318E Hydraulic Excavator





Engine		
Engine Model	Cat® C4.4 A	CERT™
Net Power – SAE J1349	85 kW	113 hp
Drive		
Maximum Travel Speed	3.9 km/h	2.4 mph
Maximum Drawbar Pull	206.9 kN	46,510 lbf

V	V	е	g	h	ts	

iviinimum Operating vveignt	18 600 Kg	41,01010
Maximum Operating Weight	19 200 kg	42,340 lb

If you are looking for a productive, fuel-efficient, easy-to-operate-and-transport 18 metric ton machine with lower emissions, you will find it in the all-new 318E. Built to meet today's U.S. EPA Tier 4 Interim emission standards, the 318E makes an excellent choice for people who need a well-balanced utility machine that delivers power and fuel economy in an easy-to-transport package. In fact, this new model comes equipped with several new features and benefits that will delight both you and your operators.

	nts

Engine	4
Hydraulics	6
Operator Station	8
Structures & Undercarriage	9
Work Tools	10
Front Linkage	12
ntegrated Technologies	13
Serviceability	14
Safety	15
Complete Customer Care	16
Sustainability	17
Specifications	18
Standard Equipment	27
Optional Equipment	28





Since its introduction in the 1990s, the 300 Series family of excavators has become the industry standard for production and performance. The all-new E Series and the 318E continue that trend-setting standard.





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 318E 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 engine speed low during light loading 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 resale value.

Biodiesel-Ready Fuel System

You have added flexibility with the C4.4 ACERT engine because it's equipped to run 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

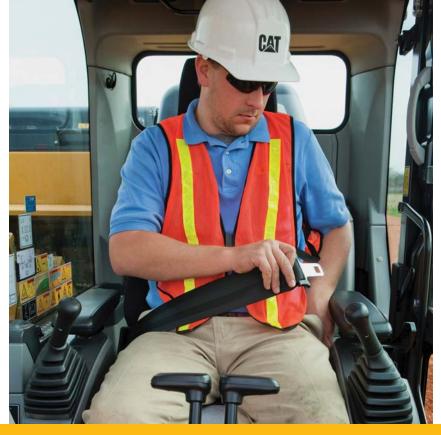
One of the biggest contributors to your productivity and fuel savings is a well-designed hydraulic system, and this is where Cat excavators stand apart. The 318E is loaded with several unique features that will put more power to the ground with less money out of your pocket.

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.





Seats

Three seat options help give your operators all the comfort they need for a long day of work. Air suspension, heated, and air-cooled seats are available. All seats include a reclining back, upper and lower seat slide adjustments, and height and tilt angle adjustments.

Operator Station

Your operators will enjoy the incredibly quiet and comfortable cab.

Controls

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

Monitor

Your operators can keep safely focused on the job at hand with a high-resolution LCD monitor (1) that is programmable in 44 languages to support today's diverse workforce. It also projects the image from the rearview camera, further enhancing your job site safety and productivity.

Power Supply and Auxiliary Audio Port

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

Storage

Your operators can store their gear in storage spaces located in the front, rear, and side consoles. 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.

Automatic Climate Control

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

Frame

You can expect excellent quality, reliability, and durability with the 318E's reinforced lower and upper frames (1). Both are built to handle a hard day's work over and over again.

Undercarriage

Long undercarriage (2) supports any type of work you can do with an 18 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

Whether you're on flat ground hogging dirt or on a slope surgically placing rip rap over drainage pipe, the 3.4 mt (3.8 t) counterweight (3) provides plenty of weight out back to keep you balanced and productive. With integrated links, you can also easily – and safely – remove the counterweight for maintenance or shipping.







Structures & Undercarriage

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



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. The Cat Center-LockTM pin grabber coupler features a patented locking system and highly visible lock. You can clearly see when the coupler is engaged or disengaged from the attachment.

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. Field-installed hydraulic kits are uniquely designed to integrate any Cat work tool with your 318E.

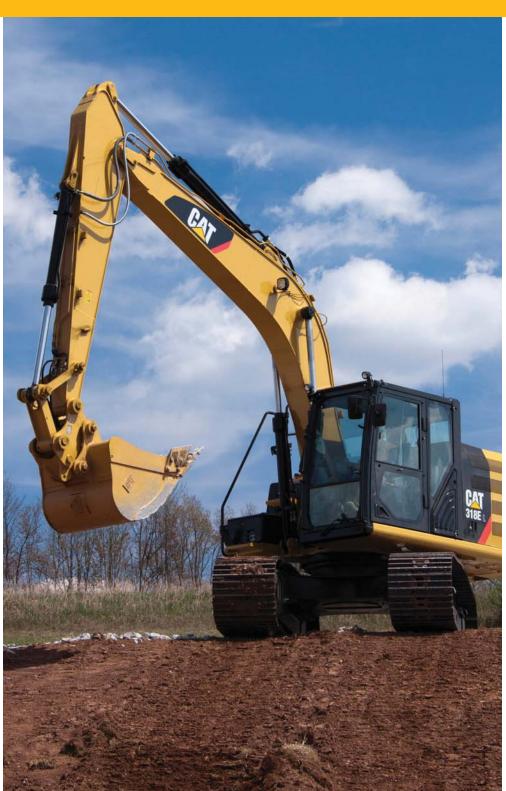
Buckets: Dig, Move, Load

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.



