318E L

Hydraulic Excavator

Engine		
Engine Model	Cat® C4.4 ACERT™	
Power – ISO 14396 (metric)	89 kW	121 hp

Drive	
Maximum Travel Speed	3.9 km/h
Maximum Drawbar Pull	206.9 kN

Weights	
Minimum Operating Weight	18 600 kg
Maximum Operating Weight	19 500 kg

If you are looking for a productive, fuel-efficient, easy-to-operate-and-transport 18-ton machine, you will find it in the all-new 318E L.

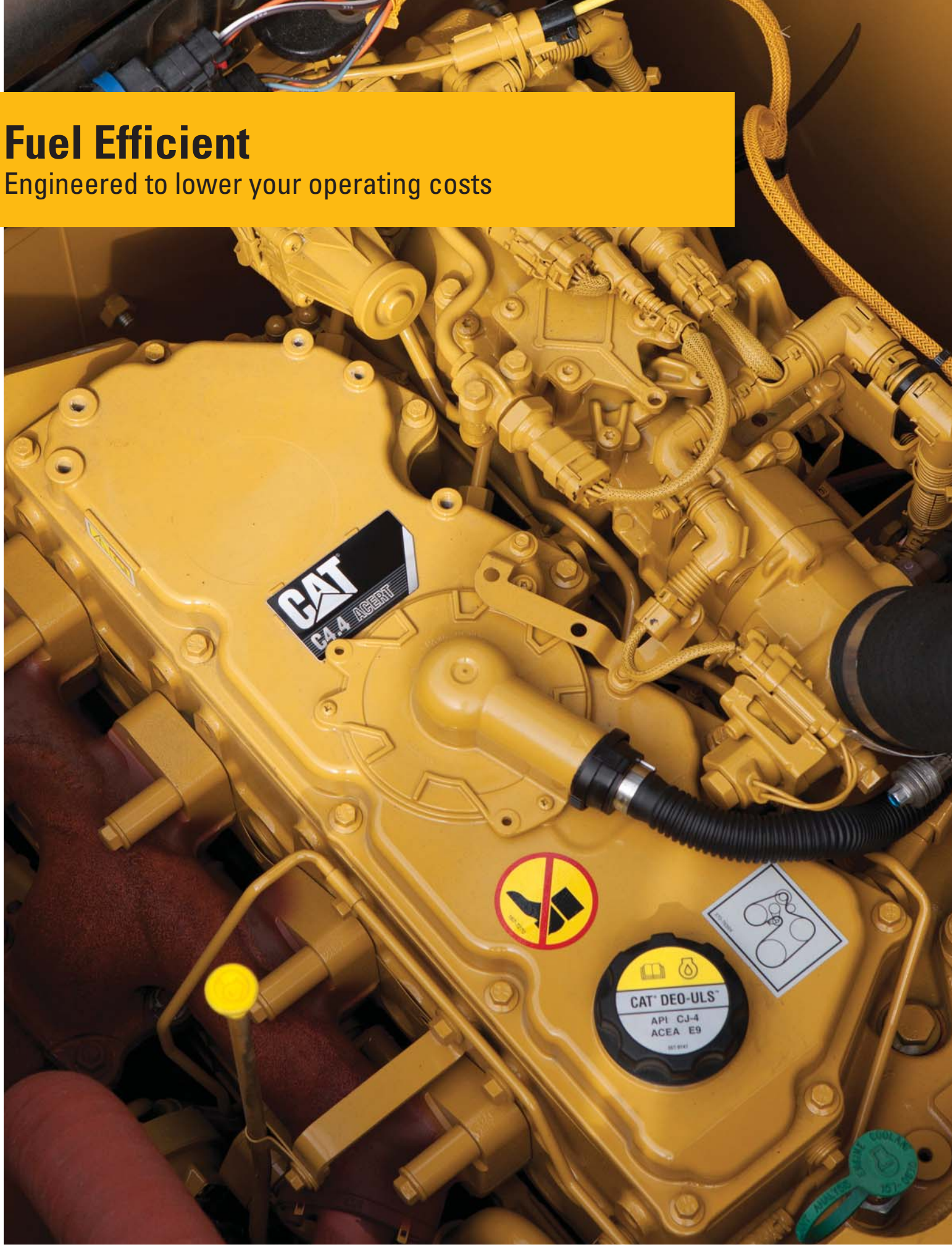
Built to meet today's European Union Stage IIIB emission standards, the 318E L makes an excellent choice for people who need a well-balanced utility machine that delivers power and fuel economy in an easy-to-transport package. In fact, this new model comes equipped with several new features and benefits that will delight both owners and operators.

Contents

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 L continue that trend-setting standard.

Fuel Efficient

Engineered to lower your operating costs



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 Mode

The 318E L 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 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

You have added flexibility with the C4.4 ACERT engine because it's equipped to run on B20 biodiesel fuel. Just fill it up and go.

Reliable and Productive

Power to move your material with speed and precision

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 L 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.

Easy to Operate

Comfort and convenience to keep you productive all day long

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 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 near key storage areas for charging electronic devices such as an MP3 player and cell phone.

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 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, which makes working in the heat and cold much more pleasant.

Durable Structures

Built to work in your tough, heavy-duty applications

Frame

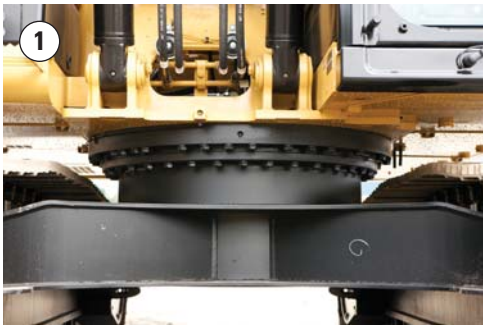
You can expect excellent quality, reliability, and durability with the 318E L's reinforced lower and upper frames (1). Both are built to handle a hard day's work over and over again.

Undercarriage

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

Counterweight

Whether you're on flat ground hogging dirt or on a slope surgically placing rip rap over drainage pipe, the 3.4 mt 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.



Versatile

Do more jobs with one machine

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.

