

# 325F L

## Hydraulic Excavator



### Engine

Engine Model	Cat® C4.4 ACERT	
Engine Power – ISO 14396	122 kW	164 hp
Net Power – SAE J1349	120 kW	161 hp

### Drive

Maximum Travel Speed	5.6 km/h	3.5 mph
Maximum Drawbar Pull	203 kN	45,591 lbf

### Weights

Operating Weight	25 907 kg	57,115 lb
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Introduction

Picture yourself behind the joysticks of one of the world's finest compact radius excavators, the new Cat 325FL. This machine features a highly efficient U.S. EPA Tier 4 Final C4.4 ACERT engine that's miserly on fuel paired with a state-of-the-art hydraulic system that's responsive to your every command. Each pull of the "sticks" will feel like a natural extension of yourself – with the inhuman ability to lift roughly 12 246 kg (27,000 lb). This smooth, controlled power puts you in place to literally move tons of material all day long with tremendous speed, precision, and confidence.

When you add in robust structures that keep you grounded and balanced, an operator environment that enhances your comfort and productivity, service points that make your routine maintenance fast and simple, available Cat Grade Control to help you create precise planes and slopes with ease, and multiple Cat work tools and tool control system that enable you to quickly take on a variety of tasks, you simply won't find a better built, more reliable, more versatile, or more rewarding excavator in its size class – from any company, anywhere.

Bottom line: If your work takes you into tight spaces and you need the absolute best performance at the lowest cost per unit of work that you can possibly get from a 25-ton excavator, take along a Cat 325F. You will be glad you did.

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#### Key Performance Stats & Facts

**Maximum Lift without Limitation\***

12 246 kg (27,000 lb) without bucket

\*Ground level, 4.5 m (15'0") out front

**Maximum Bucket Size**

1.57 m<sup>3</sup> (2.05 yd<sup>3</sup>) 1372 mm (54")

**Maximum Reach**

9790 mm (32'1")

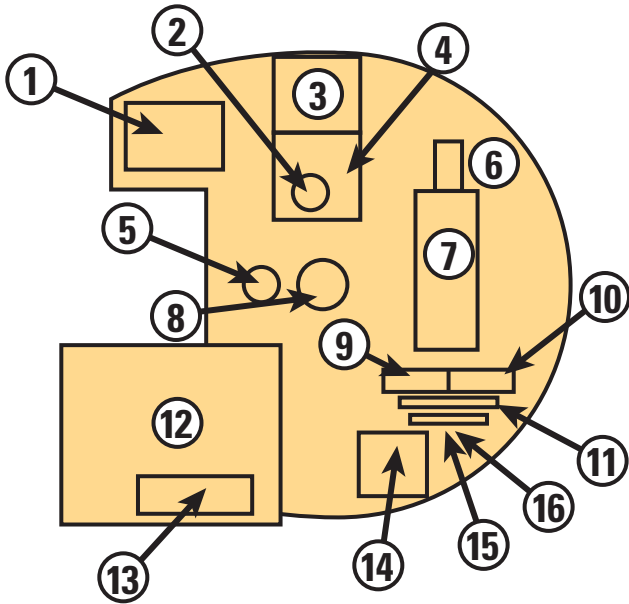
**Maximum Dig Depth**

6710 mm (22'0")



# Hydraulics

Power to move your material with maximum speed, ease, and precision



- 1) Main Control Valve
- 2) Capsule Filter
- 3) Fuel Tank
- 4) Hydraulic Tank
- 5) Rotary Joint
- 6) Pump
- 7) Engine
- 8) Swing Motor

- 9) Oil Cooler
- 10) Radiator
- 11) Air Aftercooler
- 12) Cab
- 13) Batteries
- 14) DEF Tank
- 15) Fuel Cooler
- 16) A/C Condenser

## A Logical Layout

All major hydraulic components are strategically located close together. This positioning leads to reduced friction loss and pressure drops, and the result is more hydraulic horsepower for the heavy-lifting, ground-breaking work you need to get done.



## A Forceful, Responsive Design

The 325F features a negative flow control hydraulic system. In layman's terms, negative flow control *decreases* pump flow when oil pressure *increases* and vice versa. The net result is the pump and valve operate in harmony with less energy *and* less wear and tear. What's *really* new with the 325F is the hydraulic valve's electronic control. Integrated with the electronic engine, the hydraulic power with electronic control is smoother and more responsive than traditional hydraulic control. It also contributes to less energy consumption and less wear and tear, and both of those translate into lower owning and operating costs for you.

## Valves For Added Efficiency

The 325F is built with a back-to-back main control valve, and the benefit to you is reduced pressure loss and fuel consumption due to the shorter distance oil has to travel. The machine also features special boom and stick valves that recirculate oil flow in the cylinders during work instead of going all the way back to the tank. The valves contribute to energy savings, but their primary benefit is allowing more oil to flow to other functions so you can experience faster cycle times and more production.

## Tool Control For Enhanced Performance

Tool control is a distinct Cat excavator advantage that adds incredible convenience and enhanced performance to your everyday work. The electronic system stores flows and pressures for up to 20 work tools right in the cab monitor, eliminating the need to calibrate tools every time you make a change out front. It works with both one- and two-way-flow tools, and it can be outfitted with a third pump and medium-pressure circuit so you can use tools like shears, grapples, and tilt buckets. Standard high-pressure circuits make the tools open and close; medium-pressure circuits enable them to rotate. Adding an optional quick coupler circuit makes tool changes even faster for maximum productivity.

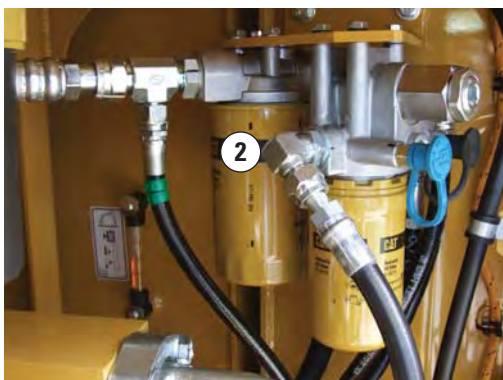


## Other Cat Exclusive Hydraulics Advantages



**Main Pump** – The purpose of the main pump is to convert the engine's mechanical energy into hydraulic energy, and the 325F's pump does that job very well. Its displacement (amount of fluid pumped per revolution) is high so the machine can deliver ground-breaking performance at lower engine speeds. That translates into less wear and tear on the hydraulic system and more fuel savings for you.