Front Linkage

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



Your uptime and service intervals are increased with high quality, durable, and reliable booms, sticks, and linkage pins. Each boom and stick is built with internal baffle plates for additional durability, and each undergoes ultrasound inspection to ensure the expected Cat durability and reliability for any tough application you might take on.

A reach boom and a choice of two stick configurations provide all the utility you need. The R3.1 m (10'2") stick is best for when you need deep trenching, longer reach, and excellent truck loading capabilities. The R2.6 m (8'6") stick provides greater breakout force and increases productivity when you primarily plan on using hydromechanical work tools.



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.

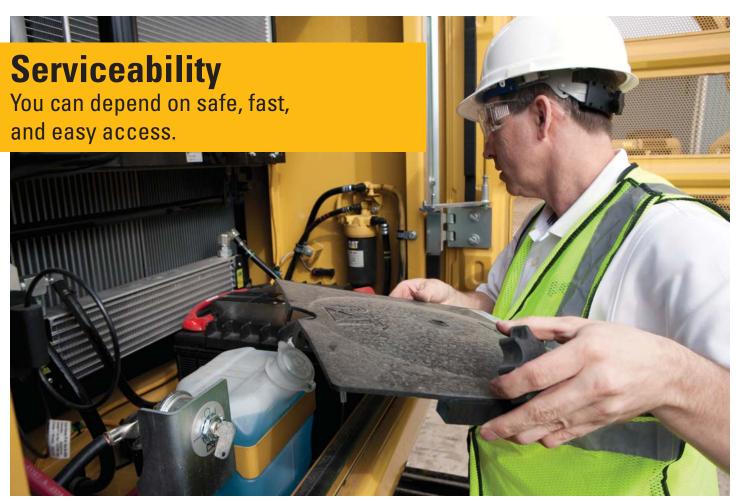
For enhanced site features and more complex designs, Cat Grade Control Depth and Slope can be upgraded with Cat AccuGrade™ components like GPS and Universal Total Station (UTS). These positioning technologies



interface with site infrastructure to allow your operators to know exactly where the bucket tip is in regards to an engineer's digital design, which saves your operators benching time and improves their productivity and accuracy.

Cat Product Link

You can monitor and improve your fleet management with Cat Product LinkTM. 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 LinkTM. 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, and the air-to-air aftercooler swings up and A/C condenser swings out of the way to make cleaning cores easy — a major service convenience.

Other Service Benefits

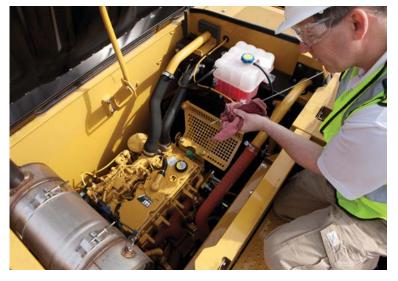
The engine oil dipstick is conveniently located in the front of the engine compartment.

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

Risk of overfilling the fuel tank is significantly reduced with an integrated fuel level indicator.











Several built-in features will help protect your people.

Roll-Over Protective Structure (ROPS) Cab

Your operators will benefit from the enhanced 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 guard rails 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 lights (1) for greater visibility in low-light conditions.

Windows

You can easily store both the upper and lower windows (2) in the cab. Your overhead visibility and lighting are enhanced with a large skylight that can double as an emergency exit.