Work Tools: Cut, Crush, Pulverize, and Load

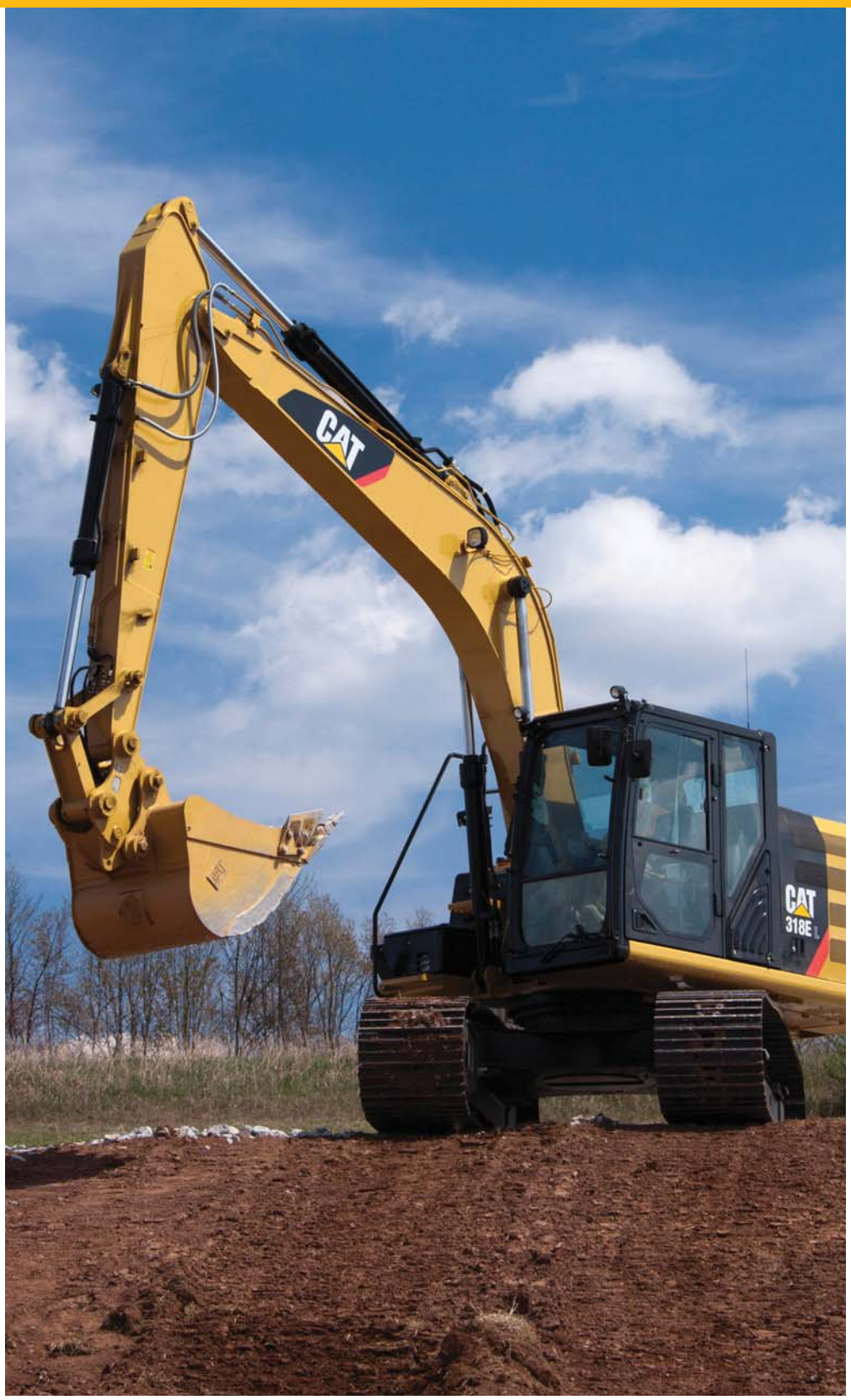
No matter your specialty, Caterpillar provides tools that are perfectly matched to get the most out of your Cat machine – quickly and efficiently.

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.

Durable Linkages

Options to take on your far-reaching or up-close tasks



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.

Booms and Sticks

The 318E L is offered with a reach boom and four stick configurations: R3.1 m, R2.9 m, R2.6 m, and R2.25 m. The 318E L can also be equipped with a variable angle boom and two stick configurations: R2.6 m, and R2.25 m.

The **reach boom** covers all the utility applications this size of machine was designed to take on such as digging dirt, moving rock, and doing the nearly endless amount of tasks you can do with Cat hydraulic work tools.

The **variable angle boom** offers superb flexibility and versatility in the working envelope. Boom position can be adjusted from 90° when fully retracted to 180° and fully extended. With full extension, the working range gives maximum dig depth, reach, and working height. When retracted, it can work closer to its tracks, increase lifting capacity, and work in confined areas, ideally suited for placing PVC pipe.

Integrated Technologies

Monitor, manage, and enhance job site operations

Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:

EQUIPMENT MANAGEMENT

Equipment Management – increase uptime and reduce operating costs.

PRODUCTIVITY

Productivity – monitor production and manage job site efficiency.

SAFETY

Safety – enhance job site awareness to keep your people and equipment safe.

LINK Technologies

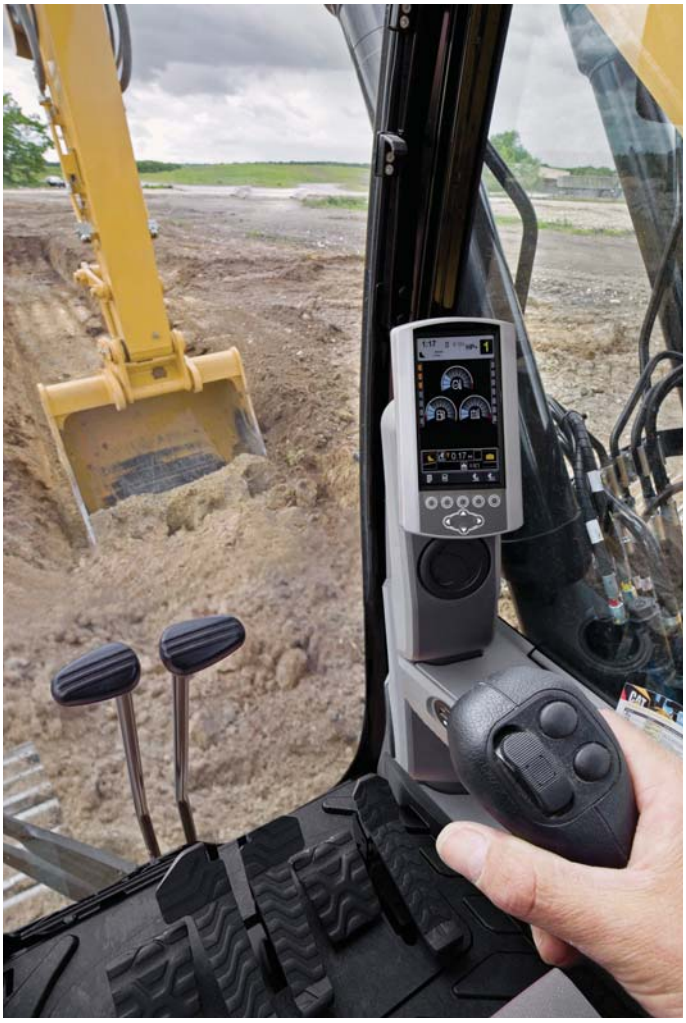
LINK technologies, like Product Link™, are deeply integrated into your machine and wirelessly communicates key information, including location, hours, fuel usage, idle time and event codes.

Product Link/VisionLink®

Easy access to Product Link data via the online VisionLink user interface can help you see how your machine or fleet is performing. You can use this information to make timely, fact based decisions that can boost job site efficiency and productivity, and lower costs.

GRADE Technologies

Grade technologies combine digital design data and in-cab guidance to help you reach target grade quickly and accurately, with minimal staking and checking. That means you'll be more productive, complete jobs faster, in fewer passes, using less fuel, at a lower cost.



