

325F L

Hydraulic Excavator

2017



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 – North America	25 900 kg	57,100 lb
Operating Weight – ANZ	25 630 kg	56,500 lb

Introduction

Picture yourself behind the joysticks of one of the world's finest compact radius excavators, the new Cat 325F L. This machine features a highly efficient U.S. EPA Tier 4 Final/EU Stage IV 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 with the 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 m³ (2.05 yd³) 1372 mm (54")

Maximum Reach

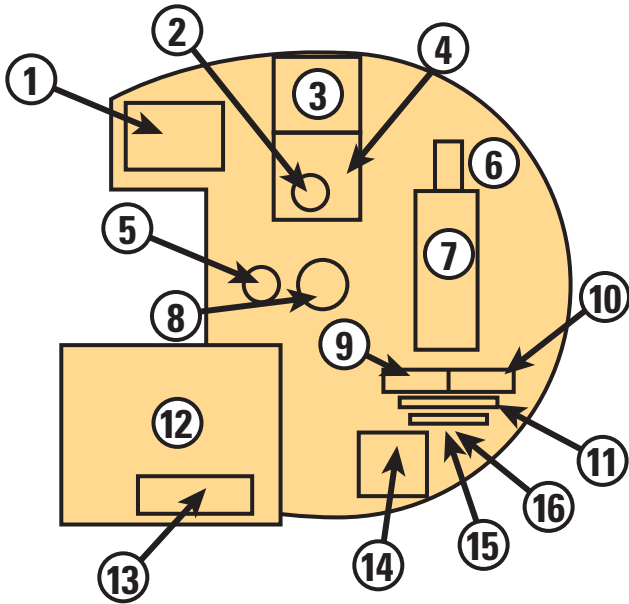
9790 mm (32'1")

Maximum Dig Depth

6710 mm (22'0")

Hydraulics

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



- | | |
|-----------------------|---------------------|
| 1) Main Control Valve | 9) Oil Cooler |
| 2) Capsule Filter | 10) Radiator |
| 3) Fuel Tank | 11) Air Aftercooler |
| 4) Hydraulic Tank | 12) Cab |
| 5) Rotary Joint | 13) Batteries |
| 6) Pump | 14) DEF Tank |
| 7) Engine | 15) Fuel Cooler |
| 8) Swing Motor | 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.

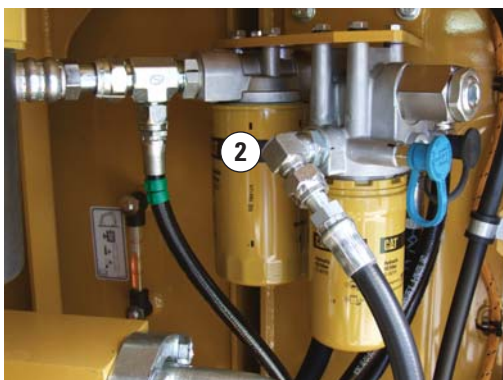


Other Cat Exclusive Hydraulics Advantages



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/Stage IV 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:

