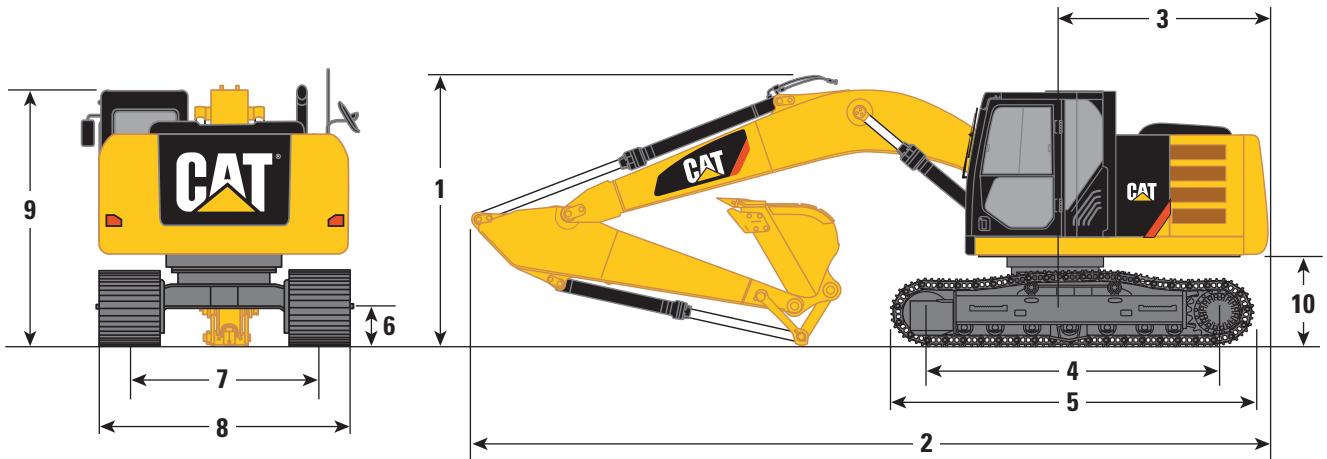


316E Hydraulic Excavator

Dimensions

All dimensions are approximate.



Reach Booms 5.1 m (16'9")

Stick	R3.1 (10'2")	R2.9 (9'6")	R2.6 (8'6")
	mm (ft)	mm (ft)	mm (ft)
1 Shipping Height*	3370 (11'1")	3090 (10'2")	3090 (10'2")
Shipping Height at Boom Top	3370 (11'1")	3080 (10'1")	3020 (9'11")
Shipping Height with Guard Rail	3090 (10'2")	3090 (10'2")	3090 (10'2")
Shipping Height with Top Guard	3100 (10'2")	3100 (10'2")	3100 (10'2")
2 Shipping Length	8570 (28'1")	8580 (28'2")	8570 (28'1")
3 Tail Swing Radius	2500 (8'2")	2500 (8'2")	2500 (8'2")
4 Length to Center of Rollers	3170 (10'5")	3170 (10'5")	3170 (10'5")
5 Track Length	3970 (13'0")	3970 (13'0")	3970 (13'0")
6 Ground Clearance	440 (1'5")	440 (1'5")	440 (1'5")
7 Track Gauge	1990 (6'6")	1990 (6'6")	1990 (6'6")
8 Transport Width			
500 mm (20") Shoes	2520 (8'3")	2520 (8'3")	2520 (8'3")
600 mm (24") Shoes	2590 (8'6")	2590 (8'6")	2590 (8'6")
700 mm (28") Shoes	2690 (8'10")	2690 (8'10")	2690 (8'10")
9 Cab Height	2890 (9'6")	2890 (9'6")	2890 (9'6")
Cab Height with Top Guard	3100 (10'2")	3100 (10'2")	3100 (10'2")
10 Counterweight Clearance**	1010 (3'4")	1010 (3'4")	1010 (3'4")