Cat Grade Control Depth and Slope

The factory integrated Cat Grade Control system delivers 2D bucket tip elevation guidance to the cab to help operators create precise planes and slopes with ease. Real-time bucket tip elevation guidance on the easy-to-read standard cab monitor indicates how much to cut or fill. Fast response sensors deliver immediate feedback, while optional integrated joystick buttons help operators make quick adjustments to maintain consistent, quality grades. Built-in alerts can be set to warn the operator if the linkage or bucket approaches a predefined elevation or depth, such as when working in areas with low ceilings, or digging near water lines. Staking and checking is minimized, which reduces ground crews and enhances job site safety.

Works best in simple 2D applications, such as digging basements or grading steep embankments. Easily upgrade to AccuGrade™ when 3D control is required.

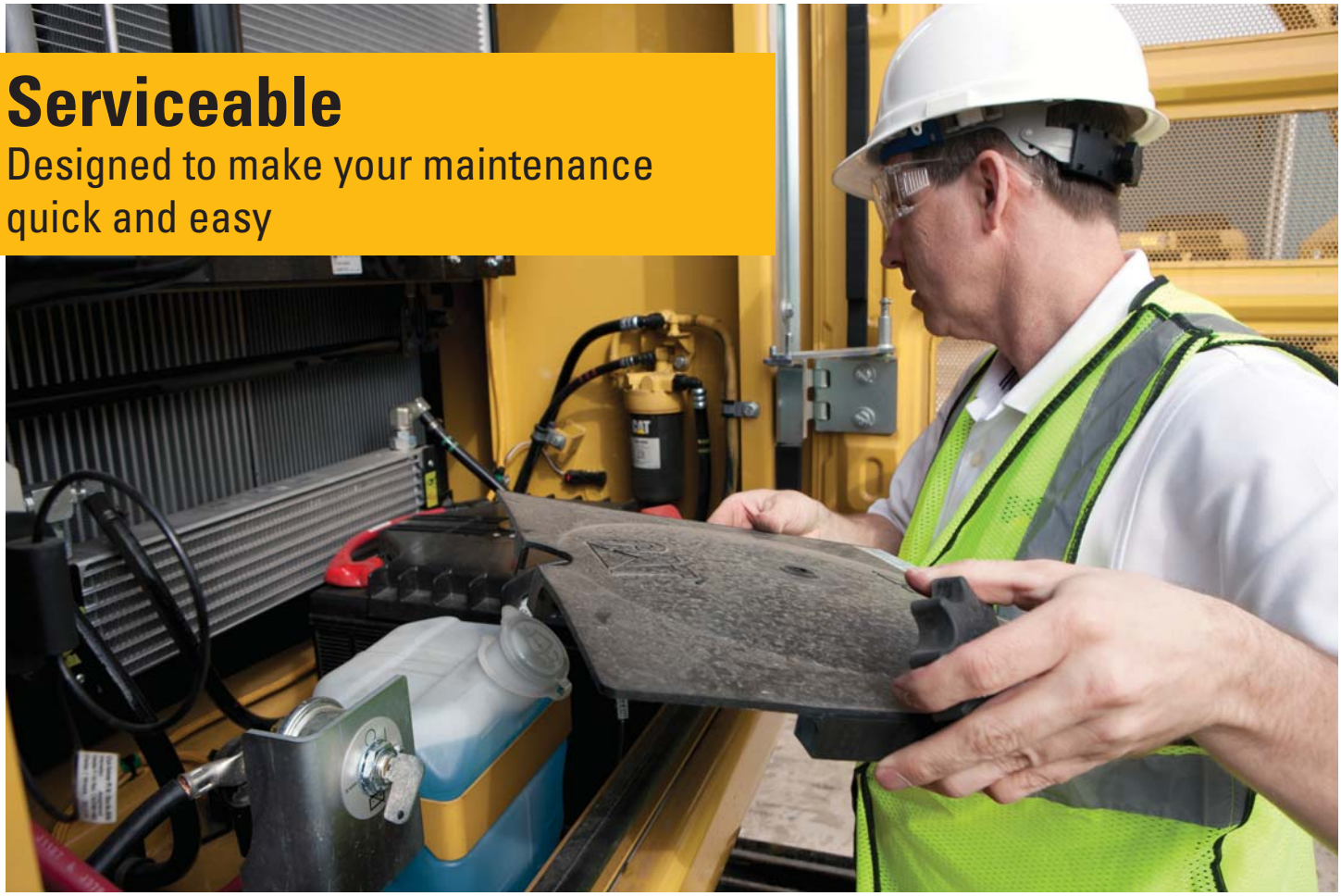
Cat AccuGrade

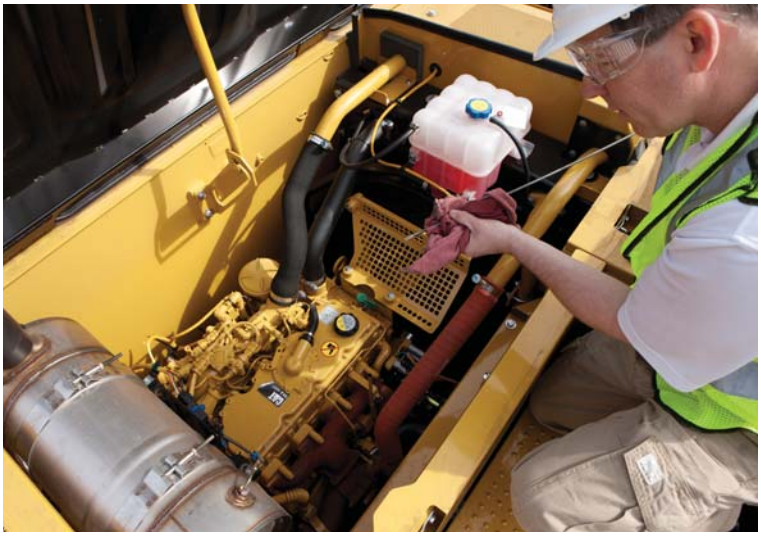
The dealer-installed AccuGrade system provides 3D guidance for making complex cuts and contours, eliminating the need for staking and checking. A dedicated monitor displays a digital design plan with 3D bucket tip positioning and elevation guidance, indicating precisely where to work and how much to cut or fill.

Plug and play capability on the 318E L simplifies upgrading. Choose from satellite (GNSS) control for large projects with complex designs or total station (UTS) systems in areas with limited reception.

Serviceable

Designed to make your maintenance quick and easy





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 and out of the way to make cleaning cores easy – a major service convenience.

Other Service Benefits

- 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.

Safe Work Environment

Features to help protect you day in and day out

Roll-Over Protective Structure (ROPS) Cab

The ROPS-certified cab provides your operator with enhanced protection in the event of a roll-over; it's also built to accommodate a Falling Object Guard Structure (FOGS), which is important in waste and demolition 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 in the cab (2). 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 the rearview camera, which is integrated in the counterweight for enhanced protection (3).

Complete Customer Care

Unmatched support makes the difference

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 the 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.

Sustainable

Generations ahead in every way

- The 318E L is an efficient, productive machine that's designed to conserve your financial resources for generations ahead.
- The C4.4 ACERT engine, along with the Cat Clean Emission Module (CEM), meets EU Stage IIIB emission standards.
- The 318E L 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 or EN 14214 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 QuickEvac™ option.
- A 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.