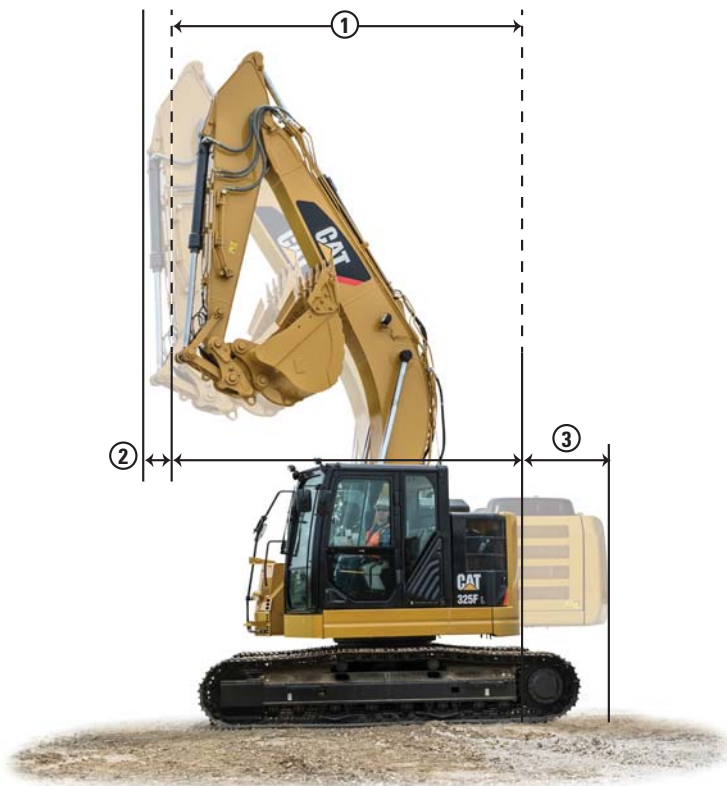
- **Improved fuel efficiency** over the Tier 3/Stage IIIA 321D
- **High performance** across a variety of applications
- **Enhanced reliability** through commonality and simplicity of design
- **Maximized uptime and reduced cost** with world-class Cat dealer support
- **Minimized impact** on emission 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/Stage IIIA 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")	6.49 m (21'4")
2 Front Swing Radius	2.34 m (7'8")	3.66 m (12'0")
3 Tail Swing Radius	1.72 m (5'8")	2.83 m (9'3")

Compact Radius

Sized right for tight quarters work





Cat Connect Technologies

Monitor, manage, and enhance your 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 – increase uptime and reduce operating costs.



Productivity – monitor production and manage job site efficiency.



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



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 325F L simplifies upgrading. Choose from satellite (GNSS) control for large projects with complex designs or total station (UTS) systems in areas with limited reception.



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.

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

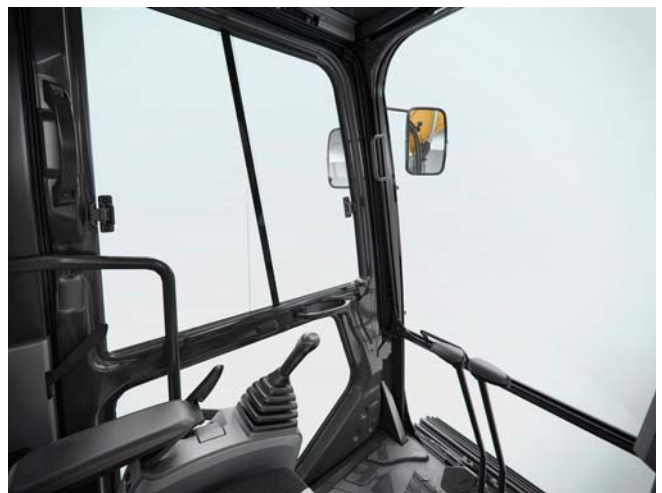
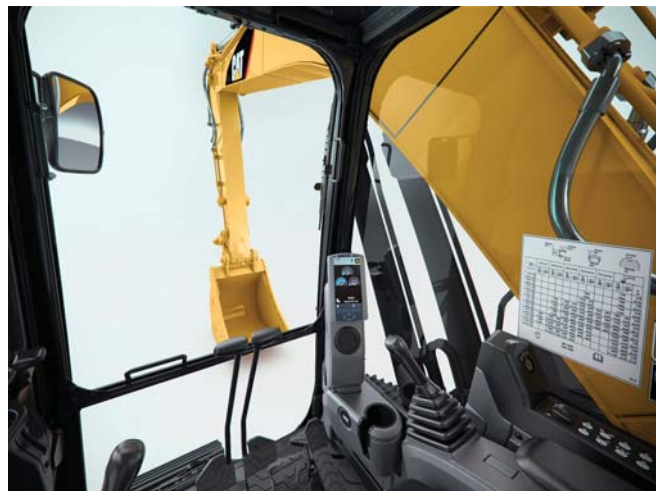
The automatic climate control system features multiple air outlets with filtered ventilation. Air flows on the floor, behind the seat, and in front of you to make your work in either hot or cold weather much more pleasant and productive.