**Capsule Filter** – The capsule filter is designed to take out impurities and help you avoid system contamination and accidental spilling. The self-contained, maintenance-friendly filter is easy to remove with a simple wrench. It can take out impurities as small as beta 10 – particles so tiny you cannot see them with the eye. A sensor lets you know if there is a clog or if pressure exceeds a certain level so you can take action.



**Drain Filter** – A drain filter is one extra level of contamination prevention. Located in the pump compartment behind the pilot filter, the drain filter purifies the case drain from the main pumps, swing motor, and travel motors – all to enhance the life of the pumps and motors and uptime for you.

1) Return Capsule Filter 2) Drain Filter





# Engine

Powerful and fuel efficient to meet your expectations

## Proven Technology

Every Tier 4 Final ACERT™ engine is equipped with a combination of proven electronic, fuel, air, and aftertreatment components. Applying these time-tested technologies lets us meet your high expectations for productivity, fuel efficiency, reliability, and service life.

Following are the results you can expect:

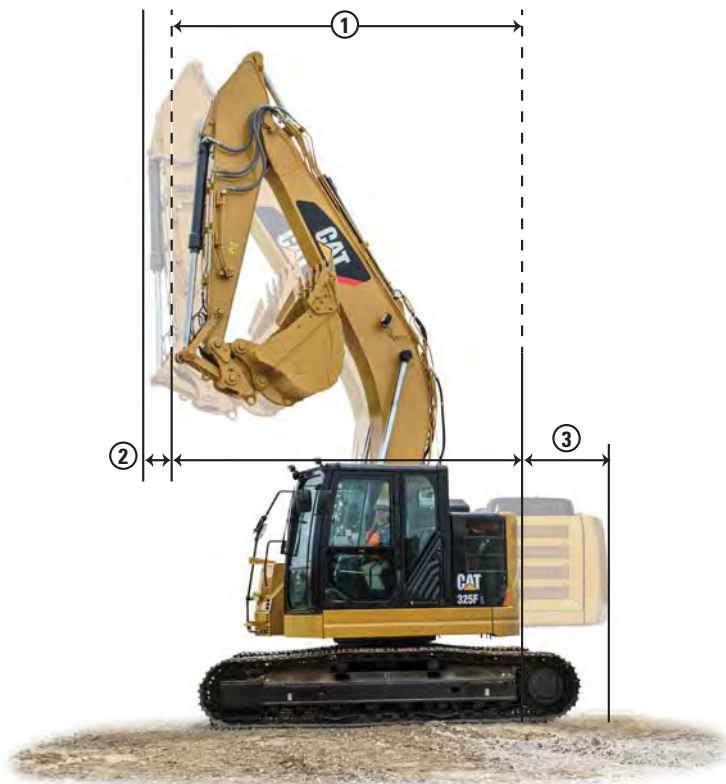
- **Improved fuel efficiency** over the Tier 3 321D
- **High performance** across a variety of applications
- **Enhanced reliability** through commonality and simplicity of design
- **Maximized uptime and reduced cost** with world-class Cat dealer support
- **Minimized impact** on emission systems – with no operator interaction required
- **Durability** with long service life
- **Better fuel economy** with minimized maintenance costs
- **Same great power** and response

## Less Fuel, More Power

While the 325F consumes up to 22% less fuel than the Tier 3 321D, the engine actually delivers more horsepower. How's that possible? Simple. Advanced engine technology and system control. Isochronous control, for example, permits the engine to run at a constant lower speed but at an optimum point in the power curve for maximum efficiency. Automatic engine speed control also contributes by lowering rpm when the machine isn't calling for it. Automatic engine idle shutdown turns the engine off when it's been idling for more than a specified amount of time, which you can easily set through the monitor. Plus you have a choice of three power modes – high power, standard power, and eco mode. Simply change between modes through the switch panel to meet the work needs in front of you. Collectively, all of these benefits add up to reduced fuel consumption, reduced repair and maintenance costs, and increased engine life for you.

## Biodiesel Not A Problem

The C4.4 ACERT engine can run on up to B20 biodiesel that meets ASTM 6751 standards – all to give you more potential fuel-saving flexibility.



### Work With Confidence

The 325F L's compact radius design makes it ideal for working confidently in space-restricted areas like road jobs with lane closures and next to buildings or other structures you'd like to keep out of harm's way. With a front swing radius of 2.34 m (7'8") and a tail swing radius of 1.72 m (5'8"), the machine can dig, swing, and dump within a working space of 4.06 m (13'4"). When rotated 90 degrees and working over the side, just 135 mm (5") of counterweight extends beyond the track width, which allows trucks and jersey barriers to be positioned closer to the machine.

### Work With Power

Unlike a standard radius machine, the 325F's boom is positioned toward the center of the machine. Not only does this help reduce the front swing radius, but it also supports more lift capacity over the front due to greater stability.

### Work With Comfort

The machine features a full-size roll-over protective structure (ROPS) cab. With low sound levels, high visibility, convenient access to switches and controls, and a fully adjustable seat, you will find it comfortable to work in all day long.

	325F L	320F L
1 Working Space	4.06 m (13'4")	
2 Front Swing Radius	2.34 m (7'8")	
3 Tail Swing Radius	1.72 m (5'8")	2.83 m (9'3")

## Compact Radius

Sized right for tight quarters work







# Integrated Technologies

Monitor, manage, and enhance your job site operations

## Cat Connect

The smart use of technology and services will improve your job site efficiency. In fact, using data from technology-equipped machines gives you more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:

## GRADE Technologies

GRADE technologies like Cat Grade Control Depth and Slope combine digital design data and in-cab guidance to help you work more productively and accurately with less rework. Real-time bucket tip positioning and cut and fill data on the standard cab monitor guide you to grade, saving money on fuel and materials.

## LINK Technologies

LINK technologies like Product Link™ wirelessly connect you to your equipment, giving you valuable insight into how your machine or fleet is performing. The system tracks location, hours, fuel usage, productivity, idle time, and diagnostic codes through the online VisionLink® interface so you can make timely, fact-based decisions to maximize efficiency, improve productivity, and lower operating costs.







## Front Linkage

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

### Link & Pins

The power link between the stick and bucket is designed for long-term heavy-duty lifting. With an integrated lifting eye, the power link helps enhance the machine's lifting capability by lowering your load point and maximizing the power built into the boom cylinders. All pins used in the front linkage have thick chrome plating to give them high wear and corrosion resistance. The large diameter pins distribute load weight to ensure long pin, boom, and stick life.

### Boom & Stick

The 325F is offered with a reach boom and stick. This combination provides excellent all-around versatility whether you are picking and placing underground utilities or top loading trucks.