318E L Hydraulic Excavator Specifications

Engine

Engine Model	Cat C4.4 ACERT
Net Power – ISO 9249	85 kW
Net Power – ISO 9249	115 hp (metric)
Net Power – ISO 9249	113 hp (imperial)
Power – ISO 14396	89 kW
Power – ISO 14396	121 hp (metric)
Power – ISO 14396	119 hp (imperial)
Bore	105 mm
Stroke	127 mm
Displacement	4.4 L

Weights

Minimum Operating Weight*	18 600 kg
Maximum Operating Weight**	19 500 kg

*5.1 m reach boom, 2.6 m stick, 3.4 mt counterweight, GD 0.91 m³, 1200 mm wide bucket with 1380 mm tip radius, and 500 mm shoes.

**VA boom, 2.6 m stick, 3.4 mt counterweight, GD 0.76 m³, 1050 mm wide bucket with 1380 mm tip radius, and 700 mm shoes.

Hydraulic System

Main System – Maximum Flow (Total)	300 L/min
Swing System – Maximum Flow	150 L/min
Maximum Pressure – Equipment (Boom Up)	35 000 kPa
Maximum Pressure – Equipment (Other)	32 000 kPa
Maximum Pressure – Travel	35 000 kPa
Maximum Pressure – Swing	23 000 kPa
Pilot System – Maximum Flow	26.1 L/min
Pilot System – Maximum Pressure	4120 kPa
Boom Cylinder – Bore	110 mm
Boom Cylinder – Stroke	1193 mm
Stick Cylinder – Bore	130 mm
Stick Cylinder – Stroke	1331 mm
Bucket Cylinder – Bore	110 mm
Bucket Cylinder – Stroke	1039 mm

Drive

Maximum Travel Speed	3.9 km/h
Maximum Drawbar Pull	206.9 kN
Gradeability	30°/70%

Swing Mechanism

Swing Speed	8.85 rpm
Swing Torque	50.7 kN·m

Service Refill Capacities

Fuel Tank Capacity	290 L
Cooling System	24 L
Engine Oil (with filter)	13.5 L
Swing Drive	8 L
Final Drive (each)	8 L
Hydraulic System Oil Capacity (including tank)	190 L
Hydraulic Tank Oil	121 L

Track

Number of Shoes (each side)	45 pieces
Number of Track Rollers (each side)	7 pieces
Number of Carrier Rollers (each side)	2 pieces

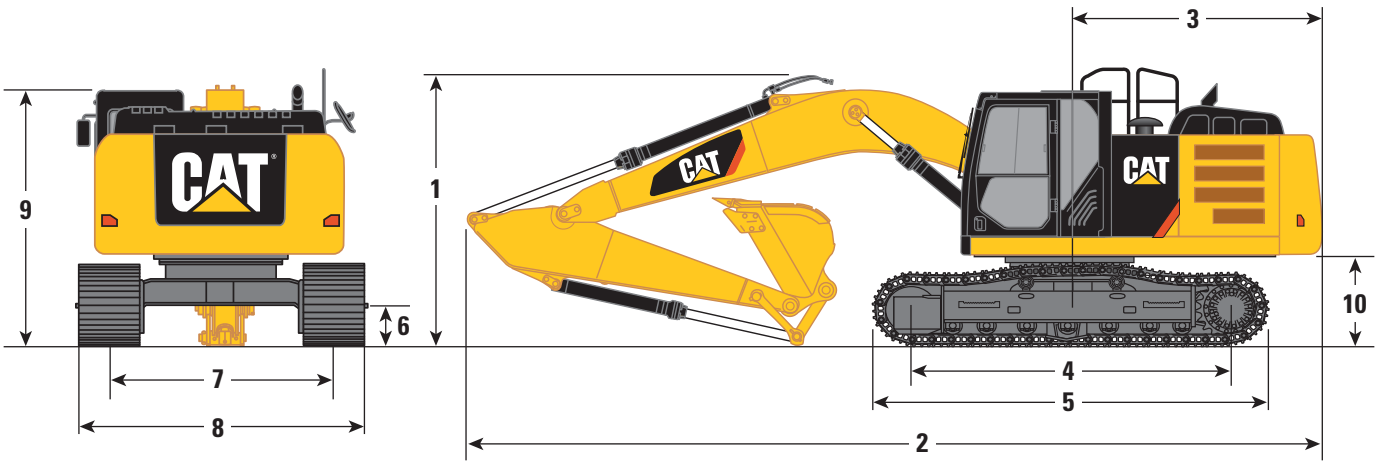
Sound

Operator – ISO 6396	71 dB(A)
Spectator – ISO 6396	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.



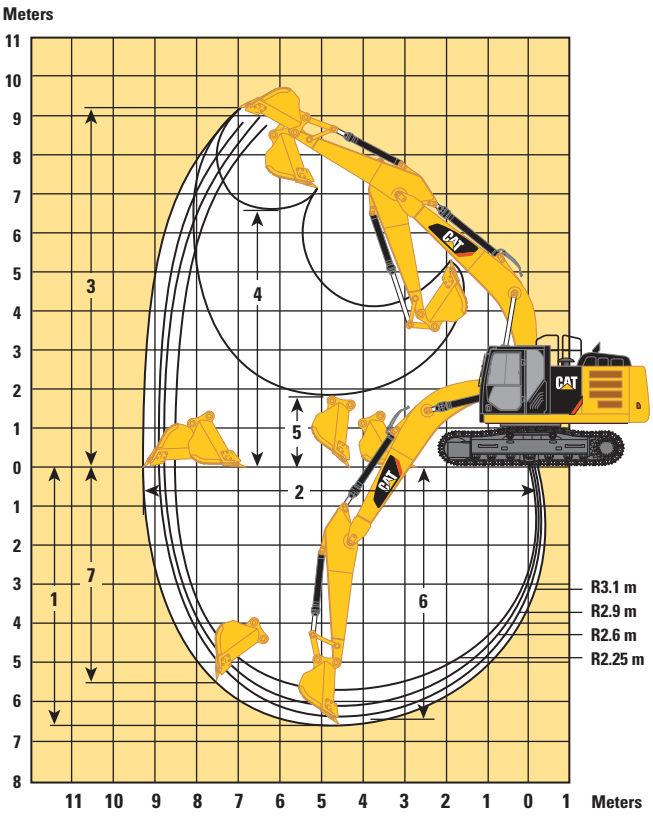
		Reach Boom 5.1 m			VA Boom		
	Stick	**R3.1 m**	**R2.9 m**	**R2.6 m**	**R2.25 m**	**R2.6 m**	**R2.25 m**
1	Shipping Height*	3390 mm	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm
	Shipping Height at Boom Top	3390 mm	3090 mm	3040 mm	2930 mm	2980 mm	2840 mm
	Shipping Height with Guard Rail	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm
	Shipping Height with Top Guard	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm
2	Shipping Length	8580 mm	8590 mm	8570 mm	8560 mm	8630 mm	8640 mm
3	Tail Swing Radius	2500 mm	2500 mm	2500 mm	2500 mm	2500 mm	2500 mm
4	Length to Center of Rollers	3265 mm	3265 mm	3265 mm	3265 mm	3265 mm	3265 mm
5	Track Length	4075 mm	4075 mm	4075 mm	4075 mm	4075 mm	4075 mm
6	Ground Clearance	440 mm	440 mm	440 mm	440 mm	440 mm	440 mm
7	Track Gauge	1990 mm	1990 mm	1990 mm	1990 mm	1990 mm	1990 mm
8	Transport Width						
	500 mm Shoes	2520 mm	2520 mm	2520 mm	2520 mm	2520 mm	2520 mm
	600 mm Shoes	2590 mm	2590 mm	2590 mm	2590 mm	2590 mm	2590 mm
	700 mm Shoes	2690 mm	2690 mm	2690 mm	2690 mm	2690 mm	2690 mm
	790 mm Shoes	2870 mm	2870 mm	2870 mm	2870 mm	2870 mm	2870 mm
9	Cab Height	2890 mm	2890 mm	2890 mm	2890 mm	2890 mm	2890 mm
	Cab Height with Top Guard	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm	3100 mm
10	Counterweight Clearance**	1010 mm	1010 mm	1010 mm	1010 mm	1010 mm	1010 mm
	Bucket Capacity	0.91 m^3	0.91 m^3	0.91 m^3	0.91 m^3	0.76 m^3	0.76 m^3
	Bucket Tip Radius	1380 mm	1380 mm	1380 mm	1380 mm	1380 mm	1380 mm