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 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/Stage IV 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 (up to 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
Engine rpm		
Operation	1,800 rpm	
Travel	1,800 rpm	
Bore	105 mm	4 in
Stroke	127 mm	5 in
Displacement	4.4 L	269 in ³

- The 325F L meets Tier 4 Final/Stage IV 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.
- Power rating at 1,800 rpm.

Weights

Operating Weight – North America*	25 900 kg	57,100 lb
Operating Weight – ANZ**	25 630 kg	56,500 lb

*Long Undercarriage, Reach Boom, R 2.9 m (9'6") Stick, 1.19 m³ (1.56 yd³) bucket and 790 mm (31") TG shoes.

**Long Undercarriage, Reach Boom, R 2.9 m (9'6") Stick, 1.19 m³ (1.56 yd³) bucket and 600 mm (31") TG HD 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	
Maximum Swing Torque	74 kN·m	54,440 lbf·ft

Drive

Maximum Gradeability	35°/70%	
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.

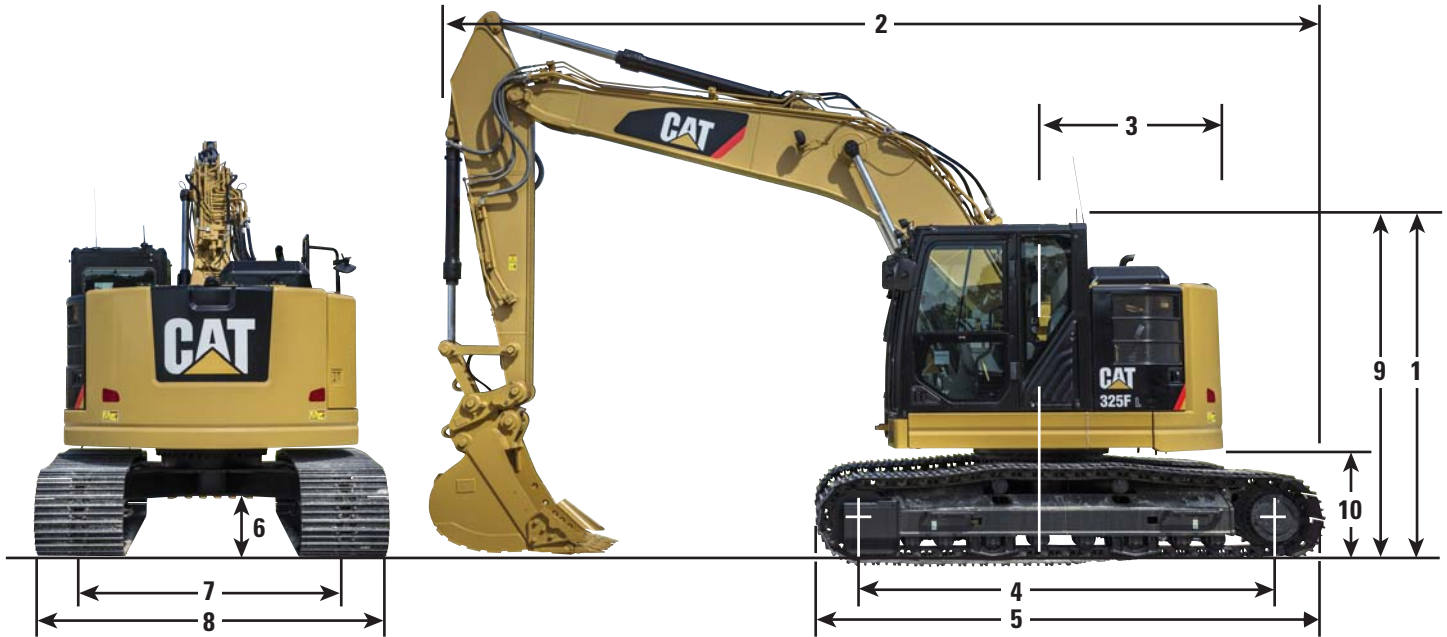
Standards

Brakes	ISO 10265:2008
Cab/FOGS	ISO 10262:1998
Cab/ROPS	ISO 12117-2:2008
DEF	ISO 22241

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")

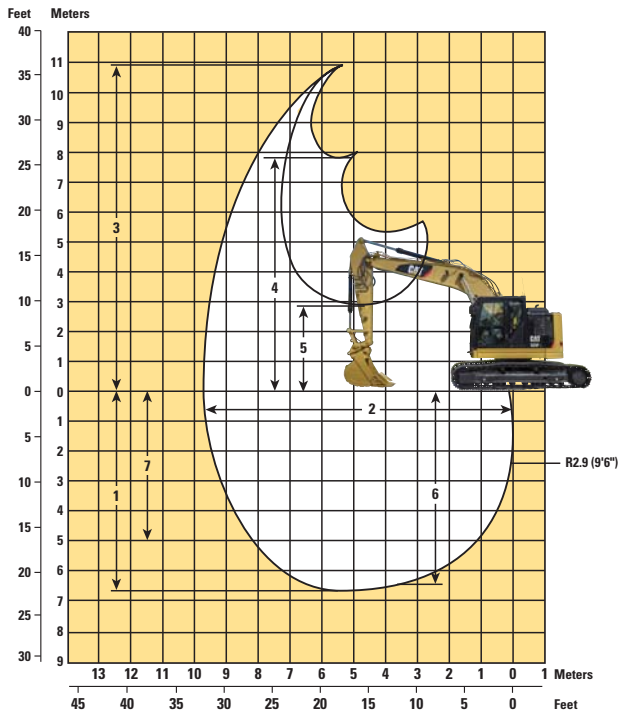
1 Shipping Height	3180 mm	10'5"
2 Shipping Length	8920 mm	29'3"