### Built To Last

Each boom and stick is built with internal baffle plates for additional durability, and each undergoes ultrasound inspection to ensure quality and reliability. Large box-section structures with thick, multi-plate fabrications, castings, and forgings are used in high-stress areas such as the boom nose, boom foot, and boom and stick cylinders to enhance durability for the tough work you do.







## Operator Station

Comfort and convenience to keep you productive

### A Safe, Quiet Cab

The ROPS cab provides you with a safe working environment. It also contributes to your comfort because it's attached to a reinforced frame with special viscous mounts that limit vibration and unnecessary sound. Add in special roof lining and sealing and you have a cab that's as quiet inside as today's top pickup trucks.



### Comfortable Seat

The seat is an air suspension type with heat. It features a reclining back, upper and lower slide adjustments, and height and tilt angle adjustments to meet your needs for maximum comfort.

### A Cool & Warm Environment

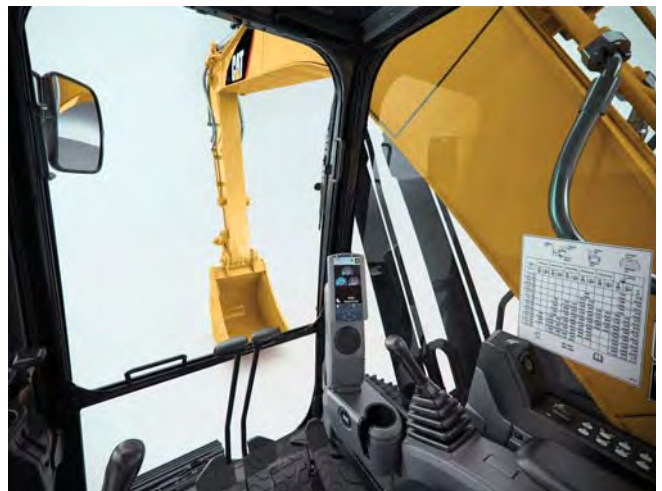
The automatic climate control system features multiple air outlets with filtered ventilation. Air flows on the floor, behind the seat, and in front of you to make your work in either hot or cold weather much more pleasant and productive.

### Controls Just For You

The joystick consoles adjust to improve your comfort and productivity during the course of a day. The armrests telescope up and down just like a bicycle seat. Joysticks for tool control have buttons to make working with a two-way-flow grapple, thumb, and shear simple. The right joystick features a button that will reduce engine speed when you are not working to help save fuel. Touch it once and speed reduces; touch it again and speed increases for normal operation.

### Ample Storage & Auxiliary Power

Storage spaces are located in the front, rear, and side consoles of the cab. A drink holder accommodates a large mug, and a shelf behind the seat stores large lunch or toolboxes. Two 12-volt power supply sockets are conveniently located near the key storage areas for charging your electronic devices like an MP3 player, a cell phone, or a tablet.



### A Helpful Monitor

The LCD monitor is easy to see and navigate. Programmable in up to 44 languages to meet today's diverse workforce, the monitor clearly displays critical information you need to operate efficiently and effectively. Plus it projects the image from the standard rearview camera to help you see what's going on around you so you can stay safely focused on the job at hand.



# Structures & Undercarriage

Made to work in your rugged applications





## Robust Frame

The 325F L is a well-built machine designed to give you a very long service life. The upper frame has mountings made specifically to support the heavy-duty cab; it's also reinforced around key areas that take on stress like the boom foot and skirt. Massive bolts are used to attach the track frames to the body, and additional bolts are used throughout to increase the machine's digging force, which leads to more productivity for you.

## Durable Undercarriage

The 325F L undercarriage contributes significantly to its outstanding stability and durability. Track shoes, links, rollers, idlers, and final drives are all built with long-lasting, high-tensile-strength steel. Cat Grease Lubricated Track 2 (GLT2) track link protects moving parts by keeping water, debris, and dust out and grease sealed in, which delivers longer wear life and reduced noise when traveling. Optional guide guards help maintain track alignment to improve the machine's overall performance—whether you're traveling on a flat, heavy bed of rock or a steep, wet field of mud.



## Huge Counterweight

The counterweight weighs nearly 6800 kg (15,000 lb) to help enhance lift capability – out front and over the side. Rounded to minimize the amount of overhang, the weight is bolted directly to the main frame using massive bolts to ensure maximum rigidity. Plus the counterweight has an integrated housing to help protect the machine's standard rearview camera.





# Attachments

Tools to make you productive and profitable

## Get The Most Out Of One Machine

You can easily expand the performance of your machine by utilizing any of the variety of attachments offered by Cat Work Tools.

## Change Jobs Quickly

A quick coupler brings the ability to quickly change attachments and switch from job to job. The Cat Pin Grabber coupler is the secure way to decrease downtime and increase job site flexibility and your overall productivity.

## Dig, Finish & Compact

Cat buckets dig everything from top soil to harsh, abrasive material. For finishing and grading work, compact and shallow ditch cleaning buckets fit the need. A Cat compactor prepares the area for the next phase of construction.

## Break, Demolish & Scrap

A hydraulic hammer equips your machine for breaking rock in quarries, preparing trenches on construction sites, or taking down bridge pillars and reinforced concrete on road jobs. Multi-processor, pulverizer, and shear attachments take your machine into structure demolition jobs and process the debris for reuse and recycle.

## Move & Handle

Add a thumb and you have the ability to move and handle brush, rocks, and debris. For constant material handling, a grapple is your solution. Choose from three different styles for picking, sorting, and loading trash, demolition debris, or recyclables.

## Set Up Your Machine For Profitability

Your Cat dealer can install hydraulic kits to properly operate all Cat Work Tool attachments – maximizing the machine's uptime and your profits. All Cat Work Tool attachments are supported by the same Cat dealer network as your Cat machine.



## GRAB, SORT, LOAD



Pro Series Hydraulic Thumbs



Stiff Link Thumbs



Contractors' Grapples



Trash Grapples

## SWAP TOOLS



Pin Grabber Coupler

## DIG & PACK



Ditch Cleaning and Tilt Buckets



General Duty Buckets



Heavy Duty Buckets



Severe Duty Buckets



Vibratory Plate Compactors

## CUT, CRUSH, BREAK & RIP



Multi-Processors



Scrap & Demolition Shears



Secondary Pulverizers



Hydraulic Hammers



Rippers





## Serviceability

Designed to make your maintenance quick and easy

### On-Board Monitoring

The 325F has a pre-start monitoring system that allows you to check coolant, hydraulic oil, and engine oil levels right inside the cab. The monitor also tells you fluid and filter change intervals to ensure you keep the machine in top-performing condition.