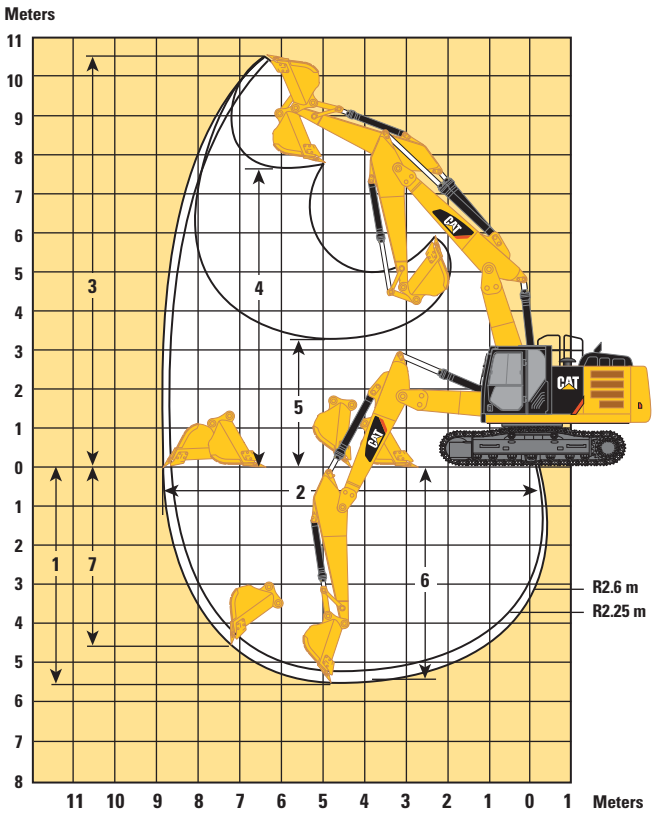
*Including shoe lug height.

**Without shoe lug height.

Working Ranges

All dimensions are approximate.





	Reach Boom 5.1 m				VA Boom	
Stick	**R3.1 m**	**R2.9 m**	**R2.6 m**	**R2.25 m**	**R2.6 m**	**R2.25 m**
1 Maximum Digging Depth	6590 mm	6390 mm	6090 mm	5740 mm	5510 mm	5160 mm
2 Maximum Reach at Ground Level	9260 mm	8990 mm	8780 mm	8460 mm	8970 mm	8630 mm
3 Maximum Cutting Height	9220 mm	8880 mm	8930 mm	8750 mm	10 560 mm	10 260 mm
4 Maximum Loading Height	6570 mm	6280 mm	6280 mm	6120 mm	7870 mm	7550 mm
5 Minimum Loading Height	1810 mm	2010 mm	2310 mm	2660 mm	3300 mm	3600 mm
6 Maximum Depth Cut for 2440 mm Level Bottom	6400 mm	6150 mm	5860 mm	5490 mm	5380 mm	5020 mm
7 Maximum Vertical Wall Digging Depth	5390 mm	4900 mm	4920 mm	4480 mm	4480 mm	4090 mm
Bucket Capacity	0.91 m^3	0.91 m^3	0.91 m^3	0.91 m^3	0.76 m^3	0.76 m^3
Bucket Tip Radius	1380 mm	1380 mm	1380 mm	1380 mm	1380 mm	1380 mm

Major Component Weights

Base Machine (with boom cylinder, without counterweight, front linkage and track)	5900 kg
Long Undercarriage	3930 kg
Counterweight	3400 kg
Boom (includes lines, pins and stick cylinder)	
Reach Boom – 5.1 m	1500 kg
Reach Boom for CGC – 5.1 m	1500 kg
VA Boom	1900 kg
Stick (includes lines, pins and bucket cylinder)	
R3.1 m	1000 kg
R2.6 m for CGC	910 kg
R2.9 m	970 kg
R2.6 m	910 kg
R2.25 m	880 kg
R2.6 m for VA Boom	840 kg
R2.25 m for VA Boom	810 kg
Track Shoe (Long/per two tracks)	
500 mm Triple Grouser	2240 kg
600 mm Triple Grouser	2480 kg
700 mm Triple Grouser	2710 kg
790 mm Triple Grouser	3090 kg

All weights are rounded up to nearest 10 kg except for quick coupler and buckets.

Base machine includes 75 kg operator weight, 90% fuel weight, and undercarriage with center guard.

Operating Weight and Ground Pressure

	790 mm Triple Grouser Shoes	700 mm Triple Grouser Shoes	600 mm Triple Grouser Shoes	500 mm Triple Grouser Shoes
Reach Boom – 5.1 m				
R3.1 m	19 600 kg	19 200 kg	19 000 kg	18 700 kg
R2.9 m	19 600 kg	19 200 kg	18 900 kg	18 700 kg
R2.6 m	19 500 kg	19 100 kg	18 900 kg	18 600 kg
R2.25 m	19 500 kg	19 100 kg	18 800 kg	18 600 kg
VA Boom				
R2.6 m	19 900 kg	19 500 kg	19 300 kg	19 000 kg
R2.25 m	19 900 kg	19 500 kg	19 200 kg	19 000 kg

All weights are rounded up to nearest 100 kg.

Reach boom includes GD 0.91 m^3 bucket (740 kg).

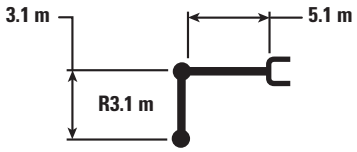
VA boom includes GD 0.76 m^3 bucket (660 kg) and AUX lines.