3 Tail Swing Radius	1720 mm	5'8"
4 Length to Center of Rollers	3650 mm	12'0"
5 Track Length	4460 mm	14'8"
6 Ground Clearance	450 mm	1'6"
7 Track Gauge	2380 mm	7'10"
8 Transport Width		
600 mm (24") Shoes	2980 mm	9'9"
790 mm (31") Shoes	3170 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

Stick Options

Bucket

1 Maximum Digging Depth

2 Maximum Reach at Ground Line

3 Maximum Cutting Height

4 Maximum Loading Height

5 Minimum Loading Height

6 Maximum Depth Cut for 2440 mm (8 ft) Level Bottom

7 Maximum Vertical Wall Digging Depth

Maximum Height, to Bucket Teeth at Highest Arc

Bucket Digging Force (SAE)

Stick Digging Force (SAE)

Reach Boom

R2.9 m (9'6")

HD 1.19 m³

1.56 yd³

6710 mm

22'0"

9790 mm

32'1"

10 960 mm

35'11"

7890 mm

25'11"

2960 mm

9'9"

6540 mm

21'5"

5000 mm

16'5"

10 960 mm

35'11"

134 kN

30,124 lbf

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 (HD)	
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
Long Undercarriage						
Reach Boom						
R2.9 m (9'6") Stick + HD 1.19 m ³ (1.56 yd ³) Bucket	26 330 (58,050)	41.6 (6.0)	25 900 (57,100)	40.9 (5.9)	25 630 (56,500)	53.3 (7.7)
Reach Boom for CGC						
R2.9 m (9'6") Stick for CGC + HD 1.19 m ³ (1.56 yd ³) Bucket	26 350 (58,090)	41.6 (6.0)	25 920 (57,140)	41.0 (5.9)	25 650 (56,550)	53.4 (7.7)

