# 314E CR/314E L CR Hydraulic Excavator

CAT®



Cat <sup>®</sup> C4.4 ACERT™				
67 kW	89 hp			
5.4 km/h	3.4 mph			
113 kN	25,400 lbf			
	67 kW 5.4 km/h			

•		
Operating Weight		
Standard Undercarriage		
Minimum Weight	13 300 kg	29,300 lb
Maximum Weight	15 200 kg	33,500 lb
Long Undercarriage		
Minimum Weight	15 000 kg	33,100 lb
Maximum Weight	17 100 kg	37,700 lb

If you are looking for a compact, productive, and fuel-efficient 14 metric ton machine, you will find it in the all new 314E CR/314E L CR. Built to meet U.S. **Environmental Protection** Agency (EPA) Tier 4 Interim emission standards, European **Union Stage IIIB emission** standards, and Japan MLIT Step 4 emission standards, the 314E CR/314E L CR makes an excellent choice for people who need a wellbalanced and versatile utility machine. In fact, this new model comes equipped with several new features and benefits that will please both you and your operators.

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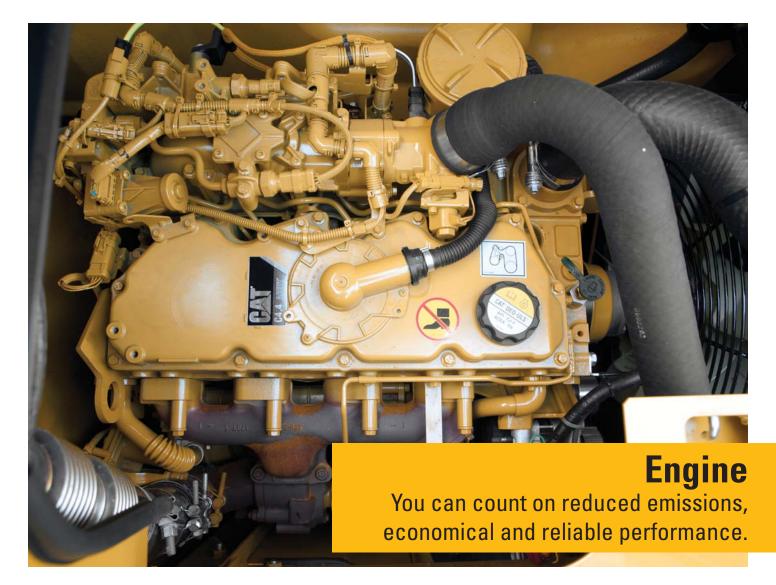
# **Compact Radius**

You can have flexibility and peace of mind in tight quarters.



If your work space is restricted, the 314E CR/314E L CR makes an ideal choice because it can get up close to new residential construction, buildings, fences, hillsides, or any other "crowded" environment with ease.

When rotated 90 degrees and working over the side, the 314E CR/314E L CR's counterweight extends only 185-285 mm (7.28 in-11.22 in) (depending on track shoe size) beyond the track shoe edge. During the entire 360 swing the counterweight will never protrude beyond the length of the undercarriage. This significantly reduces the risk of your operator damaging the machine and surrounding structures in full swing, which makes for a safer work environment and lower owning and operating costs for your business.



The Cat C4.4 ACERT engine is built to meet your demanding needs all day every day. There is no interruption to your job process as our new regeneration system works automatically with no operator intervention required.

#### **Power Modes**

The 314E CR/314E L CR features two power modes: High power mode is when you need maximum production; economy mode is when you need to balance performance with fuel economy.

Two additional fuel-saving features are on demand engine power and engine idle shutdown. On demand engine power keeps speed low during light loading and idling and automatically adjusts speed up when it senses a heavier load; engine idle shutdown automatically shuts the engine off when it's been idling for more than a specified amount of time that you set, which can save you significant amounts of fuel, reduce your emissions, and even reduce your accumulated service hours, which will extend service intervals and improve re-sale value.

#### **Biodiesel-Ready Fuel System**

The C4.4 ACERT engine runs on ultra-low-sulfur diesel fuel, and you have added flexibility of running on B20 biodiesel fuel that meets ASTM 6751 standards. Just fill it up and go.

# **Hydraulics**

You can move dirt, rock, and debris with speed, precision, and efficiency.





#### **Hydraulic System**

One of the biggest contributors to your productivity and fuel savings is a well-designed hydraulic system, and this is where Cat excavators stand apart. The 314E CR/314E L CR is loaded with several unique features that will put more power to the ground with less money out of your pocket.

#### **Pumps and Valves**

The main control valve is built to work with any tool, allowing you to take on multiple tasks with one machine. The main pumps are located side by side and are driven directly by the engine for the highest level of efficiency to reduce your fuel costs.

#### **Boom Regeneration**

Electric boom regeneration results in less pressure loss, higher controllability, more productivity, and lower operating costs for you; it works by reusing the flow of oil that travels from the head of the boom cylinder to the rod end of the boom cylinder during your operator's everyday "boom down" operation. During boom regeneration, engine speed is controlled to be low in order to save extra oil flow from going to the boom cylinders, which saves energy.

# **Operator Station**

Your operators will enjoy the incredibly quiet and comfortable cab.



### Seats

The air suspended, heated and cooled seat gives operators all the comfort they need for a long day of work. All seats include a reclining back, upper and lower seat slide adjustments, and height and tilt angle adjustments.

#### **Controls**

Your operators can adjust the right and left joysticks for individual preferences, helping the operator become more comfortable, more productive, and more alert.

# Power Supply and Auxiliary Audio Port

To keep your operators happy, comfortable and connected, one 12-volt power supply is located on the radio near key storage areas for charging electronic devices such as an MP3 player and cell phone. An auxiliary port allows your operators to plug and play MP3 audio through the cab's speakers.

#### Storage

Your operators have storage spaces located in the rear. A dedicated space near the auxiliary power supply will hold an MP3 player and cell phone. The drink holder accommodates large mugs with handles, and a shelf behind the seat stores large lunch or toolboxes.

#### **Monitor**

Your operators can keep safely focused on the job at hand with a high-resolution LCD monitor that is programmable in 42 languages to support today's diverse workforce. It also projects the image from an available rearview camera, further enhancing the safety and productivity of your job site.



#### **Automatic Climate Control**

An automatic climate control system features seven air outlets with filtered ventilation to make your operators comfortable in either hot or cold climates.

# **Structures & Undercarriage**

You can take on a variety of tough tasks with this built-to-last machine.







#### **Frame**

You can expect excellent quality, reliability, and durability with the 314E CR/314E L CR's reinforced lower and upper frames. Both are built to handle a hard day's work over and over again. The upper frame includes reinforced mountings to support the Roll-Over Protective Structure (ROPS) cab; the lower frame is reinforced to increase component durability.