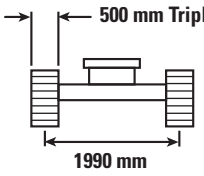
Bucket and Stick Forces

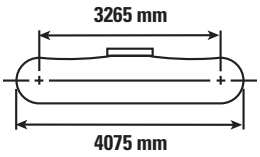
Stick	Reach Boom 5.1 m			VA Boom		
	R3.1 m	R2.9 m	R2.6 m	R2.25 m	R2.6 m	R2.25 m
Without CW						
General Duty						
Bucket Digging Force (ISO)	123 kN	123 kN	123 kN	123 kN	135 kN	135 kN
Stick Digging Force (ISO)	77 kN	80 kN	86 kN	94 kN	80 kN	88 kN
Severe Duty						
Bucket Digging Force (ISO)	123 kN	123 kN	123 kN	123 kN	134 kN	134 kN
Stick Digging Force (ISO)	76 kN	80 kN	86 kN	94 kN	80 kN	88 kN
CW-30						
General Duty						
Bucket Digging Force (ISO)	112 kN	112 kN	112 kN	112 kN	123 kN	123 kN
Stick Digging Force (ISO)	75 kN	78 kN	83 kN	91 kN	78 kN	85 kN
Heavy Duty						
Bucket Digging Force (ISO)	112 kN	112 kN	112 kN	112 kN	123 kN	123 kN
Stick Digging Force (ISO)	75 kN	78 kN	83 kN	91 kN	77 kN	85 kN
CW-30S						
General Duty						
Bucket Digging Force (ISO)	111 kN	111 kN	111 kN	111 kN	121 kN	121 kN
Stick Digging Force (ISO)	74 kN	78 kN	83 kN	91 kN	77 kN	85 kN
Heavy Duty						
Bucket Digging Force (ISO)	112 kN	112 kN	112 kN	112 kN	123 kN	123 kN
Stick Digging Force (ISO)	75 kN	78 kN	83 kN	91 kN	77 kN	85 kN

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 – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*2700	*2700	5.50
6.0 m	kg							*3600	*3600			*2400	*2400	6.76
4.5 m	kg							*3800	3650	*2400	*2400	*2350	*2350	7.52
3.0 m	kg			*7350	*7350	*5200	*5200	*4350	3500	*3750	2450	*2350	2250	7.93
1.5 m	kg			*8100	*8100	*6600	4950	*5050	3300	4000	2400	*2500	2150	8.03
0.0 m	kg			*7200	*7200	*7550	4650	5400	3150	3900	2300	*2800	2150	7.85
–1.5 m	kg	*5450	*5450	*10 050	8300	*7900	4550	5300	3050			*3300	2350	7.36
–3.0 m	kg	*9050	*9050	*11 100	8400	*7500	4550	5300	3100			*4400	2800	6.49
–4.5 m	kg			*8800	8700	*5950	4700					*5050	4050	5.03

* ISO 10567

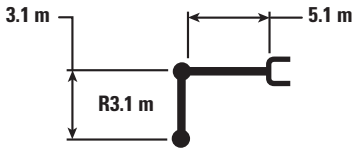
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

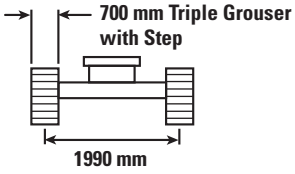
Lift capacity stays with ±5% for all available track shoes.

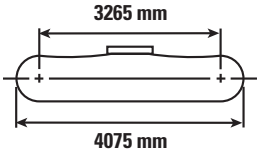
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

318E L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*2700	*2700	5.50
6.0 m	kg							*3600	*3600			*2400	*2400	6.76
4.5 m	kg							*3800	3750	*2400	*2400	*2350	*2350	7.52
3.0 m	kg			*7350	*7350	*5200	*5200	*4350	3600	*3750	2550	*2350	2300	7.93
1.5 m	kg			*8100	*8100	*6600	5050	*5050	3400	4100	2450	*2500	2200	8.03
0.0 m	kg			*7200	*7200	*7550	4800	5550	3250	4000	2350	*2800	2200	7.85
–1.5 m	kg	*5450	*5450	*10 050	8500	*7900	4650	5450	3150			*3300	2400	7.36
–3.0 m	kg	*9050	*9050	*11 100	8600	*7500	4650	*5450	3150			*4400	2850	6.49
–4.5 m	kg			*8800	*8800	*5950	4850					*5050	4150	5.03

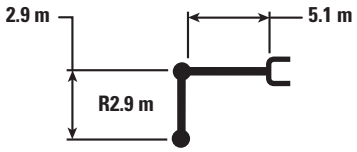
* ISO 10567

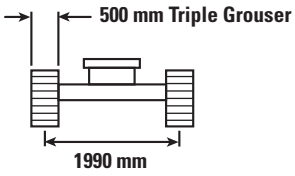
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

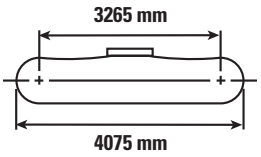
Lift capacity stays with ±5% for all available track shoes.

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

Reach Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*2900	*2900	5.09
6.0 m	kg							*3600	*3600			*2600	*2600	6.44
4.5 m	kg							*4000	3650			*2550	*2550	7.24
3.0 m	kg			*7900	*7900	*5450	5350	*4500	3500	*3250	2450	*2600	2400	7.66
1.5 m	kg			*7650	*7650	*6800	4950	*5150	3300	4000	2400	*2800	2250	7.77
0.0 m	kg			*7600	*7600	*7700	4650	5400	3150	*3700	2350	*3200	2300	7.58
–1.5 m	kg	*6150	*6150	*10 900	8350	*7900	4550	5300	3100			*3900	2500	7.07
–3.0 m	kg	*10 050	*10 050	*10 850	8450	*7450	4600	*5300	3100			*5100	3050	6.15
–4.5 m	kg			*8300	*8300	*5550	4800					*5400	4650	4.59

* ISO 10567

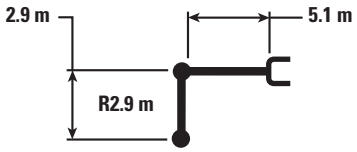
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

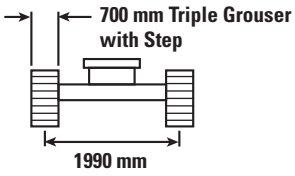
Lift capacity stays with ±5% for all available track shoes.

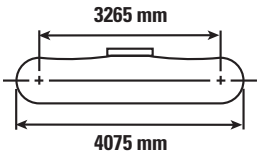
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

318E L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*2900	*2900	5.09
6.0 m	kg							*3600	*3600			*2600	*2600	6.44
4.5 m	kg							*4000	3750			*2550	*2550	7.24
3.0 m	kg			*7900	*7900	*5450	*5450	*4500	3550	*3250	2550	*2600	2450	7.66
1.5 m	kg			*7650	*7650	*6800	5050	*5150	3400	*4050	2450	*2800	2300	7.77
0.0 m	kg			*7600	*7600	*7700	4800	5550	3250	*3700	2400	*3200	2350	7.58
–1.5 m	kg	*6150	*6150	*10 900	8550	*7900	4650	5450	3150			*3900	2550	7.07
–3.0 m	kg	*10 050	*10 050	*10 850	8650	*7450	4700	*5300	3200			*5100	3100	6.15
–4.5 m	kg			*8300	*8300	*5550	4900					*5400	4800	4.59

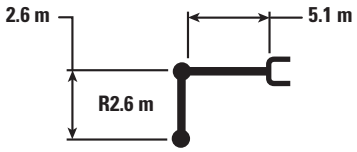
* ISO 10567

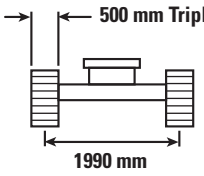
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

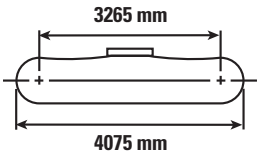
Lift capacity stays with ±5% for all available track shoes.