### Safe, Convenient Access

You can see the service hour meter inside the cab and reach most routine maintenance items like fluid taps and grease points from the safety and convenience of ground level. Filters are banked together for higher service efficiency. Compartments feature wide service doors and heavy-duty hardware to keep them open – all to make service work simpler and more secure.





### **A Fresh Idea**

The fresh air filter is conveniently located on the side of the cab to make it easy for you to reach and replace. It's protected by a lockable door that can only be opened with the engine key.

### **A Priming Solution**

Located in the pump compartment, an electric fuel priming pump eliminates the need for you to manually prime after filter changes. It also eliminates the risk of fuel contamination by preventing unfiltered fuel from being backfilled during filter changes.

### **More Service Benefits**

Drain tubes beneath the machine make it easy and simple for you to remove water and sediment during routine maintenance. They also make it easy to change oil without special tools or the risk of spilling. Same goes for an integrated fuel level indicator that pops up to help you reduce the possibility of fuel tank overfilling.





# Safety

Features to help protect you day in and day out

## A Safe, Quiet Cab

The ROPS cab provides you with a safe working environment when properly seated and belted. It also contributes to your comfort because it's attached to a reinforced frame with special viscous mounts that limit vibration and unnecessary sound. Add in special roof lining and sealing and you have a cab that's as quiet inside as any of today's top pickup trucks.

## Secure Contact Points

Multiple large steps get you into the cab as well as a leg up to the compartments. Extended hand and guard rails allow you to safely climb to the upper deck. Anti-skid plates reduce your slipping hazards in all types of weather conditions, and they can be removed for cleaning.

## Great Views

Ample glass gives you excellent visibility out front and to the side, and the available rearview camera gives you a clear field of view behind the machine through the cab monitor. The available split-configuration windshield features an upper window with handles that make it easy to slide and store above you and a lower window that can be removed and stored on the inside wall of the cab. The large skylight also serves as an emergency exit and provides you with enhanced overhead visibility.

## Smart Lighting

Halogen lights provide plenty of illumination, and 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 you safely exit the machine.

## Guard Options

The 325F can be equipped with several guarding options. Following are just a few that will help protect you and your machine:

- Falling Object Guarding System (FOGS)
- Vandal guards
- Full-length wire mesh
- Heavy-duty bottom guards
- Track guiding guards







## Complete Customer Care

Support you can count on

### Expert Advice You Can Trust

What are the job requirements and machine attachments? What production is needed? Your Cat dealer can provide recommendations to help you make the right machine choices.

### Support Agreements To Fit Your Needs

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.

### Parts When And Where You Need Them

Cat dealers utilize a worldwide parts network to maximize your machines' uptime. Plus they can help you save money with Cat remanufactured components.

### Operating Techniques To Boost Your Profits

Improving operating techniques can boost your profits. 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.

### Financial Options Just For You

Consider financing options and day-to-day operating costs. Look at dealer services that can be included in the machine's cost to yield lower owning and operating costs over time.

### What's Best For You Today...And Tomorrow

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

Generations ahead in every way



- The C4.4 ACERT engine meets Tier 4 Final emission standards.
- The machine burns up to 22% less fuel than the model it replaces, which means a lower carbon footprint.
- The engine can run on either ultra-low-sulfur diesel (ULSD) fuel with 15 ppm of sulfur or less or biodiesel (B20) fuel blended with ULSD.
- A ground-level overfill indicator rises when the tank is full to help the operator avoid spilling.
- The machine is built to be rebuilt with major structures and components capable of being remanufactured to reduce waste and replacement costs.
- The 325F L is an efficient, productive machine that's designed to conserve our natural resources for generations ahead.



# 325F L Hydraulic Excavator Specifications

## Engine

Engine Model	Cat C4.4 ACERT	
Engine Power – ISO 14396	122 kW	164 hp
Net Power – SAE J1349	120 kW	161 hp
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in <sup>3</sup>

- The 325F L meets Tier 4 Final emission standards.
- No engine power derating required below 3000 m (9,800 ft) altitude.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.
- Rating at 1,800 rpm.

## Weights

Operating Weight	25 907 kg	57,115 lb
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- Long Undercarriage, Reach Boom, R 2.9 m (9'6") Stick, 1.19 m<sup>3</sup> (1.56 yd<sup>3</sup>) bucket and 790 mm (31") TG shoes.

## Track

Number of Shoes Each Side	49	
Number of Track Rollers Each Side	7	
Number of Carrier Roller Each Side	2	

## Swing Mechanism

Swing Speed	11.2 rpm	
Swing Torque	62 kN·m	45,612 lbf·ft

## Drive

Maximum Travel Speed	5.6 km/h	3.5 mph
Maximum Drawbar Pull	203 kN	45,591 lbf

## Hydraulic System

Main System – Maximum Flow (implement)	429 L/min	113 gal/min
Maximum Pressure – Equipment – Normal	35 000 kPa	5,075 psi
Maximum Pressure – Equipment – Lift Mode	38 000 kPa	5,510 psi
Maximum Pressure – Travel	35 000 kPa	5,075 psi
Maximum Pressure – Swing	25 500 kPa	3,698 psi
Pilot System – Maximum Flow	18 L/min	4.8 gal/min
Pilot System – Maximum Pressure	4100 kPa	595 psi
Boom Cylinder – Bore	125 mm	5 in
Boom Cylinder – Stroke	1403 mm	55 in
Stick Cylinder – Bore	140 mm	6 in
Stick Cylinder – Stroke	1504 mm	59 in
Bucket Cylinder – Bore	120 mm	5 in
Bucket Cylinder – Stroke	1104 mm	43 in

## Service Refill Capacities

Fuel Tank Capacity	328 L	86.6 gal
DEF Tank Capacity	19 L	4.9 gal
Cooling System	30 L	7.9 gal
Engine Oil	25 L	6.6 gal
Swing Drive	8 L	2.1 gal
Final Drive	8 L	2.1 gal
Hydraulic System (including tank)	280 L	74.0 gal
Hydraulic Tank	128 L	33.8 gal

## Sound Performance

ISO 6395 (external)	99 dB(A)
ISO 6396 (inside cab)	69 dB(A)