#### Undercarriage

Standard and Long undercarriage supports any type of work you can do with a 14 metric ton machine. The track rollers are a double solid-pin-type design to improve reliability; an optional two-piece guiding guard helps maintain track alignment and improves the machine's overall performance.

#### **Counterweight**

Counterweight is selected depending on undercarriage — 2.19 mt (2.4 t) for standard undercarriage and 3.56 mt (3.9 t) for long undercarriage — to optimally match your machine to the task at hand, whether it's doing light trenching or heavy lifting. With integrated links, you can also easily — and safely — remove the counterweight for maintenance or shipping.

### **Work Tools**

You can dig, hammer, rip, and cut with confidence.



You can extend the versatility and performance of your machine with the full lineup of Cat work tools. Each tool equips your machine to perform many different tasks found at a variety of job sites.

#### **Couplers: Quick Tool Changes**

Imagine the productivity you'll achieve with a quick coupler. Combine a robust coupler with a common work tool inventory that can be shared between same size machines, and you'll get performance and flexibility on every job.

#### **Cat Center-Lock™ Pin Grabber Coupler**

Center-Lock is the pin grabber style of coupler featuring a patented locking system. A highly visible lock clearly shows the operator when the coupler is engaged or disengaged from the bucket or work tool.

#### Work Tools: Cut, Crush, Pulverize, and Load

No matter your specialty, Caterpillar provides tools that are perfectly matched to get the most out of your Cat machine – quickly and efficiently.

#### **Buckets: Dig, Move, Load**

Cat buckets are designed to fill efficiently so you notice a fast, smooth cycle which means high productivity each time you dig. Wear characteristics of General Duty, Heavy Duty and Severe Duty buckets give you solid performance in a wide variety of material abrasions. Ditch cleaning and other specialty buckets are available when needed.

#### **Four Durability Categories Suitable for Any Situation**

Caterpillar offers four standard bucket categories for excavators. Each category is based on intended bucket durability when used in recommended application and material. Each bucket durability is available as pin-on or can be used with a Quick Coupler. Red areas on bucket images illustrate additional protection against wear as it increases across each category.

#### **General Duty (GD)**

GD buckets are for digging in low-impact, low-abrasion material such as dirt, loam, and mixed compositions of dirt and fine gravel.

#### **Heavy Duty (HD)**

The most popular bucket style, HD buckets are a good starting point when digging conditions are not well known like a wide range of impact and abrasion conditions that include mixed dirt, clay, and rock.

#### **Severe Duty (SD)**

SD buckets are for higher abrasion conditions such as well shot granite and caliche.

#### **Extreme Duty (XD)**

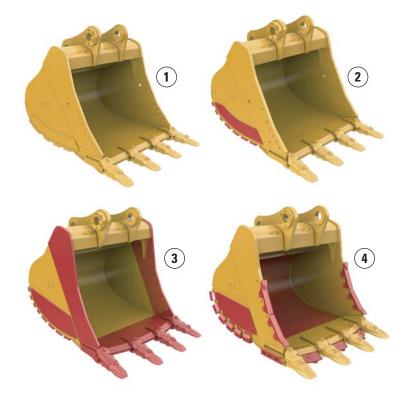
XD buckets are the new standard for high-abrasion conditions, including high quartzite granite.

#### **Special Buckets**

Special buckets are available for the 314E CR/314E L CR on request.

#### **Comprehensive Product Support**

All Cat Work Tools are backed up by a world-wide network of well-stocked parts depots and highly experienced service and support personnel.



1) General Duty 2) Heavy Duty 3) Severe Duty 4) Extreme Duty



# **Front Linkage**

You'll experience a long service life even in the harshest of conditions.

Your uptime and service intervals are increased with durable and reliable booms, sticks, and linkage pins. Each boom and stick is built with internal baffle plates for additional strength, and each undergoes ultrasound inspection to ensure you get the durability and reliability you expect for any tough application.

#### **Booms**

Two types of booms are available to meet the variety of tasks you take on in a given day. A reach boom offers you excellent all-around versatility and a large working envelope; a power offset boom allows your operator to stay in the same position to load and dump, which increases productivity when your team is working in narrow, restricted space. A unique bucket-to-cab avoidance feature is also included to ensure safe operation.

#### **Sticks**

Sticks are matched to the booms. The R3.0 m (9'10") stick is best for when you need deep trenching, longer reach, and top truck loading capabilities. The R2.5 m (8'2") stick provides greater breakout force and increases productivity when you primarily plan on using hydromechanical work tools. The R2.1 m (6'11") stick combines with the power offset boom to deliver excellent breakout force and cycle speed in those tough-to-reach places. Your Cat dealer can help you pick the best configuration for your business.

# **Integrated Technologies**

You can make your team's work much easier and more efficient.

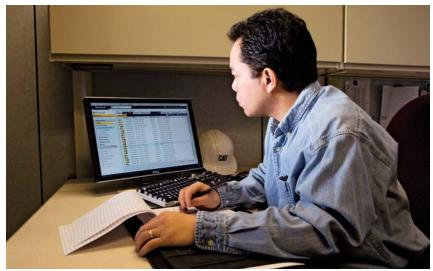
#### **Cat Grade Control Depth and Slope**

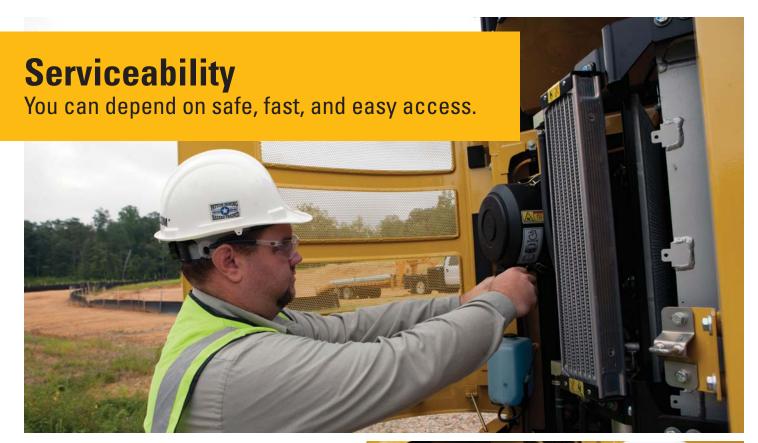
Cat Grade Control Depth and Slope is a standalone factory offering that allows your operator to reference a site elevation and input simple elevation and slope targets into the display to give them real-time bucket tip position through the cab monitor. This allows them to cut or fill to the target elevation the first time, which minimizes the need and cost for traditional grade checking. It also enhances job site safety and helps your team complete jobs quicker with fewer cycles, which means you'll save money on fuel.