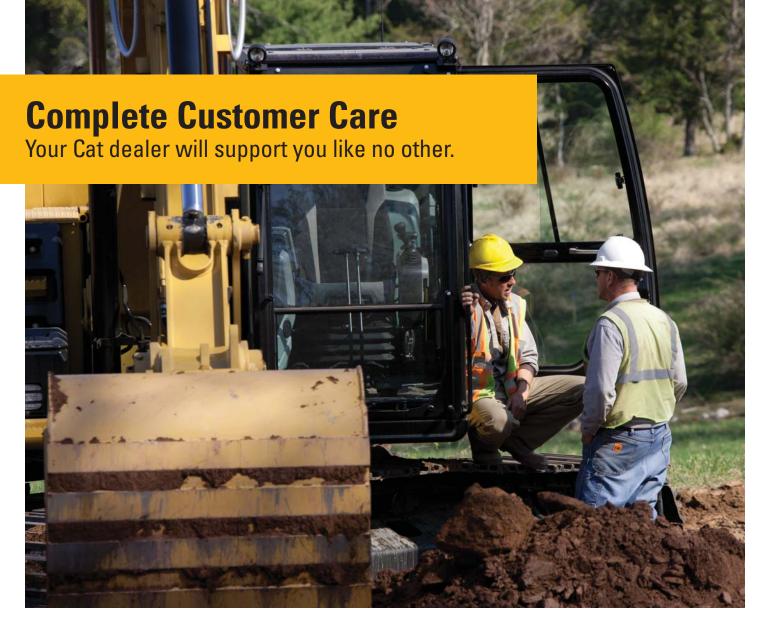
Rearview Camera

Your operator has a clear view behind the machine through the monitor with an optional rearview camera, which is integrated in the counterweight for enhanced protection.









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 unique Cat 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 your operators' techniques. Your Cat dealer has videos, literature, and other ideas to help 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 benefit generations ahead.

- The 318E is an efficient, productive machine that's designed to conserve your financial resources for generations ahead.
- The C4.4 ACERT engine ensures you meet U.S. EPA Tier 4 Interim emission standards.
- The 318E 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.
- You can ensure fast, easy, and secure changing of engine and hydraulic oil with the QuickEvacTM option.
- A unique engine oil filter eliminates the need for painted metal cans and aluminum top plates. The cartridgestyle spin-on housing enables the internal filter to be separated and replaced; the used internal element can be incinerated to help reduce waste.







318E Hydraulic Excavator Specifications

Engine		
Engine Model	Cat C4.4 A	CERT
Net Power – SAE J1349	85 kW	113 hp
Gross Power – SAE J1995	90 kW	120 hp
Bore	105 mm	4.13 in
Stroke	127 mm	5.00 in
Displacement	4.4 L	269 in ³

Weights			
Minimum Operating Weight*	18 600 kg	41,010 lb	
Maximum Operating Weight**	19 200 kg	42,340 lb	

- *5.1 m (16'9") reach boom, 2.6 m (8'6") stick, 3.4 mt (3.8 t) counterweight, GD 0.91 m³ (1.19 yd³), 1200 mm (48") wide bucket with 1380 mm (4'5") tip radius, and 500 mm (20") shoes.
- **5.1 m (16'9") reach boom, 3.1 m (10'2") stick, 3.4 mt (3.8 t) counterweight, GD 0.91 m³ (1.19 yd³), 1200 mm (48") wide bucket with 1380 mm (4'5") tip radius, and 700 mm (28") shoes.

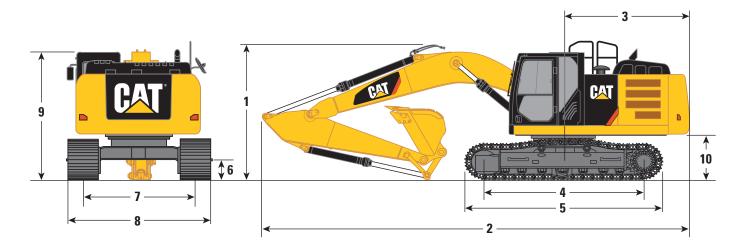
Hydraulic System		
Main System – Maximum Flow (Total)	300 L/min	79 gal
Swing System – Maximum Flow	150 L/min	40 gal
Maximum Pressure – Equipment (Boom Up)	35 000 kPa	5,080 psi
Maximum Pressure – Equipment (Other)	32 000 kPa	4,640 psi
Maximum Pressure – Travel	35 000 kPa	5,080 psi
Maximum Pressure – Swing	23 000 kPa	3,340 psi
Pilot System – Maximum Flow	26.1 L/min	1,590 in ³ /min
Pilot System – Maximum Pressure	4120 kPa	600 psi
Boom Cylinder – Bore	110 mm	4 in
Boom Cylinder – Stroke	1193 mm	47 in
Stick Cylinder – Bore	130 mm	5 in
Stick Cylinder – Stroke	1331 mm	52 in
Bucket Cylinder – Bore	110 mm	4 in
Bucket Cylinder – Stroke	1039 mm	41 in

D :		
Drive		
Maximum Travel Speed	3.9 km/h	2.4 mph
Maximum Drawbar Pull	206.9 kN	46,510 lb
Swing Mechanism		
Swing Speed	8.85 rpm	
Swing Torque	50.7 kN·m	37,390 lb-ft
Service Refill Capacities		
Fuel Tank Capacity	290 L	76 gal
Cooling System	24 L	6.3 gal
Engine Oil (with filter)	13.5 L	3.6 gal
Swing Drive	8 L	2.1 gal
Final Drive (each)	8 L	2.1 gal
Hydraulic System (including tank)	121 L	32 gal
Hydraulic Tank	106 L	28 gal
Track		
Number of Shoes (each side)	45 pieces	
Number of Track Rollers (each side)	7 pieces	
Number of Carrier Rollers (each side)	2 pieces	
Sound		
Operator – ISO 6396	71 dB(A)	
Spectator – ISO 6395	101 dB(A)	

- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at the time of manufacture.
- 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.