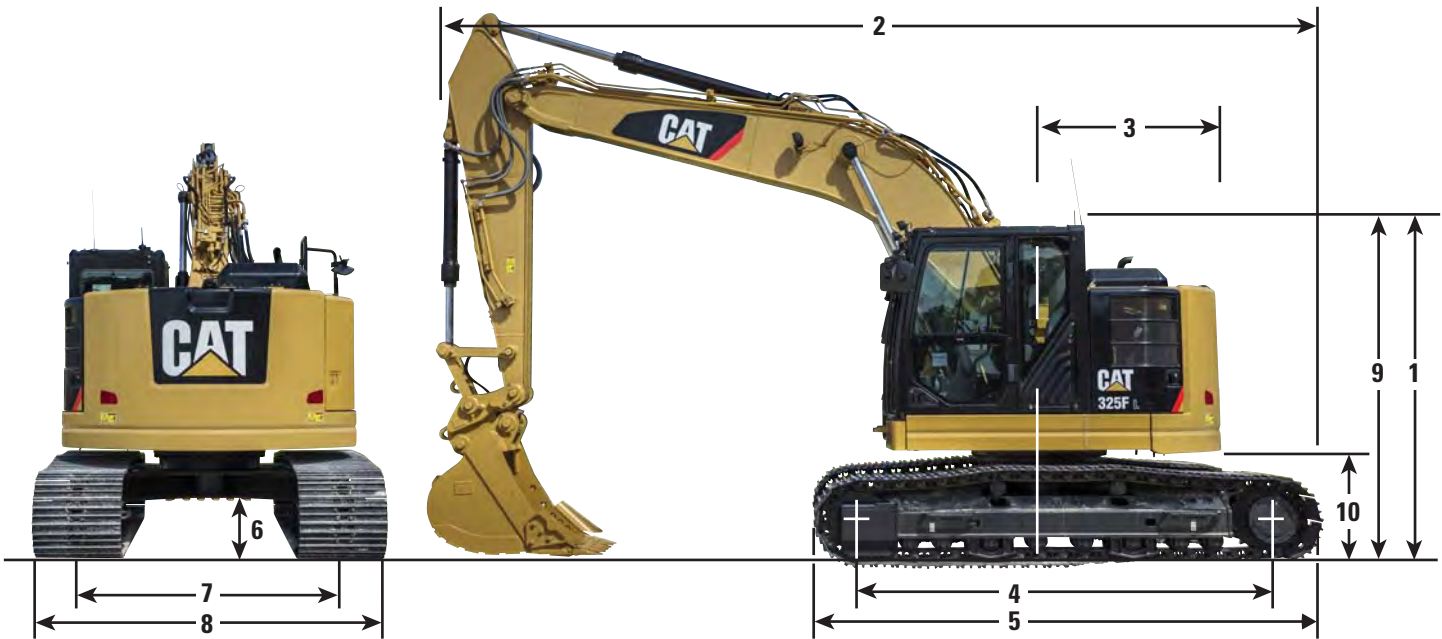
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 OCT98, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.



# 325F L Hydraulic Excavator Specifications

## Dimensions

All dimensions are approximate.



Boom Options		Reach Boom 5.7 m (18'8")	
Stick Options		R2.9 m* (9'6")	
1	Shipping Height	3180 mm	10'5"
2	Shipping Length	8920 mm	29'3"
3	Tail Swing Radius	1720 mm	5'8"
4	Length to Center of Rollers	3650 mm	12'0"
5	Track Length	4460 mm	14'8"
6	Ground Clearance	450 mm	1'6"
7	Track Gauge	2380 mm	7'10"
8	Transport Width		
	600 mm (24") Shoes	2980 mm	9'9"
	790 mm (31") Shoes	3170 mm	10'5"
9	Handrail Height	3180 mm	10'5"
10	Counterweight Clearance	960 mm	3'2"

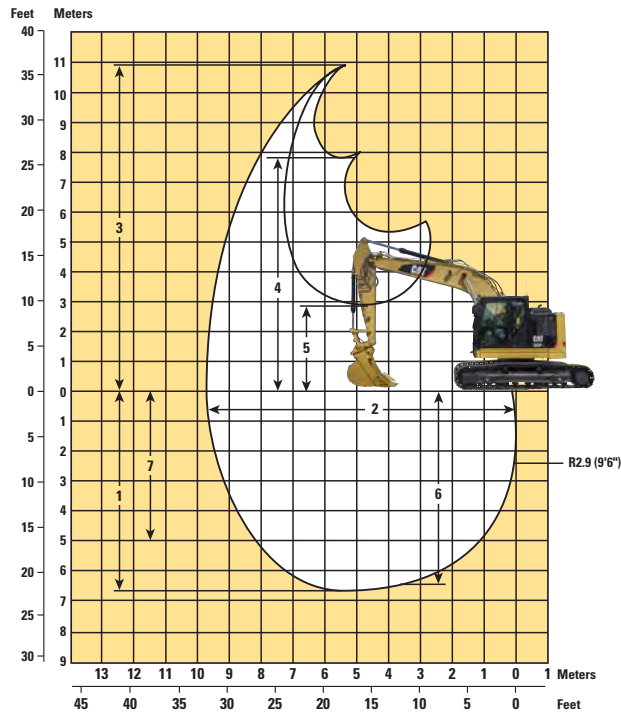
\*With 1.19 m³ (1.56 yd³) Bucket



# 325F L Hydraulic Excavator Specifications

## Working Ranges

All dimensions are approximate.



Boom Options	Reach Boom	
Stick Options	R2.9 m (9'6")	
Bucket	HD 1.19 m <sup>3</sup>	1.56 yd <sup>3</sup>
1 Maximum Digging Depth	6710 mm	22'0"
2 Maximum Reach at Ground Line	9790 mm	32'1"
3 Maximum Cutting Height	10 960 mm	35'11"
4 Maximum Loading Height	7890 mm	25'11"
5 Minimum Loading Height	2960 mm	9'9"
6 Maximum Depth Cut for 2440 mm (8 ft) Level Bottom	6540 mm	21'5"
7 Maximum Vertical Wall Digging Depth	5000 mm	16'5"
Maximum Height, to Bucket Teeth at Highest Arc	10 960 mm	35'11"
Bucket Digging Force (SAE)	134 kN	30,124 lbf
Stick Digging Force (SAE)	103 kN	23,155 lbf



# 325F L Hydraulic Excavator Specifications

## Operating Weights and Ground Pressures

	790 mm (31") TG Shoes (HD)		790 mm (31") TG Shoes		600 mm (24") TG Shoes	
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
<b>Long Undercarriage</b>						
Reach Boom						
R2.9 m (9'6") Stick + HD 1.19 m <sup>3</sup> (1.56 yd <sup>3</sup> ) Bucket	26 343 (58,076)	41.6 (6.0)	25 907 (57,115)	40.9 (5.9)	25 349 (55,885)	52.7 (7.6)
Reach Boom for CGC						
R2.9 m (9'6") Stick for CGC + HD 1.19 m <sup>3</sup> (1.56 yd <sup>3</sup> ) Bucket	26 364 (58,123)	41.6 (6.0)	25 928 (57,161)	41.0 (5.9)	25 370 (55,931)	52.8 (7.7)

## Major Component Weights

	kg	lb
Base Machine (with Counterweight and 790 mm (31 in) TG Shoe (HD) without Front Linkage)	22 142	48,810
Counterweight	6800	14,990
Reach Boom (includes lines, pins, stick cylinder)	1740	3,840
Stick (includes lines, pins, bucket cylinder and linkage)		
R2.9 m (9'6")	975	2,150
Buckets		
HD 1.19 m <sup>3</sup> (1.56 yd <sup>3</sup> )	1062	2,340
GD 1.3 m <sup>3</sup> (1.8 yd <sup>3</sup> )	916	2,020

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.