#### Cat Product Link™

You can monitor and improve your fleet management with optional Cat Product Link. The integrated system reports events, diagnostic codes, hours, fuel consumption, location, and other pieces of detailed machine information to the secured web-based application called Vision Link®. The powerful tools within Vision Link communicate with you and your authorized Cat dealer to allow them to help you avoid downtime and better maintain your fleet.







#### **Ground-Level Compartments**

Your service technicians have ground-level access to the radiator, pump, and air cleaner compartments through wide service doors, making it easy for them to reach, check, and replace fluids and filters.

#### **Cooling System**

The cooling package features an improved oil cooler and engine radiator design mounted side by side and the air-to-air aftercooler and A/C condenser mounted in front. The radiator uses an aluminum square wave fin to prevent clogging with the other components positioned to make cleaning cores easier — a major service convenience.

#### **Other Service Benefits**

The engine oil dipstick is conveniently located in the front of the engine compartment.

The fuel tank's remote drain cock makes it easy and simple to remove water and sediment during routine maintenance.

Overfilling the fuel tank is significantly reduced with an integrated fuel level indicator.





# Safety

### Several built-in features will help protect your people.



#### **Roll-Over Protective Structure (ROPS) Cab**

Your operators will benefit from the protection of a ROPS-certified cab. It is also built to accommodate a Falling Object Guard Structure (FOGS) for industrial applications.

#### **Sound Proofing**

Roof lining and sealing make your operator's sound experience inside the cab comparable to any of today's top pickup trucks.

#### **Anti-Skid Plates**

Your operator and service technicians' slipping hazards are reduced with anti-skid plates on the surface of the upper structure and the top of the storage box area.

#### Steps, Hand and Guard Rails

Your service technicians can work securely on the machine with extended hand and guardrails to the upper deck and steps on the track frame and storage box.

#### **Time Delay Lights**

The cab and boom lights can be programmed to stay on for up to 90 seconds after the engine has been turned off to help your operators safely exit the machine.

#### High Intensity Discharge (HID) Lights

You can upgrade to HID for greater visibility in low-light conditions.

#### Windows

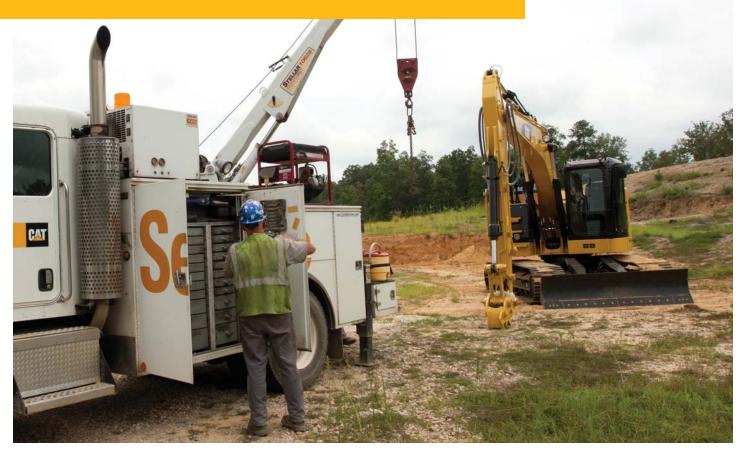
You can easily store both the upper and lower window in cab. You also have great overhead visibility and lighting with a large skylight.

#### **Rearview Camera**

Your operator has a clear view behind the machine with the rearview camera. The image projects through the standard cab monitor.

# **Complete Customer Care**

Your Cat dealer will support you like no other.



#### **Product Support**

You can maximize your machines' uptime with the Cat worldwide dealer network. You can also decrease your repair costs by utilizing Cat remanufactured components while contributing to sustainable development.

#### **Machine Selection**

What are your job requirements and machine attachments? What production do you need? Your Cat dealer can provide recommendations to help you make the right machine configuration.

#### **Purchase**

You can ensure lower owning and operating costs by utilizing dealer services and financing options.

#### **Customer Support Agreements**

Cat dealers offer a variety of customer support agreements and work with you to develop a plan to meet your specific needs. These plans can cover the entire machine, including attachments, to help protect your investment.

#### **Operation**

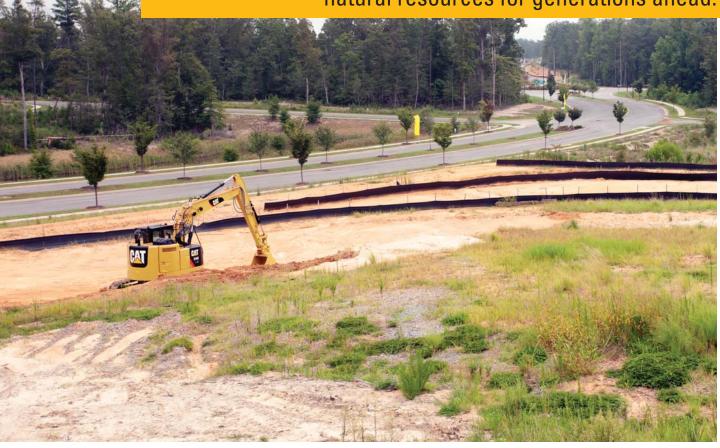
You can boost your profits by improving operating techniques. Your Cat dealer has videos, literature, and other ideas to help you increase productivity. Caterpillar also offers simulators and certified operator training to help maximize the return on your investment.

#### Replacement

Repair, rebuild, or replace? Your Cat dealer can help you evaluate the cost involved so you can make the best choice for your business.

# **Sustainability**

Your machine is designed to conserve natural resources for generations ahead.



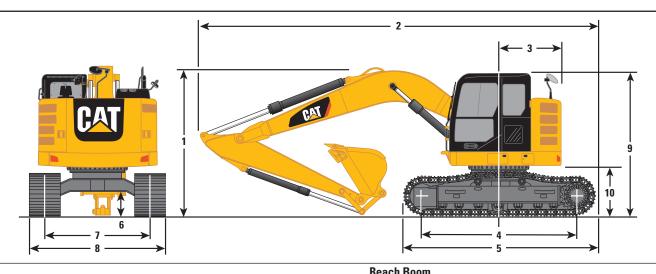


- The 314E CR/314E L CR is an efficient, productive machine that's designed to conserve our natural resources for generations ahead.
- The C4.4 ACERT engine meets EPA Tier 4 Interim emission standards, European Union Stage IIIB emission standards, and Japan MLIT Step 4 emission standards.
- The 314E CR/314E L CR has the flexibility of running on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or biodiesel
  (B20) fuel blended with ULSD that meets ASTM 6751 standards.
- An overfill indicator rises when the fuel tank is full to help your service technicians avoid spilling.
- An unique engine oil filter eliminates the need for painted metal cans and aluminum top plates. The cartridge-style spin-on housing enables the internal filter to be separated and replaced; the used internal element can be incinerated to help reduce waste.