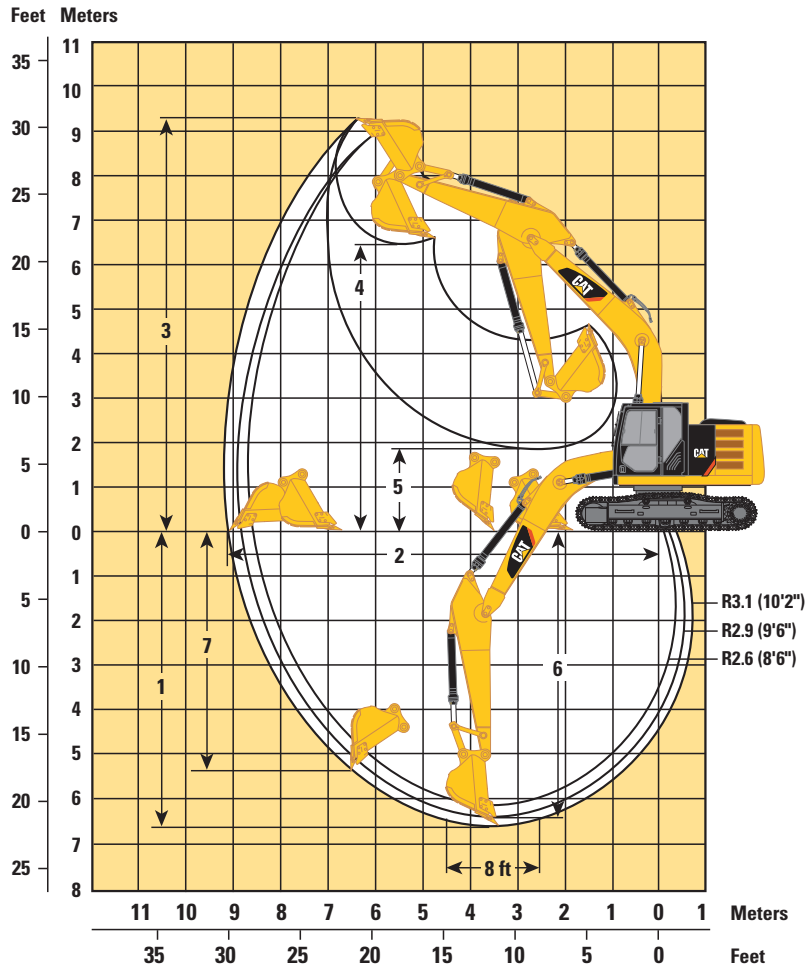
*Including shoe lug height.

**Without shoe lug height.

316E Hydraulic Excavator

Working Ranges

All dimensions are approximate.



Stick	Reach Booms 5.1 m (16'9")		
	R3.1 (10'2")	R2.9 (9'6")	R2.6 (8'6")
	mm (ft)	mm (ft)	mm (ft)
1 Maximum Digging Depth	6590 (21'7")	6390 (21'0")	6090 (20'0")
2 Maximum Reach at Ground Level	9260 (30'5")	8990 (29'6")	8780 (28'10")
3 Maximum Cutting Height	9210 (30'3")	8880 (29'2")	8920 (29'3")
4 Maximum Loading Height	6570 (21'7")	6270 (20'7")	6280 (20'7")
5 Minimum Loading Height	1810 (5'11")	2000 (6'7")	2300 (7'7")
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6400 (21'0")	6160 (20'3")	5870 (19'3")
7 Maximum Vertical Wall Digging Depth	5400 (17'9")	4910 (16'1")	4930 (16'2")

316E Hydraulic Excavator

Operating Weight and Ground Pressure

	700 mm (28") Triple Grouser Shoes		600 mm (24") Triple Grouser Shoes		500 mm (20") Triple Grouser Shoes	
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
	Reach Boom – 5.1 m (16'9")					
R3.1 (10'2")	17 800 (39,242)	36 (5.22)	17 600 (38,801)	42 (6.09)	17 400 (38,367)	49 (7.1)
R2.9 (9'6")	17 800 (39,242)	36 (5.22)	17 600 (38,801)	42 (6.09)	17 400 (38,367)	49 (7.1)
R2.6 (8'6")	17 700 (39,022)	36 (5.22)	17 500 (38,581)	41 (5.95)	17 300 (38,147)	49 (7.1)