# 325F L Hydraulic Excavator Specifications

## Work Tool Offering Guide\*

Boom Option	Reach Boom
Stick Option	R2.9 m HD (9'6")
Hydraulic Hammer	H120E s H130E s
Multi-Processor	MP318 CC Jaw MP318 D Jaw MP318 P Jaw MP318 S Jaw MP318 U Jaw
Pulverizer	P215
Demolition and Sorting Grapple (D-Demolition shells, R-Recycling shells, WH-Waste Handling shells)	G315B-D / R G315B-WH G320B-D/R * #
Scrap and Demolition Shear	S320B S325B ^ S340B # ^
Compactor (vibratory plate)	CVP110
Orange Peel Grapple	
Thumbs	
Rippers	
Pin Grabber Coupler	
Dedicated Quick Coupler	

These work tools are available for the 325F L.  
Consult your Cat dealer for proper match.

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.

\* Match; Pin-on only

# Work over the front only

^ Match; Boom Mount



# 325F L Hydraulic Excavator Specifications

## Bucket Specifications and Compatibility

	Linkage								600 mm (24") TG
		Width		Capacity		Weight		Fill	Reach Boom
		mm	in	m³	yd³	kg	lb	%	R2.9 m (9'6")
Without Quick Coupler									
General Duty (GDC)	B	600	24	0.55	0.72	618	1,363	100%	●
	B	750	30	0.75	0.98	710	1,566	100%	●
	B	900	36	0.95	1.24	786	1,733	100%	●
	B	1050	42	1.16	1.52	847	1,867	100%	⊙
	B	1200	48	1.38	1.80	925	2,038	100%	⊖
	B	1350	54	1.59	2.08	1002	2,209	100%	○
Heavy Duty (HD)	B	600	24	0.46	0.61	649	1,430	100%	●
	B	750	30	0.64	0.84	747	1,647	100%	●
	B	900	36	0.81	1.06	825	1,818	100%	●
	B	1050	42	1.00	1.31	879	1,937	100%	●
	B	1200	48	1.19	1.56	970	2,138	100%	⊙
	B	1350	54	1.38	1.81	1051	2,316	100%	⊖
Severe Duty (SD)	B	600	24	0.46	0.61	693	1,527	90%	●
	B	750	30	0.64	0.84	801	1,765	90%	●
	B	900	36	0.81	1.06	887	1,955	90%	●
	B	1050	42	1.00	1.31	962	2,121	90%	●
	B	1200	48	1.19	1.56	1051	2,316	90%	⊙
With Pin Grabber Coupler									
General Duty (GDC)	B	600	24	0.55	0.72	618	1,363	100%	●
	B	750	30	0.75	0.98	710	1,566	100%	●
	B	900	36	0.95	1.24	786	1,733	100%	●
	B	1050	42	1.16	1.52	847	1,867	100%	⊖
	B	1200	48	1.38	1.80	925	2,038	100%	○
	B	1350	54	1.59	2.08	1002	2,209	100%	◇
Heavy Duty (HD)	B	600	24	0.46	0.61	649	1,430	100%	●
	B	750	30	0.64	0.84	747	1,647	100%	●
	B	900	36	0.81	1.06	825	1,818	100%	●
	B	1050	42	1.00	1.31	879	1,937	100%	⊙
	B	1200	48	1.19	1.56	970	2,138	100%	⊖
	B	1350	54	1.38	1.81	1051	2,316	100%	○
Severe Duty (SD)	B	600	24	0.46	0.61	693	1,527	90%	●
	B	750	30	0.64	0.84	801	1,765	90%	●
	B	900	36	0.81	1.06	887	1,955	90%	●
	B	1050	42	1.00	1.31	962	2,121	90%	⊙
	B	1200	48	1.19	1.56	1051	2,316	90%	⊖

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.

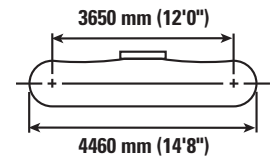
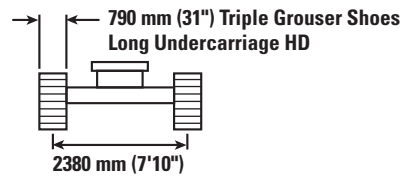
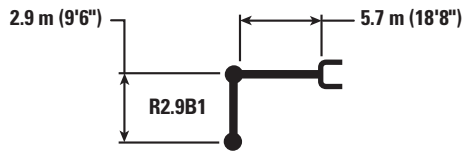
### Maximum Material Density:

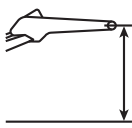













- 2100 kg/m<sup>3</sup> (3,500 lb/yd<sup>3</sup>)
- ⊙ 1800 kg/m<sup>3</sup> (3,000 lb/yd<sup>3</sup>)
- ⊖ 1500 kg/m<sup>3</sup> (2,500 lb/yd<sup>3</sup>)
- 1200 kg/m<sup>3</sup> (2,000 lb/yd<sup>3</sup>)
- ◇ 900 kg/m<sup>3</sup> (1,500 lb/yd<sup>3</sup>)

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.