Engine			Drive		
Engine Model	Cat C4.4 AC	CERT	Maximum Travel Speed	5.4 km/h	3.4 mph
Gross Power – SAE J1995	71 kW	95 hp	Maximum Drawbar Pull	113 kN	25,400 lbf
Net Power – SAE J1349	67 kW	89 hp			
Bore	105 mm	4.1 in	Swing Mechanism		
Stroke	127 mm	5.0 in	Swing Speed – 314E L CR	11.5 rpm	
Displacement	4.4 L	270 in <sup>3</sup>	Swing Speed – 314E CR	10.9 rpm	
Weight			Swing Torque	30.9 kN·m	22,790 lbf-ft
Operating Weight			Service Refill Capacities		
Long Undercarriage			Fuel Tank Capacity	178 L	47.0 gal
Minimum Weight	15 000 kg	33,100 lb	Cooling System	28 L	7.40 gal
Maximum Weight	17 100 kg	37,700 lb	Engine Oil (with filter)	13.5 L	3.6 gal
Standard Undercarriage			Swing Drive (each)	2.4 L	0.6 gal
Minimum Weight	13 300 kg	29,300 lb	Final Drive (each)	3 L	0.8 gal
Maximum Weight	15 200 kg	33,500 lb	Hydraulic System (including tank)	160 L	42.3 gal
Hydraulic System			Hydraulic Tank	84 L	22.2 gal
Main System – Maximum Flow 314E L CR	2 × 127 L/min	2 × 34 gal/min	Track		
Main System – Maximum Flow	2 × 119	2 × 31	Standard Undercarriage		
(Total) – 314E CR	L/min	gal/min	Number of Shoes (each side)	43 pieces	
Maximum Pressure – Equipment	30 500 kPa	4,420 psi	Number of Track Rollers (each side)	6 pieces	
Maximum Pressure – Power Offset	29 900 kPa	4,340 psi	Number of Carrier Rollers (each side)	1 piece	
Boom (optional)			Length to Center of Rollers	2780 mm	
Maximum Pressure – Travel	35 000 kPa	5,080 psi	Track Length	3490 mm	
Maximum Pressure – Swing	23 000 kPa	3,340 psi	Long Undercarriage		
Pilot System – Maximum Flow	21.9 L/min	4.8 gal/min	Number of Shoes (each side)	46 pieces	
Pilot System – Maximum Pressure	4120 kPa	600 psi	Number of Track Rollers (each side)	7 pieces	
Boom Cylinder – Bore	110 mm	4.3 in	Number of Carrier Rollers (each side)	2 pieces	
Boom Cylinder – Stroke	1000 mm	39.4 in	Length to Center of Rollers	3040 mm	
Stick Cylinder – Bore	120 mm	4.7 in	Track Length	3750 mm	
Stick Cylinder – Stroke	1197 mm	47.1 in	Carried Daylawara		
Bucket Cylinder – Bore	100 mm	3.9 in	Sound Performance		
Bucket Cylinder – Stroke	939 mm	37.0 in	ISO 6396		
			Operator Noise (Closed)	69 dB(A)	
			ISO 6395		
			Spectator Noise	100 dB(A)	

#### **Dimensions**

All dimensions are approximate.



		Power Offset Boom				
Stick	R3.0 ı (9'10'		R2.5 ı (8'2"		2.13 m (6'11")	
1 Shipping Height*	3000 mm	9'10"	3000 mm	9'10"	3000 mm	9'10"
Shipping Height at Boom Top	2750 mm	9'0"	2820 mm	9'3"	2780 mm	9'1"
Shipping Height with Guard Rail	3000 mm	9'10"	3000 mm	9'10"	3000 mm	9'10"
Shipping Height with Top Guard	2950 mm	9'8"	2950 mm	9'8"	2950 mm	9'8"
2 Shipping Length						
Standard Undercarriage	7320 mm	24'0"	7320 mm	24'0"	6910 mm	22'8"
Standard Undercarriage with Blade	7940 mm	26'1"	7940 mm	26'1"	7530 mm	24'9"
Long Undercarriage	7450 mm	24'5"	7450 mm	24'5"	7040 mm	23'1"
Long Undercarriage with Blade	8010 mm	26'3"	8010 mm	26'3"	7600 mm	24'8"
3 Tail Swing Radius						
Standard Undercarriage	1490 mm	4'11"	1490 mm	4'11"	1490 mm	4'11"
Long Undercarriage	1530 mm	5'0"	1530 mm	5'0"	1530 mm	5'0"
4 Length to Center of Rollers						
Standard Undercarriage	2780 mm	9'1"	2780 mm	9'1"	2780 mm	9'1"
Long Undercarriage	3040 mm	10'0"	3040 mm	10'0"	3040 mm	10'0"
5 Track Length						
Standard Undercarriage	3490 mm	11'5"	3490 mm	11'5"	3490 mm	11'5"
Long Undercarriage	3750 mm	12'4"	3750 mm	12'4"	3750 mm	12'4"
6 Ground Clearance	440 mm	1'5"	440 mm	1'5"	440 mm	1'5"
7 Track Gauge	1990 mm	6'6"	1990 mm	6'6"	1990 mm	6'6"
8 Transport Width						
500 mm (20") Shoes	2490 mm	8'2"	2490 mm	8'2"	2490 mm	8'2"
600 mm (24") Shoes	2590 mm	8'6"	2590 mm	8'6"	2590 mm	8'6"
700 mm (28") Shoes	2690 mm	8'10"	2690 mm	8'10"	2690 mm	8'10"
<b>9</b> Cab Height	2810 mm	9'3"	2810 mm	9'3"	2810 mm	9'3"
Cab Height with Top Guard	2950 mm	9'8"	2950 mm	9'8"	2950 mm	9'8"
10 Counterweight Clearance**	860 mm	2'10"	860 mm	2'10"	860 mm	2'10"

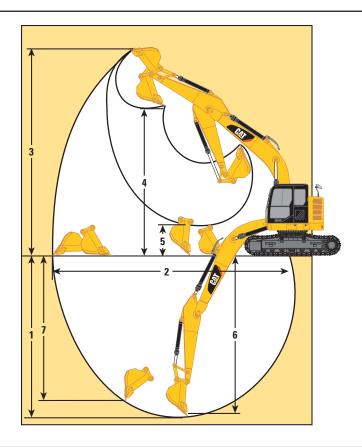
<sup>\*</sup>Including shoe lug height.