Dimensions

All dimensions are approximate.



		Reach Boom 5.1 m (16'9")			
Stick	R3.1 (10'2		R2.6 (8'6		
1 Shipping Height*	3390 mm	11'1"	3100 mm	10'2"	
Shipping Height at Boom Top	3390 mm	11'1"	3040 mm	10'0"	
Shipping Height with Guard Rail	3100 mm	10'2"	3100 mm	10'2"	
Shipping Height with Top Guard	3100 mm	10'2"	3100 mm	10'2"	
2 Shipping Length	8580 mm	28'2"	8570 mm	28'1"	
3 Tail Swing Radius	2500 mm	8'2"	2500 mm	8'2"	
4 Length to Center of Rollers	3265 mm	10'9"	3265 mm	10'9"	
5 Track Length	4075 mm	13'4"	4075 mm	13'4"	
6 Ground Clearance	440 mm	1'5"	440 mm	1'5"	
7 Track Gauge	1990 mm	6'6"	1990 mm	6'6"	
8 Transport Width					
500 mm (20") Shoes	2520 mm	8'3"	2520 mm	8'3"	
600 mm (24") Shoes	2590 mm	8'6"	2590 mm	8'6"	
700 mm (28") Shoes	2690 mm	8'10"	2690 mm	8'10"	
9 Cab Height	2890 mm	9'6"	2890 mm	9'6"	
Cab Height with Top Guard	3100 mm	10'2"	3100 mm	10'2"	
10 Counterweight Clearance**	1010 mm	3'4"	1010 mm	3'4"	

^{*}Including shoe lug height.

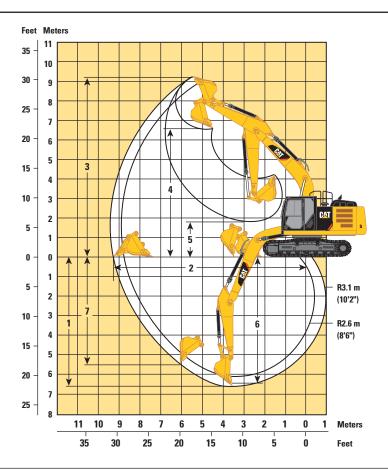
Reach boom dimensions were calculated with 1200 mm (48") width, GD 0.91 m³ (1.19 yd³ bucket) with 1380 mm (4'5") tip radius.

^{**}Without shoe lug height.

318E Hydraulic Excavator Specifications

Working Ranges

All dimensions are approximate.



		Reach Boom 5.1 m (16'9")			
Stick	R3.1 (10'2		R2.6 (8'6		
1 Maximum Digging Depth	6590 mm	21'7"	6090 mm	20'0"	
2 Maximum Reach at Ground Level	9260 mm	30'5"	8780 mm	28'10"	
3 Maximum Cutting Height	9220 mm	30'3"	8930 mm	29'4"	
4 Maximum Loading Height	6570 mm	21'7"	6280 mm	20'7"	
5 Minimum Loading Height	1810 mm	5'11"	2310 mm	7'7"	
6 Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6400 mm	21'0"	5860 mm	19'3"	
7 Maximum Vertical Wall Digging Depth	5390 mm	17'8"	4920 mm	16'2"	

Reach boom dimensions were calculated with 1200 mm (48") width, GD 0.91 m³ (1.19 yd³ bucket) with 1380 mm (4'5") tip radius.

Major Component Weights

Base Machine (with boom cylinder, without counterweight, front linkage and track)	5900 kg	12,860 lb
Long Undercarriage	3930 kg	8,670 lb
Counterweight	3400 kg	7,500 lb
Boom (includes lines, pins and stick cylinder)		
Reach Boom – 5.1 m (16'9")	1500 kg	3,310 lb
Reach Boom for CGC – 5.1 m (16'9")	1500 kg	3,310 lb
Stick (includes lines, pins and bucket cylinder)		
R3.1 m (10'2")	1000 kg	2,210 lb
R2.6 m (8'6")	910 kg	2,010 lb
R3.1 m (10'2") for CGC	1010 kg	2,230 lb
Track Shoe (Long/per two tracks)		
500 mm (20") Triple Grouser	2240 kg	4,940 lb
600 mm (24") Triple Grouser	2480 kg	5,470 lb
700 mm (28") Triple Grouser	2710 kg	5,980 lb

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.