Major Component Weights

	kg	lb
Base Machine (with boom cylinder, without counterweight, front linkage and track)	5720	12,610
Long Undercarriage	3770	8,310
Counterweight 2.8 mt (3.1 t)	2800	6,170
Boom (includes lines, pins and stick cylinder)		
Reach Boom – 5.1 m (16'9")	1320	2,910
Reach Boom – 5.1 m (16'9") for CGC	1330	2,930
Stick (includes lines, pins, bucket cylinder, and bucket linkage)		
R3.1 (10'2")	930	2,050
R2.9 (9'6")	910	2,010
R2.6 (8'6")	840	1,850
Track Shoe (Long/per two tracks)		
500 mm (20") Triple Grouser	2190	4,830
600 mm (24") Triple Grouser	2420	5,340
700 mm (28") Triple Grouser	2650	5,840

All weights are rounded up to nearest 10 kg and lb except for buckets. Kg and lb were rounded up separately so some of the kg and lb do not match. Base machine includes 75 kg (165 lb) operator weight, 90% fuel weight, and undercarriage with center guard.

316E Hydraulic Excavator

Bucket and Stick Forces

Stick	Reach Booms 5.1 m (16'9")		
	R3.1 (10'2")	R2.9 (9'6")	R2.6 (8'6")
	kN (lbf)	kN (lbf)	kN (lbf)
General Duty			
Bucket Digging Force (SAE)	98 (22,000)	98 (22,000)	98 (22,000)
Stick Digging Force (SAE)	69 (15,500)	73 (16,400)	77 (17,300)
Severe Duty			
Bucket Digging Force (SAE)	96 (21,600)	96 (21,600)	96 (21,600)
Stick Digging Force (SAE)	69 (15,500)	72 (16,200)	77 (17,300)

316E Hydraulic Excavator

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side















Boom – 5.1 m (16'9")

Counterweight – 2.8 mt (3.1 t)

Bucket – None

Stick – R3.1 (10'2")

Shoes – 700 mm (28") triple grouser

	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											*2700 *6,050	*2700 *6,050	5.49 17.57
6.0 m 20.0 ft	kg lb						*3650 *7,850	3450 7,400				*2450 *5,350	*2450 *5,350	6.76 21.96
4.5 m 15.0 ft	kg lb						*3850 *8,450	3400 7,250	*2450	2350		*2350 *5,150	2300 5,100	7.52 24.58
3.0 m 10.0 ft	kg lb			*7450 *15,850	*7450 *15,850	*5300 *11,400	4950 10,700	*4450 *9,650	3250 6,950	3650 *7,500	2300 4,850	*2400 *5,250	2050 4,550	7.93 25.98
1.5 m 5.0 ft	kg lb			*7550 *18,100	*7550 *17,700	*6700 *14,450	4600 9,900	5000 *10,750	3050 6,550	3600 7,700	2200 4,700	*2550 *5,550	2000 4,350	8.03 26.36
Ground Line	kg lb			*6650 *15,300	*6650 *15,300	7500 16,100	4350 9,300	4850 10,400	2900 6,250	3500 7,550	2150 4,600	*2800 *6,150	2000 4,400	7.85 25.77
-1.5 m -5.0 ft	kg lb	*5050 *11,250	*5050 *11,250	*9300 *21,150	7700 16,550	7350 15,800	4200 9,050	4750 10,250	2850 6,100			*3350 *7,350	2150 4,750	7.36 24.12
-3.0 m -10.0 ft	kg lb	*8400 *18,850	*8400 *18,850	*11,350 *24,500	7800 16,750	7350 15,800	4200 9,050	4800 10,300	2850 6,150			4300 9,500	2600 5,700	6.49 21.18
-4.5 m -15.0 ft	kg lb			*9000 *19,200	8050 17,300	*6100 *12,850	4350 9,450					*5150 *11,400	3750 8,500	5.04 16.24















Boom – 5.1 m (16'9")

Counterweight – 2.8 mt (3.1 t)

Bucket – None

Stick – R2.9 (9'6")