All dimensions were calculated with 900 mm (35") wide GD bucket with 0.53 m³ (0.69 yd³) capacity and 1200 mm (3'11") tip radius.

<sup>\*\*</sup>Without shoe lug height.

#### **Working Ranges**

All dimensions are approximate.

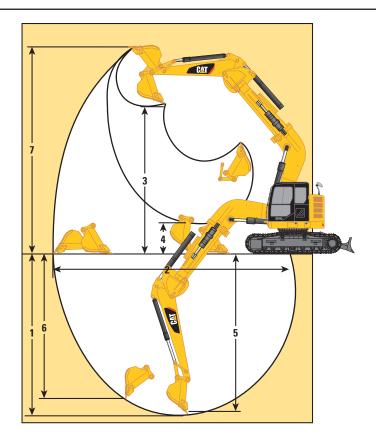


	Reach Boom 4.65 m (15'3")					
Stick	R3.0 m (9'10'')	="	R2.5 m (8'2")			
1 Maximum Digging Depth	5950 mm	19'6"	5450 mm	17'11"		
2 Maximum Reach at Ground Level	8680 mm	28'6"	8230 mm	27'0"		
3 Maximum Cutting Height	9640 mm	31'8"	9310 mm	30'7"		
4 Maximum Loading Height	7190 mm	23'7"	6860 mm	22'6"		
5 Minimum Loading Height	2060 mm	6'9"	2500 mm	8'2"		
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	5660 mm	18'7"	5160 mm	16'11"		
7 Maximum Vertical Wall Digging Depth	5280 mm	17'4"	4880 mm	16'0"		

All dimensions were calculated with 900 mm (35") wide GD bucket with 0.53 m³ (0.69 yd³) capacity and 1200 mm (3'11") tip radius.

#### **Working Ranges**

All dimensions are approximate.



			Power Offs	et Boom		
Stick	2.13 ı (6'11"		2.13 (6'11		2.13 m (6'11")**	
1 Maximum Digging Depth	4510 mm	14'10"	4840 mm	15'11"	4480 mm	14'8"
2 Maximum Reach at Ground Level	6890 mm	22'7"	7270 mm	23'10"	6850 mm	22'6"
3 Maximum Cutting Height	8110 mm	26'7"	8450 mm	27'9"	8070 mm	26'7"
4 Maximum Loading Height	5680 mm	18'8"	6020 mm	19'9"	5640 mm	18'6"
5 Minimum Loading Height	2330 mm	7'8"	2680 mm	8'10"	2290 mm	7'6"
<b>6</b> Maximum Depth Cut for 2440 mm (8'0") Level Bottom	4110 mm	13'6"	4450 mm	14'7"	4080 mm	13'5"
7 Maximum Vertical Wall Digging Depth	3270 mm	10'9"	3550 mm	11'8"	3240 mm	10'8"

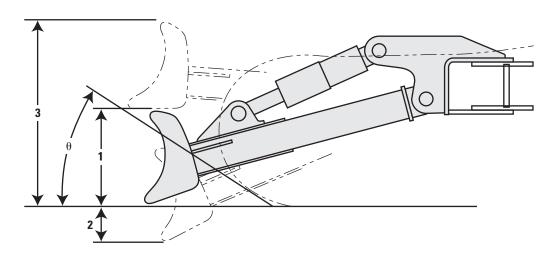
<sup>\*</sup>Left side 1100 mm (3'7") offset position

All dimensions were calculated with 900 mm (35") wide GD bucket with 0.53 m³ (0.69 yd³) capacity and 1200 mm (3'11") tip radius.

<sup>\*\*</sup>Right side 1150 mm (3'9") offset position

#### **Blade Working Ranges**

All dimensions are approximate.



Blade Options	2500 n (8'2"	2600 n (8'6"		2700 mm (8'10")		
Recommended Track Shoe Width		500 mm (20")		m )	700 mm (28")	
1 Blade Height	630 mm	2'1"	630 mm	2'1"	630 mm	2'1"
2 Maximum Lowering Depth from Ground	570 mm	1'10"	570 mm	1'10"	570 mm	1'10"
3 Maximum Raising Height above Ground	1000 mm	3'3"	1000 mm	3'3"	1000 mm	3'3"
Approach Angle						
Standard Undercarriage	23.3 deg	23.3 degrees		grees	23.3 degrees	
Long Undercarriage	24.9 des	24.9 degrees		24.9 degrees		rees

### **Major Component Weights**

Base Machine (with boom cylinder, without counterweight, front linkage and track)	5040 kg	11,110 lb
Undercarriage	2660 kg	5,870 lb
Standard Undercarriage	2440 kg	5,380 lb
Long Undercarriage	2660 kg	5,870 lb
Counterweight		
Long Undercarriage – 3.56 mt (3.9 t)	3560 kg	7,850 lb
Standard Undercarriage – 2.19 mt (2.4 t)	2190 kg	4,830 lb
Boom (includes lines, pins and stick cylinder)		
Reach Boom – 4.65 m (15'3")	1040 kg	2,290 lb
Power Offset Boom	1730 kg	3,810 lb
Reach Boom for CGC – 4.65 m (15'3")	1050 kg	2,320 lb
Stick (includes lines, pins, bucket cylinder and bucket linkage)		
R3.0 m (9'10")	650 kg	1,430 lb
R2.5 m (8'2")	570 kg	1,260 lb
2.13 m (6'11") for Power Offset Boom	570 kg	1,260 lb
R3.0 m (9'10") for CGC	650 kg	1,430 lb
Track Shoe		
Standard/per two tracks		
500 mm (20") Triple Grouser	1460 kg	3,220 lb
600 mm (24") Triple Grouser	1700 kg	3,750 lb
700 mm (28") Triple Grouser	1960 kg	4,320 lb
Long/per two tracks		
500 mm (20") Triple Grouser	1570 kg	3,460 lb
600 mm (24") Triple Grouser	1820 kg	4,010 lb
700 mm (28") Triple Grouser	2090 kg	4,610 lb
Blade		
2500 mm (8'2")	810 kg	1,790 lb
2600 mm (8'6")	810 kg	1,790 lb
2700 mm (8'10")	820 kg	1.810 lb

All weights are rounded up to nearest 10 kg and lb. Kg and lb were rounded up separately so some of the kg and lb do not match. Base machine includes 75 kg (170 lb) operator weight, 90% fuel weight, and undercarriage with center guard.