Major Component Weights

	kg	lb
Upper Structure with 6.8 t (14,990 lb) Counterweight (including full fuel [310 L/82 gal] and 75 kg/165 lb operator)	13 830	30,490
Lower Structure with 790 mm (31") TG HD Shoe	8310	18,320
Lower Structure with 790 mm (31") TG Shoe	7880	17,370
Lower Structure with 600 mm (24") TG HD Shoe	7610	16,780
Base Machine with 6.8 t (14,990 lb) Counterweight and 790 mm (31 in) TG Shoe (HD) without Front Linkage	22 140	48,810
Base Machine with 6.8 t (14,990 lb) Counterweight and 790 mm (31 in) TG Shoe without Front Linkage	21 710	47,860
Base Machine with 6.8 t (14,990 lb) Counterweight and 600 mm (24 in) TG Shoe (HD) without Front Linkage	21 440	47,270
Two Boom Cylinders	420	930
Stick Cylinder for Reach	270	600
Bucket Cylinder for Reach	160	350
6.8 t (14,990 lb) Counterweight	6800	14,990
Reach Boom (includes lines, pins, stick cylinder)	1740	3,840
Reach Boom for CGC (includes lines, pins, stick cylinder)	1750	3,860
R2.9 (9'6") Stick (includes lines, pins, bucket cylinder and linkage)	970	2,140
R2.9 for CGC (9'6") Stick (includes lines, pins, bucket cylinder and linkage)	980	2,160
HD 1.19 m ³ Bucket	1060	2,340
GD 1.3 m ³ Bucket	920	2,030

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 (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	Width		Capacity		Weight		Fill	600 mm (24") TG
		mm	in	m ³	yd ³	kg	lb	%	Reach Boom
									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.

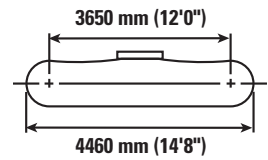
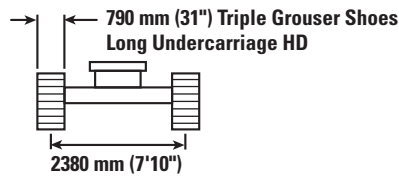
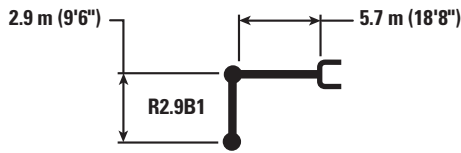
Maximum Material Density:

- 2100 kg/m³ (3,500 lb/yd³)
- ⊙ 1800 kg/m³ (3,000 lb/yd³)
- ⊖ 1500 kg/m³ (2,500 lb/yd³)
- 1200 kg/m³ (2,000 lb/yd³)
- ◇ 900 kg/m³ (1,500 lb/yd³)

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



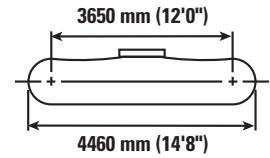
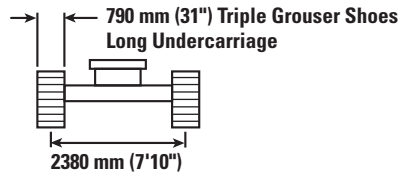
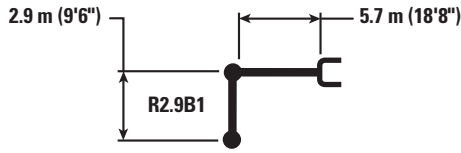
*Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories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