Shoes – 700 mm (28") triple grouser

	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											*2950 *6,500	*2950 *6,500	5.08 16.21
6.0 m 20.0 ft	kg lb							*3650 *7,350	3450 7,350			*2650 *5,800	*2650 *5,800	6.43 20.89
4.5 m 15.0 ft	kg lb							*4050 *8,850	3350 7,250			*2550 *5,650	2500 5,450	7.23 23.63
3.0 m 10.0 ft	kg lb			*8000 *17,000	*8000 *17,000	*5500 *11,900	4950 10,600	*4600 *10,000	3200 6,900	*3300 *6,050	2300 4,850	*2650 *5,800	2200 4,850	7.66 25.09
1.5 m 5.0 ft	kg lb			*7100 *17,000	*7100 *17,000	*6900 *14,900	4550 9,850	5000 10,750	3050 6,550	3600 7,700	2200 4,750	*2850 *6,250	2100 4,600	7.77 25.48
Ground Line	kg lb			*7050 *16,150	*7050 *16,150	7500 16,050	4300 9,300	4850 10,450	2950 6,300	3500	2150	*3200 *7,050	2100 4,650	7.58 24.87
-1.5 m -5.0 ft	kg lb	*5700 *12,750	*5700 *12,750	*10,100 *22,900	7750 16,600	7350 15,800	4200 9,100	4800 10,300	2850 6,150			3800 8,400	2300 5,100	7.07 23.16
-3.0 m -10.0 ft	kg lb	*9300 *20,850	*9300 *20,850	*11,100 *23,950	7850 16,800	7400 15,900	4250 9,150	4800 10,350	2900 6,250			4650 10,300	2800 6,200	6.16 20.07
-4.5 m -15.0 ft	kg lb			*8550 *18,150	8100 17,450	*5700	4450					*5550 *12,150	4300 9,800	4.60 14.75

*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.

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

316E Hydraulic Excavator

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side















Boom – 5.1 m (16'9")

Counterweight – 2.8 mt (3.1 t)

Bucket – None

Stick – R2.6 (8'6")

Shoes – 700 mm (28") triple grouser

	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				*7,500 *7,500							*3250 *7,300	*3250 *7,300	4.76 15.09
6.0 m 20.0 ft	kg lb						*3500 *6,450	3400 *6,450				*2850 *6,350	*2850 *6,350	6.18 20.05
4.5 m 15.0 ft	kg lb				*4600 *10,000	*4600 *10,000	*4300 *9,400	3350 7,200				*2750 *6,100	2600 5,750	7.01 22.89
3.0 m 10.0 ft	kg lb			*8850 *18,850	*8850 *18,850	*5900 *12,650	4900 10,550	*4800 *10,450	3200 6,900			*2800 *6,200	2300 5,100	7.44 24.39
1.5 m 5.0 ft	kg lb					*7200 *15,550	4550 9,800	5000 10,750	3050 6,600	*3400	2250	*3000 *6,600	2200 4,800	7.56 24.80
Ground Line	kg lb			*6250 *14,400	*6250 *14,400	7500 16,100	4350 9,350	4900 10,500	2950 6,350			*3400 *7,450	2250 4,900	7.36 24.16
-1.5 m -5.0 ft	kg lb	*5750 *12,800	*5750 *12,800	*10 150 *23,100	7850 16,850	7450 15,950	4300 9,200	4800 10,350	2900 6,250			4050 8,850	2450 5,400	6.84 22.40
-3.0 m -10.0 ft	kg lb	*9950 *22,400	*9950 *22,400	*10 750 *23,200	8000 17,100	*7450 *16,000	4350 9,300					5000 11,150	3050 6,750	5.89 19.19
-4.5 m -15.0 ft	kg lb			*7750 *16,300	7750 *16,300							*5400 *11,900	4950 11,350	4.23 13.51















Boom – 5.1 m (16'9")

Counterweight – 2.8 mt (3.1 t)

Bucket – None

Stick – R3.1 (10'2")