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

Reach Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*3250	*3250	4.76
6.0 m	kg							*3500	*3500			*2850	*2850	6.19
4.5 m	kg					*4550	*4550	*4200	3650			*2750	*2750	7.01
3.0 m	kg			*8750	*8750	*5800	5300	*4750	3500			*2800	2500	7.44
1.5 m	kg					*7050	4900	*5350	3300	*3400	2400	*3000	2350	7.56
0.0 m	kg			*6750	*6750	*7850	4700	5400	3200			*3350	2400	7.36
–1.5 m	kg	*6200	*6200	*10 950	8450	*7950	4600	5350	3150			*4100	2650	6.84
–3.0 m	kg	*10 750	*10 750	*10 500	8600	*7250	4650					*5250	3250	5.88
–4.5 m	kg			*7500	*7500							*5250	*5250	4.22

* ISO 10567

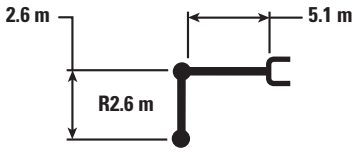
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

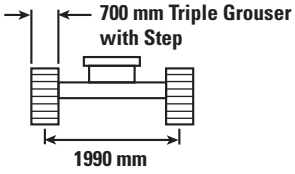
Lift capacity stays with ±5% for all available track shoes.

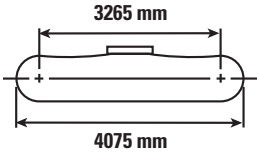
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

318E L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
7.5 m	kg											*3250	*3250	4.76
6.0 m	kg							*3500	*3500			*2850	*2850	6.19
4.5 m	kg					*4550	*4550	*4200	3700			*2750	*2750	7.01
3.0 m	kg			*8750	*8750	*5800	5400	*4750	3550			*2800	2550	7.44
1.5 m	kg					*7050	5050	*5350	3400	*3400	2450	*3000	2450	7.56
0.0 m	kg			*6750	*6750	*7850	4800	5550	3250			*3350	2450	7.36
–1.5 m	kg	*6200	*6200	*10 950	8650	*7950	4700	5500	3200			*4100	2700	6.84
–3.0 m	kg	*10 750	*10 750	*10 500	8800	*7250	4750					*5250	3350	5.88
–4.5 m	kg			*7500	*7500							*5250	*5250	4.22

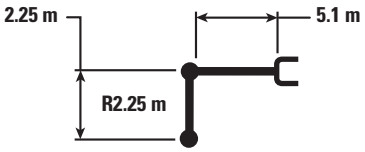
* ISO 10567

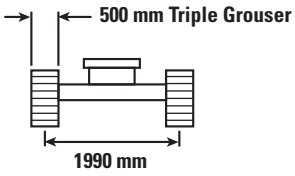
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

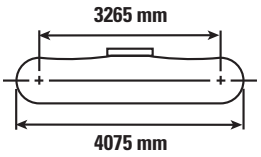
Lift capacity stays with ±5% for all available track shoes.

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

Reach Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m				
												m
7.5 m	kg									*3950	*3950	4.24
6.0 m	kg									*3400	*3400	5.79
4.5 m	kg					*4950	*4950	*4500	3600	*3250	3000	6.67
3.0 m	kg					*6150	5200	*4950	3450	*3300	2650	7.12
1.5 m	kg					*7350	4850	*5500	3300	*3550	2500	7.24
0.0 m	kg			*6050	*6050	*7950	4650	5400	3200	*4050	2550	7.04
–1.5 m	kg	*6550	*6550	*11 500	8500	*7900	4600	5400	3150	4850	2850	6.49
–3.0 m	kg			*9900	8650	*6950	4700			*5450	3650	5.47

* ISO 10567

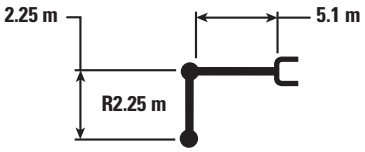
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

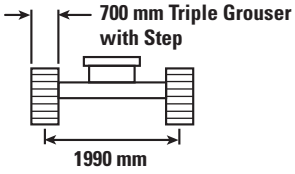
Lift capacity stays with ±5% for all available track shoes.

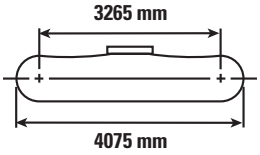
Always refer to the appropriate Operation and Maintenance Manual for specific product information.

318E L Hydraulic Excavator Specifications

Reach Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m				
												m
7.5 m	kg									*3950	*3950	4.24
6.0 m	kg									*3400	*3400	5.79
4.5 m	kg					*4950	*4950	*4500	3650	*3250	3100	6.67
3.0 m	kg					*6150	5350	*4950	3500	*3300	2700	7.12
1.5 m	kg					*7350	5000	*5500	3350	*3550	2600	7.24
0.0 m	kg			*6050	*6050	*7950	4800	5550	3250	*4050	2650	7.04
–1.5 m	kg	*6550	*6550	*11 500	8700	*7900	4750	5500	3250	4950	2950	6.49
–3.0 m	kg			*9900	8900	*6950	4800			*5450	3750	5.47

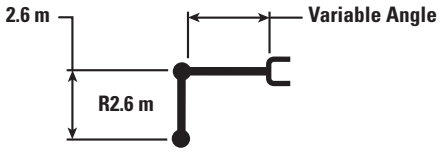
* ISO 10567

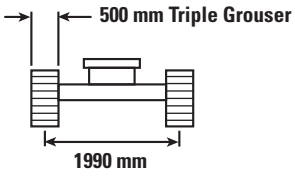
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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

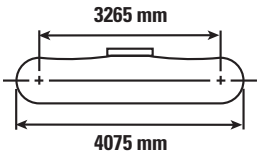
Lift capacity stays with ±5% for all available track shoes.