### **Operating Weight and Ground Pressure**

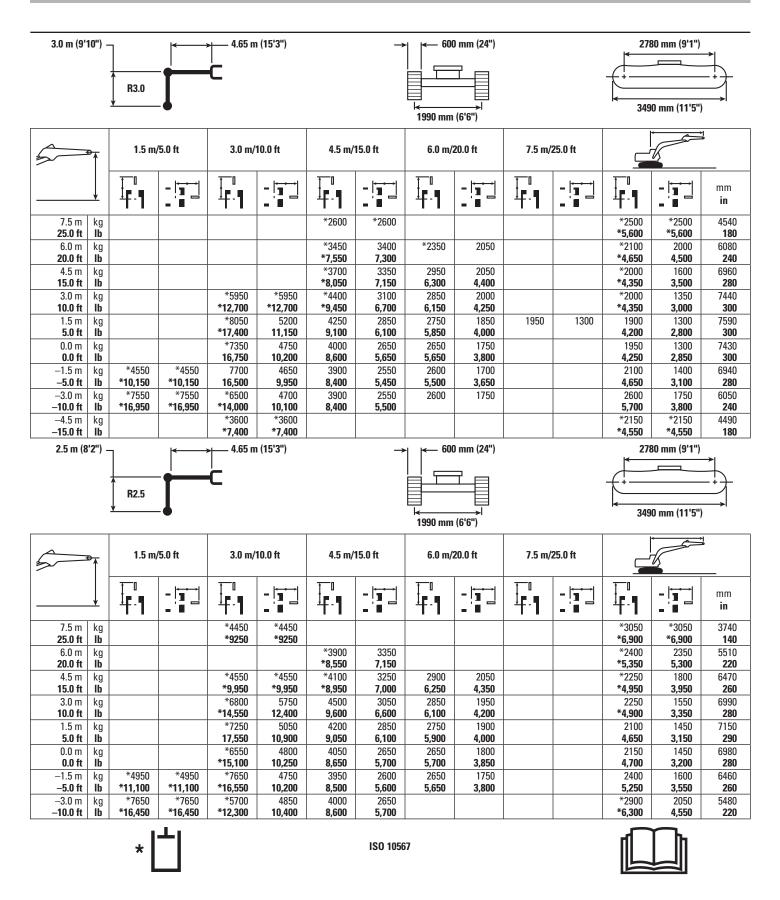
	т	700 mm (28") Triple Grouser Shoes		т	600 mm (24") Triple Grouser Shoes			500 mm (20") Triple Grouser Shoes			s	
	kg	lb	kPa	psi	kg	lb	kPa	psi	kg	lb	kPa	psi
Standard Undercarriage without	Blade											
Reach Boom – 4.65 m (15'3")												
R3.0 m (9'10")	13 800	30,400	31.9	46.00	13 600	30,000	36.7	53.00	13 300	29,300	43.0	62.00
R2.5 m (8'2")	13 800	30,400	31.9	46.00	13 500	29,800	36.4	53.00	13 300	29,300	43.0	62.00
Standard Undercarriage with Bla	de											
Reach Boom – 4.65 m (15'3")												
R3.0 m (9'10")	14 700	32,400	34.0	49.00	14 400	31,700	38.8	56.00	14 200	31,300	46.0	67.00
R2.5 m (8'2")	14 600	32,200	33.7	49.00	14 300	31,500	38.6	56.00	14 100	31,100	45.6	66.00
Power Offset Boom												
2.13 m (6'11")	15 200	33,500	35.1	51.00	15 000	33,100	40.4	59.00	14 700	32,400	47.6	69.00
Long Undercarriage without Blad	le											
Reach Boom – 4.65 m (15'3")												
R3.0 m (9'10")	15 600	34,400	33.2	4.82	15 300	33,700	38.0	5.51	15 100	33,300	45.0	6.53
R2.5 m (8'2")	15 500	34,200	33.0	4.79	15 200	33,500	37.7	5.47	15 000	33,100	44.7	6.48
Long Undercarriage with Blade												
Reach Boom – 4.65 m (15'3")												
R3.0 m (9'10")	16 400	36,200	34.9	5.06	16 100	35,500	40.0	5.80	15 900	35,100	47.4	6.87
R2.5 m (8'2")	16 300	35,900	34.7	5.03	16 100	35,500	40.0	5.80	15 800	34,800	47.1	6.83
Power Offset Boom												
2.13 m (6'11")	17 000	37,500	36.2	5.25	16 700	36,800	41.4	6.00	16 400	36,200	48.8	7.08

#### **Bucket and Stick Forces**

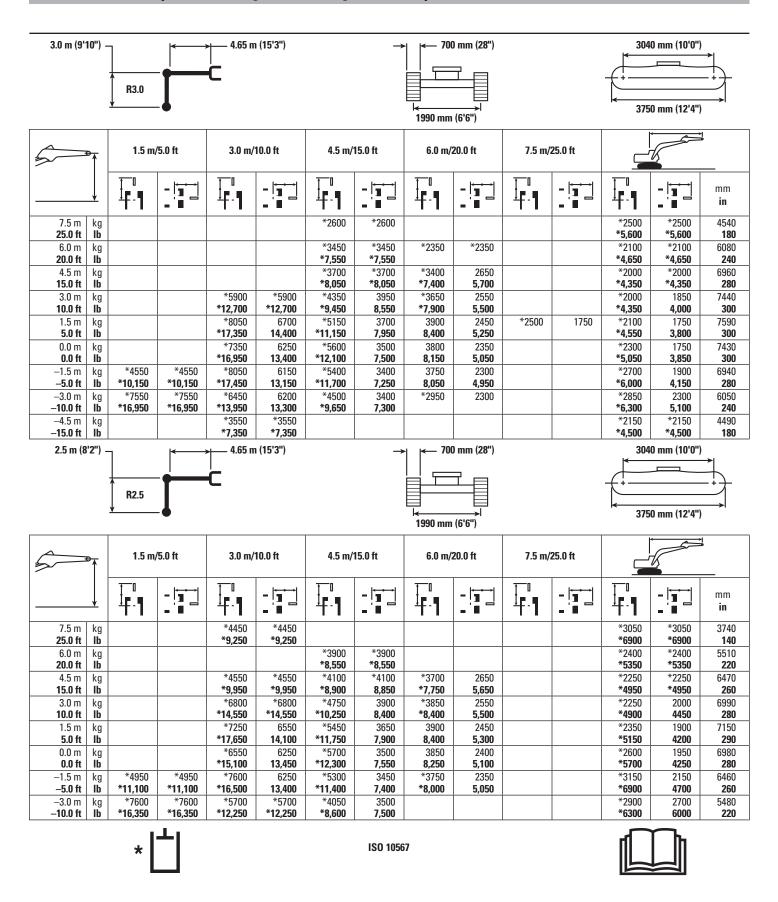
		Power Offset Boom				
Stick	R3.0 ı	R2.5	m (8'2")	2.13 m (6'11")		
General Duty						
Bucket Digging Force SAE)	85 kN	19,200 lbf	85 kN	19,200 lbf	78 kN	17,500 lbf
Stick Digging Force (SAE)	57 kN	12,800 lbf	64 kN	14,300 lbf	61 kN	13,700 lbf
Severe Duty						
Bucket Digging Force (SAE)	84 kN	18,800 lbf	83 kN	18,700 lbf	77 kN	17,200 lbf
Stick Digging Force (SAE)	57 kN	12,800 lbf	63 kN	14,200 lbf	61 kN	13,700 lbf

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.