Shoes – 600 mm (24") triple grouser

	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											*2700 *6,050	*2700 *6,050	5.49 17.57
6.0 m 20.0 ft	kg lb							*3650 *7,850	3400 7,300			*2450 *5,350	*2450 *5,350	6.76 21.96
4.5 m 15.0 ft	kg lb							*3850 *8,450	3350 7,150	*2450	2300	*2350 *5,150	2300 5,050	7.52 24.58
3.0 m 10.0 ft	kg lb			*7450 *15,850	*7450 *15,850	*5300 *11,400	4900 10,550	*4450 *9,650	3200 6,850	3600 *7,500	2250 4,800	*2400 *5,250	2050 4,500	7.93 25.98
1.5 m 5.0 ft	kg lb			*7550 *18,100	*7550 17,500	*6700 *14,450	4550 9,750	4950 10,600	3000 6,500	3550 7,550	2150 4,650	*2550 *5,550	1950 4,250	8.03 26.36
Ground Line	kg lb			*6650 *15,300	*6650 *15,300	7400 15,850	4250 9,200	4800 10,250	2900 6,200	3450 7,450	2100 4,500	*2800 *6,150	1950 4,300	7.85 25.77
-1.5 m -5.0 ft	kg lb	*5050 *11,250	*5050 *11,250	*9300 *21,150	7600 16,300	7250 15,550	4150 8,950	4700 10,100	2800 6,000			*3350 *7,350	2150 4,700	7.36 24.12
-3.0 m -10.0 ft	kg lb	*8400 *18,850	*8400 *18,850	*11 350 *24,500	7700 16,500	7250 15,600	4150 8,950	4700 10,150	2800 6,050			4250 9,350	2550 5,650	6.49 21.18
-4.5 m -15.0 ft	kg lb			*9000 *19,200	7950 17,100	*6100 *12,850	4300 9,300					*5150 *11,400	3700 8,400	5.04 16.24

*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.

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316E Hydraulic Excavator

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side















Boom – 5.1 m (16'9")

Counterweight – 2.8 mt (3.1 t)

Bucket – None

Stick – R2.9 (9'6")

Shoes – 600 mm (24") triple grouser

	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											*2950 *6,500	*2950 *6,500	5.08 16.21
6.0 m 20.0 ft	kg lb						*3650 *7,350	3400 7,250				*2650 *5,800	*2650 *5,800	6.43 20.89
4.5 m 15.0 ft	kg lb						*4050 *8,850	3350 7,150				*2550 *5,650	2450 5,400	7.23 23.63
3.0 m 10.0 ft	kg lb			*8000 *17,000	*8000 *17,000	*5500 *11,900	4900 10,500	*4600 *10,000	3200 6,850	*3300 *6,050	2250 4,800	*2650 *5,800	2150 4,800	7.66 25.09
1.5 m 5.0 ft	kg lb			*7100 *17,000	*7100 *17,000	*6900 *14,900	4500 9,700	4950 10,600	3000 6,500	3550 7,600	2200 4,650	*2850 *6,250	2050 4,550	7.77 25.48
Ground Line	kg lb			*7050 *16,150	*7050 *16,150	7400 15,850	4250 9,150	4800 10,300	2900 6,200	3500	2100	*3200 *7,050	2100 4,600	7.58 24.87
-1.5 m -5.0 ft	kg lb	*5700 *12,750	*5700 *12,750	*10 100 *22,900	7650 16,350	7250 15,600	4150 8,950	4700 10,150	2800 6,050			3750 8,250	2300 5,000	7.07 23.16
-3.0 m -10.0 ft	kg lb	*9300 *20,850	*9300 *20,850	*11 100 *23,950	7750 16,600	7300 15,650	4200 9,000	4750 10,250	2850 6,150			4600 10,200	2750 6,100	6.16 20.07
-4.5 m -15.0 ft	kg lb			*8550 *18,150	8000 17,250	*5700	4400					*5550 *12,150	4250 9,550	4.60 14.75















Boom – 5.1 m (16'9")

Counterweight – 2.8 mt (3.1 t)

Bucket – None

Stick – R2.6 (8'6")