# 325F L Hydraulic Excavator Specifications

## Reach Boom Lift Capacities – Counterweight: 6.8 mt (14,990 lb) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
														mm in
9.0 m 30.0 ft	kg lb											*5050 *11,400	*5050 *11,400	4490 170
7.5 m 25.0 ft	kg lb					*6150 *13,550	*6150 *13,550	*5350 *10,100	*5350 *10,100			*4250 *9,350	*4250 *9,350	6280 250
6.0 m 20.0 ft	kg lb					*6600 *14,400	*6600 *14,400	*6350 *13,900	5700 12,250			*3950 *8,700	*3950 *8,700	7350 290
4.5 m 15.0 ft	kg lb			*10 600 *22,500	*10 600 *22,500	*8100 *17,500	*8100 *17,500	*7000 *15,200	5550 11,900	6250 *12,750	3950 8,450	*3900 *8,550	3550 7,800	8010 320
3.0 m 10.0 ft	kg lb					*10 200 *21,950	8000 17,300	*7950 *17,200	5300 11,400	6150 13,200	3850 8,200	*4000 *8,800	3250 7,150	8340 330
1.5 m 5.0 ft	kg lb					*12 000 *25,900	7550 16,200	8350 18,000	5050 10,900	6000 12,950	3700 7,950	*4250 *9,350	3150 6,950	8400 330
0 m 0 ft	kg lb			*7350 *16,800	*7350 *16,800	*12 750 27,650	7250 15,650	8200 17,600	4900 10,550	5900 12,750	3650 7,800	*4750 *10,450	3250 7,100	8180 330
-1.5 m -5.0 ft	kg lb	*7700 *17,200	*7700 *17,200	*12 300 *27,850	*12 300 *27,850	*12 550 *27,200	7200 15,500	8100 17,450	4850 10,400	5900 12,750	3600 7,800	*5600 *12,400	3550 7,750	7660 310
-3.0 m -10.0 ft	kg lb	*12 850 *28,800	*12 850 *28,800	*15 700 *34,000	14 050 30,100	*11 350 *24,500	7300 15,700	8150 17,600	4900 10,550			6900 15,300	4200 9,300	6780 270
-4.5 m -15.0 ft	kg lb			*11 750 *25,100	*11 750 *25,100	*8550 *18,100	7550 16,250					*6800 *14,850	5950 13,450	5340 210



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.

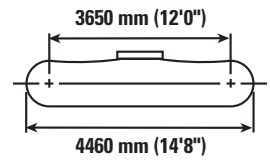
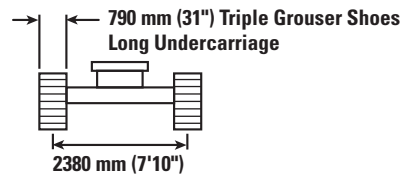
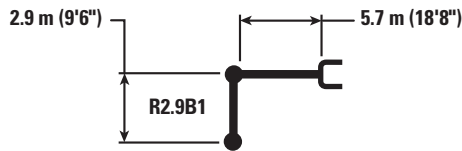
Lift capacity stays with  $\pm 5\%$  for all available track shoes.

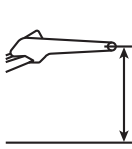













Always refer to the appropriate Operation and Maintenance Manual for specific product information.



# 325F L Hydraulic Excavator Specifications

## Reach Boom Lift Capacities – Counterweight: 6.8 mt (14,990 lb) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
														mm in
9.0 m 30.0 ft	kg lb											*5050 *11,350	*5050 *11,350	4490 170
7.5 m 25.0 ft	kg lb					*6150 *13,550	*6150 *13,550	*5350 *10,100	*5350 *10,100			*4200 *9,350	*4200 *9,350	6280 250
6.0 m 20.0 ft	kg lb					*6600 *14,400	*6600 *14,400	*6350 *13,900	5600 12,050			*3950 *8,700	*3950 *8,700	7350 290
4.5 m 15.0 ft	kg lb			*10 600 *22,500	*10 600 *22,500	*8100 *17,450	*8100 *17,450	*7000 *15,200	5450 11,700	6150 *12,750	3850 8,250	*3900 *8,550	3450 7,650	8010 320
3.0 m 10.0 ft	kg lb					*10 200 *21,950	7850 16,950	*7950 *17,200	5200 11,150	6000 12,950	3750 8,050	*4000 *8,800	3200 7,000	8340 330
1.5 m 5.0 ft	kg lb					*12 000 *25,850	7400 15,900	8200 17,650	4950 10,650	5900 12,650	3650 7,800	*4250 *9,350	3100 6,800	8400 330
0 m 0 ft	kg lb			*7350 *16,800	*7350 *16,800	12 650 27,100	7100 15,350	8000 17,250	4800 10,300	5800 12,500	3550 7,650	*4750 *10,450	3150 6,950	8180 330
-1.5 m -5.0 ft	kg lb	*7700 *17,150	*7700 *17,150	*12 300 *27,850	*12 300 *27,850	*12 550 26,950	7050 15,200	7950 17,100	4750 10,200	5800 12,450	3550 7,600	*5600 *12,400	3450 7,600	7660 310
-3.0 m -10.0 ft	kg lb	*12 850 *28,800	*12 850 *28,800	*15 700 *34,000	13 800 29,550	*11 350 *24,500	7150 15,350	8000 17,250	4800 10,300			6750 15,000	4100 9,100	6780 270
-4.5 m -15.0 ft	kg lb			*11 750 *25,050	*11 750 *25,050	*8550 *18,100	7400 15,950					*6800 *14,850	5850 13,200	5340 210



ISO 10567



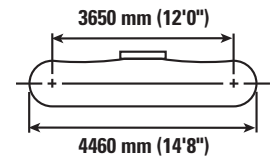
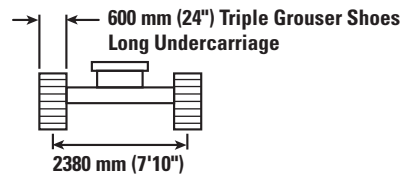
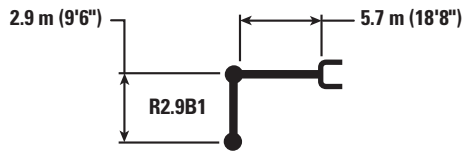
\*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories 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.

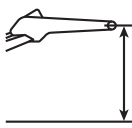













Lift capacity stays with  $\pm 5\%$  for all available track shoes.