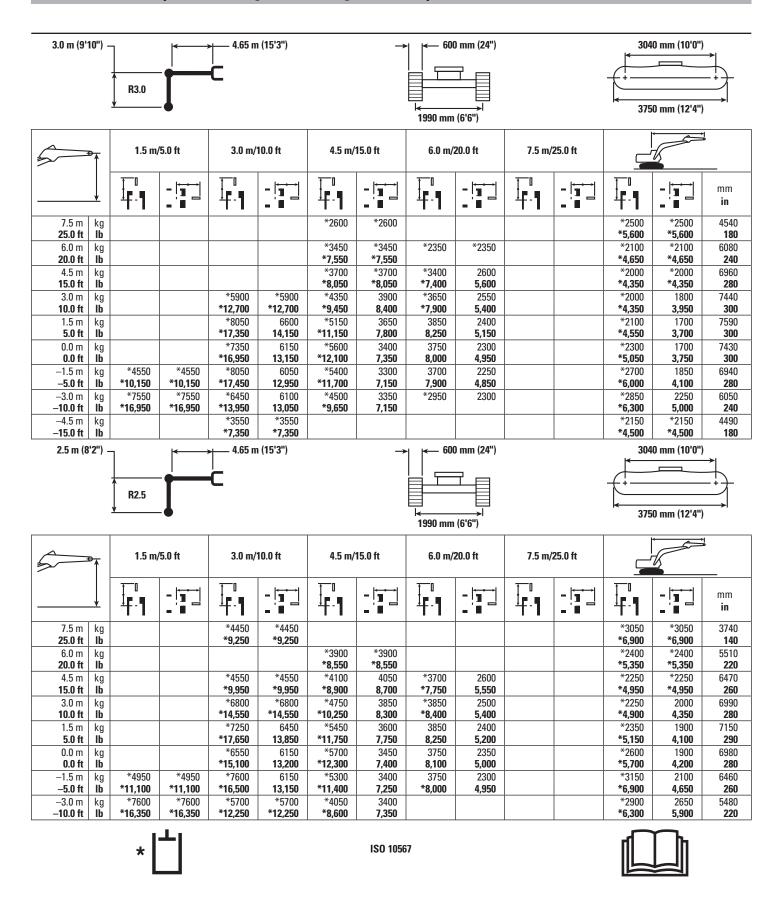
#### Reach Boom Lift Capacities - Standard Undercarriage - Blade Up/None



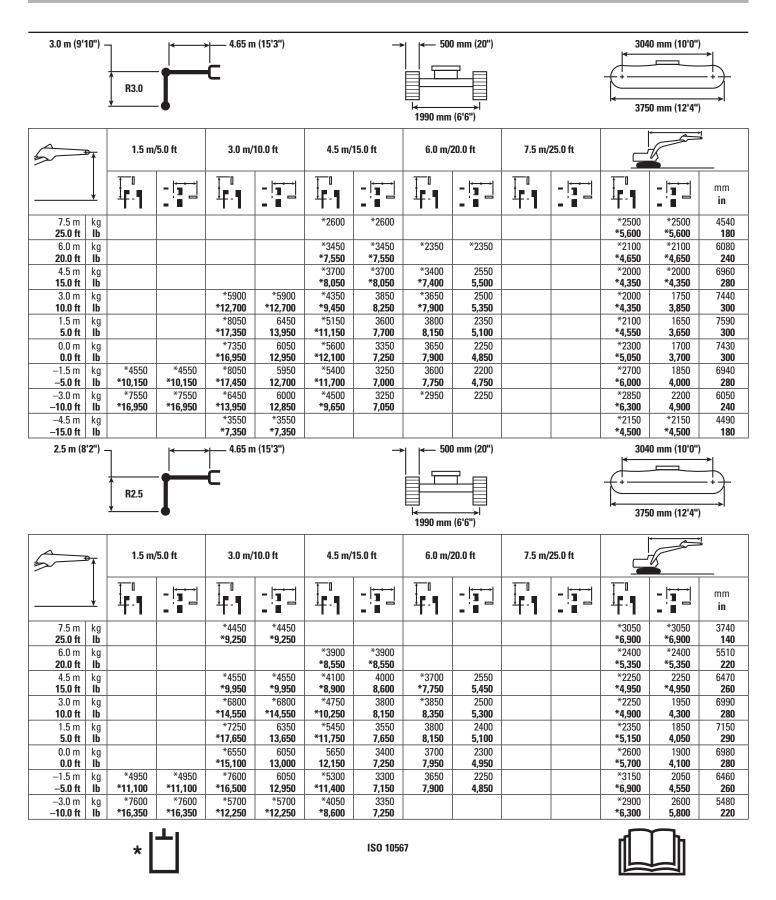
#### Reach Boom Lift Capacities - Long Undercarriage - Blade Up/None



#### Reach Boom Lift Capacities - Long Undercarriage - Blade Up/None



#### Reach Boom Lift Capacities – Long Undercarriage – Blade Up/None



#### **Work Tool Offering Guide\***

Boom Type	Reach	Boom
Stick Size	R3.0 m (9'10")	R2.5 m (8'2")
Hydraulic Hammer	H110Es H115Es	H110Es H115Es
Demolition and Sorting Grapple	G310B***#	G310B** ###
Mobile Scrap and Demolition Shear	S320B##	S320B##
Compactor (Vibratory Plate)	CVP75	CVP75
Contractors' Grapple	G112B	G112B
Orange Peel Grapple		
Trash Grapple		
Thumbs	These work tools are available	for the 314E CR/314E L CR.
Rakes	Consult your Cat dea	aler for proper match.
Center-Lock Pin Grabber Coupler		
Dedicated Quick Coupler		

<sup>\*</sup> 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.