Operating Weight and Ground Pressure

	т	700 mm riple Grous		s	Т	600 mm riple Grous		s	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 m (10'2")	19 200	42,330	38	5.51	19 000	41,890	44	6.38	18 700	41,230	52	7.54	
R2.6 m (8'6")	19 100	42,110	38	5.51	18 900	41,670	43	6.24	18 600	41,010	52	7.54	

Bucket and Stick Forces

	Reach Boom 5.1 m (16'9")								
Stick	R3.1 n	n (10'2")	R2.6 r	n (8'6")					
General Duty									
Bucket Digging Force (SAE)	109 kN	24,400 lb	109 kN	24,400 lb					
Stick Digging Force (SAE)	74 kN	16,700 lb	83 kN	18,600 lb					
Severe Duty									
Bucket Digging Force (SAE)	107 kN	24,100 lb	107 kN	24,100 lb					
Stick Digging Force (SAE)	74 kN	16,700 lb	82 kN	18,400 lb					

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.

318E Hydraulic Excavator Specifications

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 5.1 m (19'9")

Counterweight - 3.4 mt (3.8 t)

Bucket - None

Stick - R3.1 m (10'2")

Shoes - 700 mm (28") triple grouser with step

		1.5 m/	/5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
	_													m ft
7.5 m 25.0 ft	kg lb											*2700 *6,000	*2700 *6,000	5.50 17.60
6.0 m 20.0 ft	kg lb							*3600 *7,850	*3600 *7,850			*2400 *5,300	*2400 *5,300	6.76 21.98
4.5 m 15.0 ft	kg lb							*3800 *8,300	3750 8,050	*2400	*2400	*2350 *5,100	*2350 *5,100	7.52 24.59
3.0 m 10.0 ft	kg Ib			*7350 *15,650	*7350 *15,650	*5200 *11,200	*5200 *11,200	*4350 *9,450	3600 7,700	*3750 *7,450	2550 5,400	*2350 *5,200	2300 5,050	7.93 25.99
1.5 m 5.0 ft	kg Ib			*8100 *19,450	*8100 *19,450	*6600 *14,200	5050 10,900	*5050 *10,900	3400 7,250	4100 8,750	2450 5,250	*2500 *5,500	2200 4,800	8.03 26.36
Ground Line	kg Ib			*7200 *16,550	*7200 *16,550	*7550 *16,350	4800 10,250	5550 11,850	3250 6,950	4000 8,600	2350 5,050	*2800 *6,100	2200 4,850	7.85 25.76
−1.5 m −5.0 ft	kg Ib	*5450 *12,150	*5450 *12,150	*10 050 *22,850	8500 18,250	*7900 *17,100	4650 10,000	5450 11,700	3150 6,750			*3300 *7,300	2400 5,300	7.36 24.12
−3.0 m − 10.0 ft	kg Ib	*9050 *20,350	*9050 *20,350	*11 100 *23,950	8600 18,450	*7500 *16,200	4650 10,000	*5450 *11,650	3150 6,800			*4400 *9,850	2850 6,350	6.49 21.17
−4.5 m −15.0 ft	kg Ib			*8800 *18,700	*8800 *18,700	*5950 *12,500	4850 10,400					*5050 *11,100	4150 9,400	5.03 16.22

Boom – 5.1 m (19'9")

Counterweight - 3.4 mt (3.8 t)

Bucket - None

Stick - R2.6 m (8'6")

Shoes - 700 mm (28") triple grouser with step

		1.5 m/	/5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
	_													m ft
7.5 m 25.0 ft	kg lb					*7,500	*7,500					*3250 *7,250	*3250 *7,250	4.76 15.12
6.0 m 20.0 ft	kg Ib							*3500 *6,450	*3500 *6,450			*2850 *6,300	*2850 *6,300	6.19 20.06
4.5 m 15.0 ft	kg Ib					*4550 *9,850	*4550 *9,850	*4200 *9,200	3700 7,950			*2750 *6,050	*2750 *6,050	7.01 22.90
3.0 m 10.0 ft	kg Ib			*8750 *18,550	*8750 *18,550	*5800 *12,450	5400 11,650	*4750 *10,250	3550 7,650			*2800 *6,150	2550 5,600	7.44 24.40
1.5 m 5.0 ft	kg Ib					*7050 *15,250	5050 10,850	*5350 *11,550	3400 7,300	*3400	2450	*3000 *6,550	2450 5,350	7.56 24.80
Ground Line	kg Ib			*6750 *15,550	*6750 *15,550	*7850 *16,950	4800 10,300	5550 11,950	3250 7,000			*3350 *7,400	2450 5,400	7.36 24.16
−1.5 m −5.0 ft	kg Ib	*6200 *13,800	*6200 *13,800	*10 950 *24,950	8650 18,550	*7950 *17,200	4700 10,150	5500 11,800	3200 6,900			*4100 *9,100	2700 5,950	6.84 22.39
−3.0 m −10.0 ft	kg Ib	*10 750 *24,150	*10 750 *24,150	*10 500 *22,650	8800 18,850	*7250 *15,650	4750 10,250					*5250 *11,500	3350 7,450	5.88 19.18
−4.5 m −15.0 ft	kg Ib			7500 15,850	7500 15,850							5250 11,550	5250 11,550	4.22 13.48

^{*}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.