Shoes – 600 mm (24") triple grouser

	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					*7,500 *7,500						*3250 *7,300	*3250 *7,300	4.76 15.09
6.0 m 20.0 ft	kg lb							*3500 *6,450	3350 *6,450			*2850 *6,350	*2850 *6,350	6.18 20.05
4.5 m 15.0 ft	kg lb					*4600 *10,000	*4600 *10,000	*4300 *9,400	3300 7,100			*2750 *6,100	2550 5,700	7.01 22.89
3.0 m 10.0 ft	kg lb			*8850 *18,850	*8850 *18,850	*5900 *12,650	4850 10,400	*4800 *10,450	3200 6,850			*2800 *6,200	2300 5,000	7.44 24.39
1.5 m 5.0 ft	kg lb					*7200 *15,550	4500 9,700	4950 10,600	3050 6,500	*3400	2200	*3000 *6,600	2150 4,750	7.56 24.80
Ground Line	kg lb			*6250 *14,400	*6250 *14,400	7400 15,900	4300 9,250	4800 10,350	2900 6,250			*3400 *7,450	2200 4,850	7.36 24.16
-1.5 m -5.0 ft	kg lb	*5750 *12,800	*5750 *12,800	*10 150 *23,100	7750 16,600	7350 15,700	4200 9,100	4750 10,250	2850 6,150			3950 8,750	2400 5,350	6.84 22.40
-3.0 m -10.0 ft	kg lb	*9950 *22,400	*9950 *22,400	*10 750 *23,200	7850 16,900	7400 15,850	4250 9,200					4950 11,000	3000 6,650	5.89 19.19
-4.5 m -15.0 ft	kg lb			*7750 *16,300	*7750 *16,300							*5400 *11,900	4900 11,200	4.23 13.51

*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.

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316E Hydraulic Excavator

Work Tool Offering Guide*

Boom Type	Reach Boom		
Stick Size	R3.1 (10'2")	R2.9 (9'6")	R2.6 (8'6")
Hydraulic Hammer	H110Es H115Es H120Es	H110Es H115Es H120Es	H110Es H115Es H120Es
Pulverizer	P215	P215	P215
Mobile Scrap and Demolition Shear	S325B**	S325B**	S325B**
Compactor (Vibratory Plate)	CVP75	CVP75	CVP75
Contractors' Grapple	G115B	G115B	G115B
Trash Grapple			
Thumbs			
Center-Lock Pin Grabber Coupler			

These work tools are available for the 316E.
Consult your Cat dealer for proper match.

*Matches are dependent on excavator configurations. Consult your Cat dealer for proper work tool match.

**Boom-mount.

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Bucket Specifications and Compatibility

	Width		Capacity		Weight		Fill	Reach Booms			
	mm	in	m ³	yd ³	kg	lb		%	R2.6 (8'6")	R2.9 (9'6")	R3.1 (10'2")
Without Quick Coupler											
General Duty (GD)	600	24	0.35	0.46	445	980	100%	●	●	●	●
	750	30	0.49	0.64	502	1,106	100%	●	●	●	●
	900	36	0.62	0.81	548	1,208	100%	●	●	●	●
	1050	42	0.76	1.00	595	1,312	100%	●	⊙	⊙	⊖
	1200	48	0.91	1.19	672	1,480	100%	X	⊖	X	○
Severe Duty (SD)	600	24	0.35	0.46	496	1,093	90%	●	●	●	●
	750	30	0.49	0.64	564	1,243	90%	●	●	●	●
	900	36	0.62	0.81	644	1,420	90%	●	●	●	●
	1050	42	0.76	1.00	689	1,519	90%	●	●	⊙	⊙
	1200	48	0.91	1.19	762	1,678	90%	X	⊖	X	○
Maximum load pin-on (payload + bucket)							kg	2205	2095	1945	1875
							lb	4,860	4,617	4,287	4,133
With Center Lock Quick Coupler											
General Duty (GD)	600	24	0.35	0.46	445	980	100%	●	●	●	●
	750	30	0.49	0.64	502	1,106	100%	●	●	●	●
	900	36	0.62	0.81	548	1,208	100%	●	⊙	⊖	⊖
	1050	42	0.76	1.00	595	1,312	100%	⊖	⊖	○	○
	1200	48	0.91	1.19	672	1,480	100%	○	◇	◇	◇
Severe Duty (SD)	600	24	0.35	0.46	496	1,093	90%	●	●	●	●
	750	30	0.49	0.64	564	1,243	90%	●	●	●	●
	900	36	0.62	0.81	644	1,420	90%	●	⊙	⊖	⊖
	1050	42	0.76	1.00	689	1,519	90%	⊖	⊖	○	○
	1200	48	0.91	1.19	762	1,678	90%	○	○	◇	◇
Maximum load with coupler (payload + bucket)							kg	1815	1705	1555	1485
							lb	4,000	3,758	3,427	3,273

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

The above loads are in compliance with hydraulic excavator standard EN474, 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.

Bucket weight with General Duty tips.

* Densities with 3.1 m (10'2") thumb stick does not consider thumb weight.

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.