#Over the front only

## Boom Mount

### Over the frint only with CW coupler

<sup>\*\*</sup> Pin-on or CW coupler

<sup>\*\*\*</sup> Pin-on only

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

	Width		Capacity		Weight		Fill Reach		Booms	POB**
	mm	in	m³	yd³	kg	lb	%	R3.0 m (9'10")	R2.5 m (8'2")	2.13 m (6'11")
314E CR with Center-Lock Quick Co	upler									,
General Duty (GD)	450	18	0.20	0.27	235	518	100	•	•	•
	500	20	0.24	0.31	285	628	100	•	•	•
	600	24	0.31	0.40	308	679	100	•	•	•
	750	30	0.41	0.54	355	783	100	•	•	•
	900	36	0.53	0.69	404	890	100	•	•	•
	1050	42	0.65	0.84	452	996	100	$\Theta$	•	•
	1200	48	0.76	1.00	492	1084	100	0	$\Theta$	$\Theta$
Maximum load pin-on (payload + bucket)							kg	1439	1659	1609
							lb	3,172	3,657	3,547

	Wi	Width		Capacity		Weight		Reach Booms		POB**
	mm	in	m³	yd³	kg	lb	%	R3.0 m (9'10")	R2.5 m (8'2")	2.13 m (6'11")
314E L CR with Center-Lock Qu	iick Coupler									
General Duty (GD)	450	18	0.20	0.27	235	518	100	•	•	•
	500	20	0.24	0.31	285	628	100	•	•	•
	600	24	0.31	0.40	308	679	100	•	•	•
	750	30	0.41	0.54	355	783	100	•	•	•
	900	36	0.53	0.69	404	890	100	•	•	•
	1050	42	0.65	0.84	452	996	100	$\Theta$	•	•
	1200	48	0.76	1.00	492	1084	100	0	$\Theta$	•
Maximum load pin-on (payload + bucket)							kg	1479	1699	1974
							lh	3 260	3 745	4 351

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 Long tips.

\*Densities with 3.0 m (9'10") thumb stick do not consider thumb weight.

#### **Maximum Material Density:**

- 2100 kg/m³ (3,500 lb/yd³)
- 1800 kg/m³ (3,000 lb/yd³)
- → 1500 kg/m³ (2,500 lb/yd³)
- O 1200 kg/m³ (2,000 lb/yd³)

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<sup>\*\*</sup>POB installs blade as standard configuration.

### 314E CR/314E L CR Standard Equipment

#### **Standard Equipment**

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

#### CAB

- Seat, high-back air suspension with heater and cooling
- Pressurized operator station with positive filtration
- Sliding upper door window (left-hand cab door)
- Removable lower windshield with in cab storage bracket
- · Coat hook
- · Beverage holder
- · Literature holder
- AM/FM Radio with MP3 auxiliary audio port
- Two stereo speakers
- Storage shelf suitable for lunch or toolbox
- Color LCD display with indicators, filter/fluid change, and working hour information
- Adjustable armrest
- · Height adjustable joystick consoles
- Neutral lever (lock out) for all controls
- Travel control pedals with removable hand levers
- Capability of installing additional pedal
- Power outlets, 5 amp
- Travel alarm
- Laminated glass front upper window and tempered other windows
- Cab mirror
- Level sensor

#### **COUNTERWEIGHT**

- 2.19 mt (2.4 t) without lifting eye for standard undercarriage
- 3.56 mt (3.9 t) without lifting eye for long undercarriage

#### **ELECTRICAL**

- 80 amp alternator
- · Circuit breaker
- Capability to electrically connect a beacon

#### **ENGINE**

- C4.4 diesel engine
- · Biodiesel capable
- Meets EPA Tier 4 Interim emission standards
- 2300 m (7,500 ft) altitude capability
- Electric priming pump
- Automatic engine speed control
- · Economy and high power modes
- Two-speed travel
- Side-by-side cooling system
- Radial seal air filter
- Primary filter with water separator and water separator indicator
- · Secondary filter
- Screen filter in fuel line
- Variable speed fan with viscous clutch
- · Quick drains, engine and hydraulic oil

#### **HYDRAULIC SYSTEM**

- Regeneration circuit for boom and stick
- · Reverse swing dampening valve
- · Automatic swing parking brake
- High-performance hydraulic return filter
- Capability of installing HP stackable valve and medium and QC valve
- Capability of installing additional auxiliary pump and circuit
- Boom lowering and stick lowering control device

#### **LIGHTS**

- Halogen boom light (left side)
- Time delay function for boom light and cab light
- · Exterior light

#### **UNDERCARRIAGE**

- Center track guiding guard for long undercarriage
- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame
- · Swivel guard

#### **SECURITY**

- Cat one key security system
- Door locks
- Cap locks on fuel and hydraulic tanks
- Lockable external tool/storage box
- Signaling/warning horn
- · Secondary engine shutoff switch
- Rear window for emergency exit
- Guard, travel motor protection
- · Guard rail
- · Rearview camera

### 314E CR/314E L CR Optional Equipment

#### **Optional Equipment**

Optional equipment may vary. Consult your Cat dealer for details.

#### **CAB**

- Right pedal
- Cab mirror
- Ashtray

#### **ELECTRICAL**

• Cold weather battery –25° C (–13° F)

#### **ENGINE**

• Radiator Screen

#### **FRONT LINKAGE**

- Quick coupler
- 4.65 m (15'3") Reach Boom
- Power Offset Boom
- 2.13 m (6'11") stick for Power Offset Boom
- 2.5 m (8'2") stick
- 3.0 m (9'10") stick

#### **HYDRAULIC SYSTEM**

- Control pattern quick-changer, two way
- · Auxiliary hydraulics
- · Boom and stick lines
- High-pressure line
- Medium-pressure line
- · Quick coupler line
- · Cat Bio hydraulic oil

#### **LIGHTS**

- Working light, cab mounted with time delay
- HID light, cab mounted with time delay
- Halogen boom lights (right side)

#### **UNDERCARRIAGE**

- 500 mm (20") triple grouser shoes
- 600 mm (24") triple grouser shoes
- 700 mm (28") triple grouser shoes
- Rubber pad for 500 mm (20") triple grouser shoes
- 2500 mm (8'2") blade with replaceable cutting edge
- 2600 mm (8'6") blade with replaceable cutting edge
- 2700 mm (8'10") blade with replaceable cutting edge
- Segmented (2 piece) track guiding guard

#### **SECURITY**

- FOGS, bolt-on
- · Guard, vandalism
- Security system fitted (MSS)
- Bottom guards, heavy duty

#### **TECHNOLOGY**

- Cat Grade Control Depth and Slope
- Product Link

### Notes

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com** 

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AEHQ7095 (09-2013)