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 5.1 m (19'9")

Counterweight - 3.4 mt (3.8 t)

Bucket - None

Stick - R3.1 m (10'2")

Shoes - 600 mm (24") triple grouser with step

		1.5 m/	5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
	_													m ft
7.5 m 25.0 ft	kg Ib											*2700 *6,000	*2700 *6,000	5.50 17.60
6.0 m 20.0 ft	kg Ib							*3600 *7,850	*3600 *7,850			*2400 *5,300	*2400 *5,300	6.76 21.98
4.5 m 15.0 ft	kg Ib							*3800 *8,300	3700 7,950	*2400	*2400	*2350 *5,100	*2350 *5,100	7.52 24.59
3.0 m 10.0 ft	kg Ib			*7350 *15,650	*7350 *15,650	*5200 *11,200	*5200 *11,200	*4350 *9,450	3550 7,600	*3750 *7,450	2500 5,350	*2350 *5,200	2250 5,000	7.93 25.99
1.5 m 5.0 ft	kg Ib			*8100 *19,450	*8100 19,300	*6600 *14,200	5000 10,800	*5050 *10,900	3350 7,200	4050 8,650	2400 5,150	*2500 *5,500	2150 4,750	8.03 26.36
Ground Line	kg Ib			*7200 *16,550	*7200 *16,550	*7550 *16,350	4700 10,150	5450 11,700	3200 6,850	3950 8,450	2350 5,000	*2800 *6,100	2200 4,800	7.85 25.76
−1.5 m −5.0 ft	kg Ib	*5450 *12,150	*5450 *12,150	*10 050 *22,850	8400 18,000	*7900 *17,100	4600 9,850	5350 11,550	3100 6,650			*3300 *7,300	2350 5,200	7.36 24.12
−3.0 m −10.0 ft	kg Ib	*9050 *20,350	*9050 *20,350	*11 100 *23,950	8500 18,200	*7500 *16,200	4600 9,900	5400 11,600	3100 6,700			*4400 *9,850	2850 6,250	6.49 21.17
−4.5 m −15.0 ft	kg Ib			*8800 *18,700	8750 *18,700	*5950 *12,500	4750 10,300					*5050 *11,100	4100 9,300	5.03 16.22

Boom - 5.1 m (19'9")

Counterweight - 3.4 mt (3.8 t)

Bucket - None

Stick - R2.6 m (8'6")

Shoes - 600 mm (24") triple grouser with step

		1.5 m/	/5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
	_													m ft
7.5 m 25.0 ft	kg lb					*7,500	*7,500					*3250 *7,250	*3250 *7,250	4.76 15.12
6.0 m 20.0 ft	kg Ib							*3500 *6,450	*3500 *6,450			*2850 *6,300	*2850 *6,300	6.19 20.06
4.5 m 15.0 ft	kg Ib					*4550 *9,850	*4550 *9,850	*4200 *9,200	3650 7,850			*2750 *6,050	*2750 *6,050	7.01 22.90
3.0 m 10.0 ft	kg Ib			*8750 *18,550	*8750 *18,550	*5800 *12,450	5350 11,500	*4750 *10,250	3500 7,550			*2800 *6,150	2500 5,550	7.44 24.40
1.5 m 5.0 ft	kg Ib					*7050 *15,250	4950 10,700	*5350 *11,550	3350 7,200	*3400	2450	*3000 *6,550	2400 5,250	7.56 24.80
Ground Line	kg Ib			*6750 *15,550	*6750 *15,550	*7850 *16,950	4750 10,200	5500 11,800	3200 6,900			*3350 *7,400	2450 5,350	7.36 24.16
−1.5 m −5.0 ft	kg Ib	*6200 *13,800	*6200 *13,800	*10 950 *24,950	8550 18,300	*7950 *17,200	4650 10,000	5400 11,650	3150 6,800			*4100 *9,100	2700 5,900	6.84 22.39
−3.0 m −10.0 ft	kg Ib	*10 750 *24,150	*10 750 *24,150	*10 500 *22,650	8700 18,650	*7250 *15,650	4700 10,150					*5250 *11,500	3300 7,350	5.88 19.18
−4.5 m −15.0 ft	kg Ib			*7500 *15,850	*7500 *15,850							*5250 *11,550	*5250 *11,550	4.22 13.48

^{*}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.