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

Variable Angle Boom Lift Capacities – Counterweight: 3.43 mt – without Bucket







		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				
														m
9.0 m	kg											*5250	*5250	2.26
7.5 m	kg			*5350	*5350	*3450	*3450					*3450	*3450	5.05
6.0 m	kg			*4800	*4800	*4000	*4000	*3050	*3050			*3000	*3000	6.41
4.5 m	kg			*6000	*6000	*4200	*4200	*3000	*3000			*2900	2650	7.21
3.0 m	kg	*14 200	*14 200	*6600	*6600	*5350	5250	*3450	3450	*3000	2450	*2900	2350	7.63
1.5 m	kg			*6800	*6800	*7150	4850	*4800	3250	*3250	2350	*3050	2250	7.74
0.0 m	kg	*5150	*5150	*5450	*5450	8350	4600	*4600	3150	*3400	2350	*3300	2300	7.55
–1.5 m	kg	*7550	*7550	*9250	8350	*7800	4550	5350	3100			*3850	2550	7.04
–3.0 m	kg	*13 050	*13 050	*9050	8550	*5700	4650					*4300	3250	5.87

* ISO 10567

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

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

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

318E L Hydraulic Excavator Specifications

318E L Work Tool Offering Guide*

Boom Type	Reach				VAB	
Stick Size	**R3.1 m**	**R2.9 m**	**R2.6 m**	**R2.25 m**	**2.6 m**	**2.25 m**
Hydraulic Hammer	H115Es H120Es **	H115Es H120Es H130Es ***	H115Es H120Es H130Es ***	H115Es H120Es H130Es ** ##	H115Es H120Es	H115Es H120Es
Multi-Processor		MP15 S Jaw *** ****	MP15 CC Jaw *** MP15 CR Jaw *** MP15 S Jaw ***	MP15 CC Jaw ** # MP15 PP Jaw *** **** MP15 PS Jaw *** MP15 S Jaw ** #	MP15 CC Jaw *** **** MP15 CR Jaw *** **** MP15 S Jaw *** ****	MP15 CC Jaw *** MP15 PS Jaw *** **** MP15 S Jaw ***
Crusher			P315 ***		P315 *** ****	
Pulverizer		P215 ***	P215 ***	P215 ##		P215 ***
Demolition and Sorting Grapple			G315B *** ****	G315B ** #	G315B *** ****	G315B ***
Mobile Scrap and Demolition Shear	S325B ###	S325B ###	S325B ###	S325B ###	S325B ###	S325B ###
Compactor (Vibratory Plate)	CVP75	CVP75	CVP75	CVP75	CVP75	CVP75
Contractors' Grapple	G115B	G115B	G115B	G115B	G115B	G115B
Trash Grapple	These work tools are available for the 318E L. Consult your Cat dealer for proper match.					
Orange Peel Grapples						
Dedicated Quick Coupler						

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

**Pin-on or CW coupler.

***Pin-on only.

****Over the front only.

#Over the front only with CW coupler.

##Over the front only with the CL coupler.

###Boom Mount

318E L Bucket Specifications and Compatibility

	Width	Capacity	Weight	Fill	Reach Boom				VA Boom	
	mm	m^3	kg	%	R2.25 m	R2.6 m	R2.9 m	R3.1 m	R2.25 m	R2.6 m
Without Quick Coupler										
General Duty (GD)	600	0.35	450	100	●	●	●	●	●	●
	750	0.49	508	100	●	●	●	●	●	●
	900	0.62	559	100	●	●	●	●	●	●
	1100	0.80	622	100	●	●	●	◉	◉	⊖
	1200	0.91	674	100	●	◉	◉	⊖	⊖	X
	1300	1.00	707	100	X	◉	X	X	X	X
	1400	1.09	739	100	X	⊖	X	X	X	X
Heavy Duty (HD)	1300	1.00	697	100	X	◉	X	X	X	X
Maximum load pin-on (payload + bucket)				kg	2600	2415	2305	2145	2120	1960

	Width	Capacity	Weight	Fill	Reach Boom				VA Boom	
	mm	m^3	kg	%	R2.25 m	R2.6 m	R2.9 m	R3.1 m	R2.25 m	R2.6 m
With Quick Coupler (CW-30/CW-30S)										
General Duty (GD)	600	0.35	400	100	●	●	●	●	●	●
	750	0.49	446	100	●	●	●	●	●	●
	900	0.62	503	100	●	●	●	●	●	●
	1100	0.79	562	100	●	●	◉	◉	⊖	⊖
	1200	0.91	607	100	◉	◉	⊖	⊖	○	○
	1300	1.00	637	100	◉	⊖	⊖	○	○	X
	1400	1.09	667	100	X	○	X	X	X	X
Heavy Duty (HD)	1200	0.91	623	100	◉	◉	⊖	⊖	○	○
	1300	1.00	655	100	◉	⊖	⊖	○	○	X
	1400	1.09	686	100	X	○	X	X	X	X
Maximum load with coupler (payload + bucket)				kg	2380	2195	2085	1925	1900	1740

Maximum Material Density

- ● 2100 kg/m^3
- ◉ 1800 kg/m^3
- ⊖ 1500 kg/m^3
- ○ 1200 kg/m^3
- 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.

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 L Standard Equipment

Standard Equipment

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

ENGINE

- C4.4 ACERT diesel engine EU Stage IIIB
- Biodiesel capable
- EU Stage IIIB emissions
- 2300 m 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
- Standard battery –18° C

HYDRAULIC SYSTEM

- Regeneration circuit for boom and stick
- Reverse swing damping valve
- Automatic swing parking brake
- High-performance hydraulic return filter
- Boom lowering and stick lowering check valves

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
- 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 two additional pedals
- Two power outlets, 10 amp (total)
- Laminated glass front window, 70/30 split (tempered glass for bottom front window)
- Sunscreen
- Seatbelt (50.8 mm)
- Cab mirror
- Windshield wipers

UNDERCARRIAGE

- Grease Lubricated Track GLT2, resin seal
- Towing eye on base frame swivel guard
- Guard, heavy-duty bottom
- Swivel guard

COUNTERWEIGHT

- 3.4 mt

ELECTRICAL

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

FRONT LINKAGE

- Bucket linkage, with lifting eye

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 roof hatch for emergency exit
- Guard rail and handrail
- Rearview camera

TECHNOLOGY

- Product Link

Optional Equipment

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

ENGINE
- Quick drains, engine and hydraulic oil
- Cold weather battery –25° C

HYDRAULIC SYSTEM
- Auxiliary hydraulics
- Boom and stick High Pressure lines
- Boom and stick Medium Pressure lines
- Boom and stick Universal Quick Coupler lines
- Cat Bio hydraulic oil

CAB
- Seat, high-back air suspension with heater and cooling
- Seat, high-back air suspension with heater
- Seat, high-back mechanical suspension
- Air pre-filter
- Left pedal
- Rain protector

UNDERCARRIAGE
- 500 mm triple grouser shoes
- 600 mm triple grouser shoes
- 700 mm triple grouser shoes
- 790 mm triple grouser shoes
- Center track guiding guard
- Full-length track guiding guard
- Segmented (2 piece) track guiding guard

FRONT LINKAGE
- Reach boom
  - 2.9 m stick
  - 2.6 m stick
  - 2.25 m stick
- VA boom
  - 2.6 m stick
  - 2.25 m stick
- Universal Quick Coupler

LIGHTS
- HID lights, cab mounted with time delay

SECURITY
- FOGS, bolt-on
- Guard, cab front, mesh
- Travel alarm

TECHNOLOGY
- Cat Grade Control Depth and Slope

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

AEHQ6885-03 (03-2015)
Replaces AEHQ6885-02
(EU)

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