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

# 325F L Hydraulic Excavator Specifications

## Reach Boom Lift Capacities – Counterweight: 6.8 mt (14,990 lb) – without Bucket



		1.5 m/5.0 ft		3.0 m/10.0 ft		4.5 m/15.0 ft		6.0 m/20.0 ft		7.5 m/25.0 ft				
														mm in
9.0 m 30.0 ft	kg lb											*5050 *11,350	*5050 *11,350	4490 170
7.5 m 25.0 ft	kg lb					*6150 *13,550	*6150 *13,550	*5350 *10,100	*5350 *10,100			*4200 *9,350	*4200 *9,350	6280 250
6.0 m 20.0 ft	kg lb					*6600 *14,400	*6600 *14,400	*6350 *13,900	5500 11,800			*3950 *8,700	3950 *8,700	7350 290
4.5 m 15.0 ft	kg lb			*10 600 *22,500	*10 600 *22,500	*8100 *17,450	*8100 *17,450	*7000 *15,200	5350 11,450	6000 *12,750	3750 8,050	*3900 *8,550	3400 7,450	8010 320
3.0 m 10.0 ft	kg lb					*10 200 *21,950	7700 16,600	*7950 *17,200	5100 10,950	5900 12,650	3650 7,850	*4000 *8,800	3100 6,850	8340 330
1.5 m 5.0 ft	kg lb					*12 000 *25,850	7200 15,550	8000 17,250	4850 10,400	5750 12,400	3550 7,600	*4250 *9,350	3000 6,650	8400 330
0 m 0 ft	kg lb			*7350 *16,800	*7350 *16,800	12 350 26,500	6950 14,950	7850 16,850	4700 10,050	5650 12,200	3450 7,450	*4750 *10,450	3100 6,800	8180 330
-1.5 m -5.0 ft	kg lb	*7700 *17,150	*7700 *17,150	*12 300 *27,850	*12 300 *27,850	12 300 26,300	6900 14,850	7750 16,700	4600 9,950	5650 12,200	3450 7,450	5500 12,150	3350 7,400	7660 310
-3.0 m -10.0 ft	kg lb	*12 850 *28,800	*12 850 *28,800	*15 700 *34,000	13 500 28,850	*11 350 *24,500	7000 15,000	7850 16,850	4650 10,050			6600 14,650	4000 8,900	6780 270
-4.5 m -15.0 ft	kg lb			*11 750 *25,050	*11 750 *25,050	*8550 *18,100	7250 15,600					*6800 *14,850	5700 12,900	5340 210



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  $\pm 5\%$  for all available track shoes.

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



# 325F L Standard Equipment

## Standard Equipment

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

### ENGINE

- Diesel engine, Cat C4.4 ACERT, twin turbo, meets Tier 4 Final emission standards
  - Three selectable power modes capability: HHP, STD and ECO
  - Aftertreatment system: CEM (DOC + DPF + SCR) and DEF system (DEF tank and DEF lines)
- Variable fan speed control with viscous clutch
- One-touch low idle with auto engine speed control
- Automatic (programmable) idling shut down function
- Three-stage fuel filtration system with water separator and indicator
- 3000 m (9,840 ft) altitude capability without de-rate
- 52° C (126° F) high-ambient cooling capability with de-rate from 48° C (118° F)
- 85 amp alternator
- Radial seal air filter with double filter element
- Electric fuel lifting pump
- Capability of using biodiesel fuel (up to B20)

### HYDRAULIC

- Electric boom regeneration circuit
- Stick regeneration circuit
- One-touch lifting mode
- Automatic two-speed travel
- Boom and stick drift reduction valve
- Reverse swing damping valve
- High-performance hydraulic return filter (capsule filter type)
- CRN compliant accumulator

### CAB

- Sound suppressed ROPS cab (ISO 12117-2 compliant) with viscous mount
- Openable skylight as emergency exit (dual exit hatch)
- Openable laminated front upper windshield with assist device
- Removable tempered lower windshield with in-cab storage bracket
- High back seat with air suspension, seat heater and head rest
- Fully adjustable seat, console and armrest
- Seat belt
- LCD monitor with distortion-free rearview camera picture
- Automatic bi-level air conditioner with pressurized function
- 12V×2 power supply with sockets (maximum 10 amp)
- Washable floor mat
- Interior utilities (interior lighting, coat hook, beverage holder, literature holder, document holding space, and cab rear storage compartment)

### UNDERCARRIAGE & STRUCTURES

- HD track rollers
- Grease-lubricated track link
- Tie-down points on base frame (ISO 15818 compliant)
- Swivel guard

### ELECTRICAL

- Maintenance-free battery
- Centralized electrical disconnect switch
- Cat Product Link
- Programmable time delay working lights (halogen); base machine frame (one), cab mounted (two), boom mounted both sides (two)

### SERVICE & MAINTENANCE

- Engine oil, fuel, and hydraulic oil filters grouped for ease of maintenance (secondary fuel filter is located separately)
- Sampling ports for Scheduled Oil Sampling (S-O-S<sup>SM</sup>)

### SAFETY & SECURITY

- Rearview camera with three mirrors (ISO 5006 compliant) and one additional handrail mirror for right rear view
- RH handrail and hand hold (ISO 2867 compliant)
- Bolt-free service platform with anti-skid plate
- Neutral lever (lock out) for all controls
- Ground-level accessible secondary engine shutoff switch in cab
- Signaling/warning horn
- Jump start stud
- Safety hammer for cab evacuation

## Optional Equipment – Factory Installed

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

### ENGINE

- Cold start, -32° C (-26° F)

### HYDRAULIC

- Tool control
- Medium circuit, ele. device (two way, third pump)
- Cat Pin Grabber coupler circuit (high pressure)
- Boom line, high pressure for reach
- Stick line, high pressure for reach (R2.9B1/9'6")
- Boom line, medium pressure for reach
- Stick line, medium pressure for reach (R2.9B1/9'6")
- Boom line, quick coupler for reach
- Stick line, quick coupler for reach (R2.9B1/9'6")
- Fine swing control
- Boom cylinders
- Stick cylinder
- Bucket cylinder

### CAB

- Joysticks with three on/off switches and one modulation switch
- Straight travel pedal
- Control pattern quick-changer, two way
- 24V AM/FM radio with auxiliary input

### UNDERCARRIAGE & STRUCTURES

- Reach boom (5.7 m/18'8") with left-hand and right-hand boom lights
- Stick (R2.9 m/9'6") B1 linkage
- Bucket linkage, B1-family with lifting eye
- 600 mm (24") triple grouser
- 790 mm (31") triple grouser
- 790 mm (31") HD triple grouser
- Track guiding guard, segmented two pieces
- Track guiding guard, full length
- HD bottom guards
- Standard bottom guards

### TECHNOLOGY

- Cat Grade Control (GC) 2D depth and slope

### SAFETY & SECURITY

- Boom lowering control valve
- Stick lowering control valve
- Travel alarm

## Optional Equipment – Dealer Installed

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

### CAB

- Rain protector for front windshield

### SAFETY & SECURITY

- Seat belt, retractable (76 mm/3" width)
- FOGS retrofit kit package
- Mesh for front guard retrofit kit package
- Mesh guard, lower half front
- Vandalism guard with holder

### SERVICE & MAINTENANCE

- Electric refueling pump with auto shut off



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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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AEHQ7654-01 (01-2016)  
Replaces AEHQ7654