318E Hydraulic Excavator Specifications

Reach Boom Lift Capacities



Load Point Height



Load at Maximum Reach



Load Radius Over Front



Load Radius Over Side

Boom - 5.1 m (19'9")

Counterweight - 3.4 mt (3.8 t)

Bucket - None

Stick - R3.1 m (10'2")

Shoes - 500 mm (20") triple grouser with step

		1.5 m/	5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/z	20.0 ft	7.5 m/z	25.0 ft			
	_													m ft
7.5 m 25.0 ft	kg Ib											*2700 *6,000	*2700 *6,000	5.50 17.60
6.0 m 20.0 ft	kg Ib							*3600 *7,850	*3600 *7,850			*2400 *5,300	*2400 *5,300	6.76 21.98
4.5 m 15.0 ft	kg Ib							*3800 *8,300	3650 7,850	*2400	*2400	*2350 *5,100	*2350 *5,100	7.52 24.59
3.0 m 10.0 ft	kg Ib			*7350 *15,650	*7350 *15,650	*5200 *11,200	*5200 *11,200	*4350 *9,450	3500 7,500	*3750 *7,450	2450 5,250	*2350 *5,200	2250 4,950	7.93 25.99
1.5 m 5.0 ft	kg Ib			*8100 *19,450	*8100 19,100	*6600 *14,200	4950 10,650	*5050 *10,900	3300 7,100	4000 8,550	2400 5,100	*2500 *5,500	2150 4,700	8.03 26.36
Ground Line	kg Ib			*7200 *16,550	*7200 *16,550	*7550 *16,350	4650 10,050	5400 11,600	3150 6,750	3900 8,350	2300 4,950	*2800 *6,100	2150 4,750	7.85 25.76
−1.5 m −5.0 ft	kg lb	*5450 *12,150	*5450 *12,150	*10 050 *22,850	8300 17,800	*7900 *17,100	4550 9,750	5300 11,400	3050 6,600			*3300 *7,300	2350 5,150	7.36 24.12
−3.0 m −10.0 ft	kg Ib	*9050 *20,350	*9050 *20,350	*11 100 *23,950	8400 18,000	*7500 *16,200	4550 9,800	5300 11,450	3100 6,650			*4400 *9,850	2800 6,200	6.49 21.17
−4.5 m −15.0 ft	kg Ib			*8800 *18,700	8700 18,650	*5950 *12,500	4700 10,200					*5050 *11,100	4050 9,200	5.03 16.22

Boom – 5.1 m (19'9")

Counterweight - 3.4 mt (3.8 t)

Bucket - None

Stick - R2.6 m (8'6")

Shoes - 500 mm (20") triple grouser with step

		1.5 m/	/5.0 ft	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/2	20.0 ft	7.5 m/2	25.0 ft			
	_													m ft
7.5 m 25.0 ft	kg lb					*7,500	*7,500					*3250 *7,250	*3250 *7,250	4.76 15.12
6.0 m 20.0 ft	kg Ib							*3500 *6,450	*3500 *6,450			*2850 *6,300	*2850 *6,300	6.19 20.06
4.5 m 15.0 ft	kg Ib					*4550 *9,850	*4550 *9,850	*4200 *9,200	3650 7,800			*2750 *6,050	*2750 *6,050	7.01 22.90
3.0 m 10.0 ft	kg Ib			*8750 *18,550	*8750 *18,550	*5800 *12,450	5300 11,400	*4750 *10,250	3500 7,450			*2800 *6,150	2500 5,500	7.44 24.40
1.5 m 5.0 ft	kg Ib					*7050 *15,250	4900 10,600	*5350 *11,550	3300 7,100	*3400	2400	*3000 *6,550	2350 5,200	7.56 24.80
Ground Line	kg Ib			*6750 *15,550	*6750 *15,550	*7850 *16,950	4700 10,050	5400 11,650	3200 6,850			*3350 *7,400	2400 5,300	7.36 24.16
−1.5 m −5.0 ft	kg Ib	*6200 *13,800	*6200 *13,800	*10 950 *24,950	8450 18,100	*7950 *17,200	4600 9,900	5350 11,500	3150 6,700			*4100 *9,100	2650 5,800	6.84 22.39
−3.0 m −10.0 ft	kg lb	*10 750 *24,150	*10 750 *24,150	*10 500 * 22,650	8600 18,400	*7250 *15,650	4650 10,000					*5250 *11,500	3250 7,250	5.88 19.18
−4.5 m −15.0 ft	kg Ib			*7500 *15,850	*7500 *15,850							*5250 *11,550	*5250 *11,550	4.22 13.48

^{*}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.

Work Tool Offering Guide*

Boom Type	Read	h Boom
Stick Size	R3.1 m (10'2")	R2.6 m (8'6")
Hydraulic Hammer	H115Es H120Es**	H115Es H120Es H130Es**
Multi-Processor		MP15 CC Jaw** MP15 CR Jaw** MP15 S Jaw**
Pulverizer		P215**
Mobile Scrap and Demolition Shear	S325B***	S325B***
Compactor (Vibratory Plate)	CVP75	CVP75
Contractors' Grapple	G315B	G315B
Trash Grapple		
Thumbs		
Rakes		available for the 318E L.
Center-Lock Pin Grabber Coupler	——— Consult your Cat do	ealer for proper match.
Dedicated Quick Coupler		

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

^{**}Pin-on only.