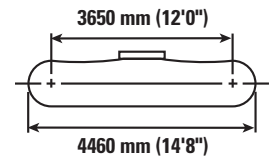
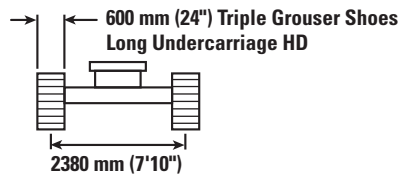
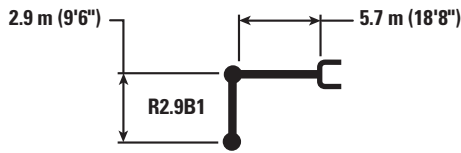
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Lift capacity stays with ±5% for all available track shoes.

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											*4600 *10,450	*4600 *10,450	4490 170
7.5 m 25.0 ft	kg lb					*5600 *12,350	*5600 *12,350	*4900 *9,250	*4900 *9,250			*3850 *8,550	*3850 *8,550	6280 250
6.0 m 20.0 ft	kg lb					*6050 *13,100	*6050 *13,100	*5750 *12,650	5550 11,950			*3600 *7,950	*3600 *7,950	7350 290
4.5 m 15.0 ft	kg lb			*9650 *20,550	*9650 *20,550	*7350 *15,900	*7350 *15,900	*6350 *13,800	5400 11,600	*5800 *11,700	3800 8,150	*3550 *7,850	3450 7,550	8010 320
3.0 m 10.0 ft	kg lb					*9250 *19,950	7800 16,800	*7200 *15,600	5150 11,050	5950 12,800	3700 7,950	*3650 *8,050	3150 6,950	8340 330
1.5 m 5.0 ft	kg lb					*10 900 *23,500	7300 15,750	*8050 *17,400	4900 10,550	5850 12,550	3600 7,700	*3900 *8,550	3050 6,700	8400 330
0 m 0 ft	kg lb			*6950 *15,850	*6950 *15,850	*11 600 *25,100	7050 15,150	7950 17,050	4750 10,200	5750 12,350	3500 7,550	*4350 *9,550	3150 6,900	8180 330
-1.5 m -5.0 ft	kg lb	*7250 *16,200	*7250 *16,200	*11 600 *26,350	*11 600 *26,350	*11 400 *24,650	7000 15,050	7850 16,900	4700 10,100	5750 *12,050	3500 7,550	*5150 *11,350	3400 7,500	7660 310
-3.0 m -10.0 ft	kg lb	*12 150 *27,200	*12 150 *27,200	*14 250 *30,800	13 650 29,250	*10 300 *22,200	7050 15,200	*7650 *16,400	4750 10,200			*6400 *14,050	4050 9,000	6780 270
-4.5 m -15.0 ft	kg lb			*10 600 *22,650	*10 600 *22,650	*7750 *16,350	7350 15,800					*6100 *13,400	5800 13,100	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 ±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/Stage IV 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 floormat
- 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
- 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·SSM)

SAFETY & SECURITY

- Rearview camera with three mirrors 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
- Cat connect technology
- Cat Product Link
- Travel alarm

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") HD triple grouser
- 790 mm (31") triple grouser (North America only)
- 790 mm (31") HD triple grouser (North America only)
- 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

Optional Equipment – Dealer Installed

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

CAB

- Rain protector for front windshield

KITS AND ATTACHMENTS

- Electrical cold weather field installation retrofit kit package
- Cab
 - Seat belt, retractable (76 mm/3" width)
 - Rain protector for front windshield

- Guards
 - FOGS retrofit kit package
 - Mesh for front guard retrofit package
 - Mesh guard, lower half front
 - Vandalism guard with holder
- Safety & Security
 - Security system (MSS)
 - Travel alarm
- Fuel system
- Electric refueling pump with auto shut off (35 L/min [9.2 gal/min]) – factory installed

SAFETY & SECURITY

- Flexible 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

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

AEHQ7851
(ADSD-N, ANZ)

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