^{***}Boom Mount.

318E Hydraulic Excavator Specifications

Bucket Specifications and Compatibility

	Wi	dth	Сар	acity	We	eight	Fill	Reach	Booms
	mm	in	m³	yd³	kg	lb	%	R2.6 m (8'6")	R3.1 m (10'2")
Without Quick Coupler									
General Duty (GD)	1200	48	0.91	1.19	693	1,526	100%	•	Θ
Heavy Duty (HD)	600	24	0.35	0.46	449	990	100%	•	•
	750	30	0.49	0.64	505	1,113	100%	•	•
	900	36	0.62	0.81	566	1,248	100%	•	•
	1050	42	0.76	1.00	618	1,362	100%	•	•
	1200	48	0.91	1.19	679	1,497	100%	•	Θ
Severe Duty (SD)	900	36	0.62	0.81	651	1,435	90%	•	•
	1050	42	0.76	1.00	710	1,564	90%	•	•
	·		М	aximum load	pin-on (paylo	ad + bucket)	kg	2485	2205
		lb	5,477	4,860					

	Wi	idth	Сар	acity	We	ight	Fill	Reach	Booms
	mm	in	m³	yd³	kg	lb	%	R2.6 m (8'6")	R3.1 m (10'2")
With Center-Lock Quick Co	upler								
General Duty (GD)	1200	1,526	100%	Θ	0				
Heavy Duty (HD)	600	24	0.35	0.46	449	990	100%	•	•
	750	30	0.49	0.64	505	1,113	100%	•	•
	900	36	0.62	0.81	566	1,248	100%	•	•
	1050	42	0.76	1.00	618	1,362	100%	•	Θ
	1200	48	0.91	1.19	679	1,497	100%	Θ	0
Severe Duty (SD)	900	36	0.62	0.81	651	1,435	90%	•	•
	1050	42	0.76	1.00	710	1,564	90%	•	Θ
	•		Maximu	m load with c	oupler (paylo	ad + bucket)	kg	2095	1815
						lb	4,617	4,000	

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.

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)

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.

Standard Equipment

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

ENGINE

- C4.4 diesel engine
- · Biodiesel capable
- EPA Tier 4 Interim
- 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
- Cold weather battery –25° C (–13° F)
- Jump start receptacle

HYDRAULIC SYSTEM

- · Regeneration circuit for boom and stick
- Reverse swing damping 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
- Capability of installing boom lowering control device and stick lowering check valve
- Fine swing control

CAB

- Pressurized operator station with positive filtration
- Sliding upper door window (left-hand cab door)
- · Glass-breaking safety hammer
- Removable lower windshield with in cab storage bracket
- · Coat hook
- · Beverage holder
- Literature holder
- · AM/FM radio
- · Radio with MP3 auxiliary audio port
- Two 12V 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 two additional pedals
- Two power outlets, 10 amp (total)
- Travel alarm
- Laminated glass front upper window and tempered other windows
- Sunscreen

UNDERCARRIAGE

- 600 mm (24") triple grouser shoes
- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame Swivel guard
- Center track guiding guard

FRONT LINKAGE

- 5.1 m (16'9") reach boom
- 3.1 m (10'2") stick

COUNTERWEIGHT

• 3.4 mt (3.8 t)

ELECTRICAL

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

LIGHTS

- Working lights, cab mounted with time delay
- Halogen boom lights (left and right)
- Time delay function for boom light and cab light
- · Exterior lights

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
- · Openable skylight
- Rearview camera-ready

318E Optional Equipment

Optional Equipment

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

ENGINE

• Quick drains, engine and hydraulic oil

HYDRAULIC SYSTEM

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

CAB

- Cab hatch emergency exit
- Seat, high-back air suspension with heater and cooling
- · Seat, high-back air suspension with heater
- Seat, high-back mechanical suspension
- · Windshield wiper, lower with washer
- Air pre-filter
- · Left pedal
- Straight travel pedal
- Rain protector
- · Cab mirror
- · Ashtray

UNDERCARRIAGE

- 500 mm (20") triple grouser shoes
- 700 mm (28") triple grouser shoes
- Full-length track guiding guard
- Guard, heavy-duty bottom
- Segmented (2 piece) track guiding guard

FRONT LINKAGE

- · Quick coupler
- · Bucket linkage, without lifting eye
- 2.6 m (8'6") stick

LIGHTS

• HID lights, cab mounted with time delay

SECURITY

- · FOGS, bolt-on
- · Side steel bumper
- Guard, cab front, mesh
- · Rearview camera

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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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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