308E

Mini Hydraulic Excavator





Engine	
Engine Model	Cat® C3.3 DI Turbo
Net Power @ 2,400 rpm	46.8 kW
Gross Power @ 2,000 rpm	49.7 kW
Bucket	
Bucket Size – Standard Stick	0.38 m³
Bucket Size – Long Stick	0.31 m ³

Weights

•	
Operating Weight – Standard Stick	7160 kg
Operating Weight – Long Stick	7190 kg
Operating Weight – Standard Stick with Blade	7720 kg
Operating Weight – Long Stick with Blade	7760 kg

308E Features

High Performance

Lower fuel consumption and higher fuel efficiency keeps you working all day.

Standard/Power dual mode offers the choice of lower fuel consumption or superior productivity.

Smooth new intuitive flow sharing "High Definition Hydraulic" system provides the level of control demanded in any application.

High Altitude and Cold Start Capability

The 308E is equipped with the new Cat C3.3 DI Turbo engine with altitude capability to 2500 m and cold start capacity as low as -15.7 degrees.

Versatility

Optional long stick provides even greater reach.

Contents

Performance	4
Undercarriage	5
Operator Comfort	6
Monitoring System	6
Engine	7
Serviceability and Customer Support	8
Specifications	10
Standard Equipment	12
Optional Equipment	13
Notes	14

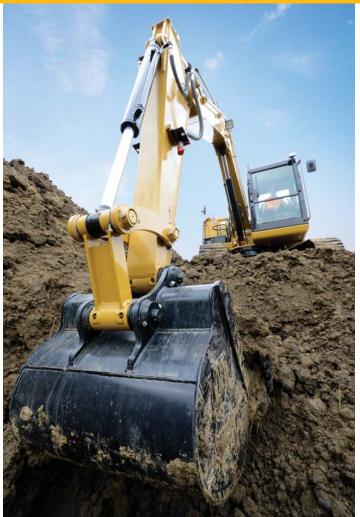




The Cat 308E Mini Hydraulic Excavator delivers superior performance and comfort while reducing your fuel consumption and operating costs. The large spacious cab provides a comfortable work area. Intuitive seat-mounted controls are easy to use for greater job accuracy and efficiency. The standard tail swing design incorporates a counterweight that extends further back on the machine. This provides leverage to create a stable work platform during lifting and digging. The 308E sets the standard for conventional tail swing excavators in the eight-ton size class.

Performance

Powerful digging combined with smooth control.



Hydraulics

Smooth responsive hydraulics give the level of control demanded by the customer in any application, from fine grading and dozing to backfilling.

Powerful bucket and stick digging forces combined with fast cycle times result in world class productivity and performance.

Two speed function improves job site maneuverability and can be selected by an easily accessible foot switch on the control console. Dozer blade float function enables easy ground leveling for landscaping and finish grade applications as well as more efficient job site clean-up.



Lift Capacity

The new Cat E Series has industry leading lift capacity matched with outstanding stability. This provides the control required to meet the diverse and continually changing needs of the customer.

Long Stick Option

An optional long stick is available for the 308E for greater reach in ditch clearing, truck loading and other applications.

Steel Track

The standard 450 mm triple grouser steel tracks provide optimum stability when lifting over the side, in demolition and heavy duty applications.

Optional Dozer with Float Function

The dozer function is pilot controlled from inside the cab, providing smooth, proportional operation. The dozer float function is enabled by pushing the lever fully forward into the decent position. Site clean up and backfilling are easier as the operator does not have to adjust the blade height during travel.



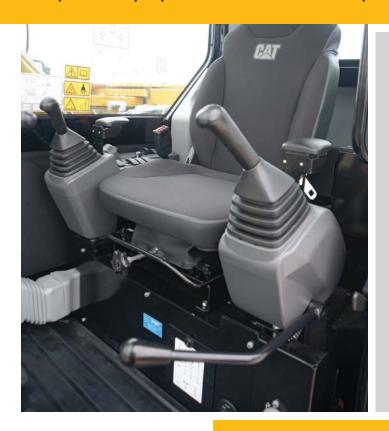
Undercarriage

Excellent stability.



Operator Comfort

Simple, easy operation allows the operator to focus on production.



Operator Station

The operator environment provides the operator with a larger cab and more ingress and egress room. The clear flat floor space allows the operator plenty of leg room. An intuitive cab layout with ergonomic joysticks, standard spring suspension seat and clear display panel makes for ease of operation allowing the operator to focus on production.

Monitoring System

Maintenance and performance

The new monitoring control panel on the E Series was specifically designed by Caterpillar for compact excavators. This system helps you easily keep track of various maintenance and performance parameters of the machine. Maintenance and performance information are all standard on the 308E.

Performance Maintenance Menu

The "Performance" menu allows the operator to view measurements of various system components.

Maintenance Information Menu

The "Maintenance Info" menu allows the operator to view the current hours of use and the recommended change intervals for various system components.





Efficient Engine and Load Sensing Hydraulics

The 308E uses a fuel efficient Cat C3.3 DI engine with a net power rating of 46.8 kW. It features a powerful load-sensing hydraulic system with standard auxiliary hydraulic valve section to provide excellent digging performance and smooth control. Low noise and vibration levels deliver comfortable operation. The C3.3 engine features a new direct injection fuel system that delivers optimum fuel efficiency.

High Ambient Cooling

A high ambient temperature cooling system is standard and features stacked coolers for a compact design.

Cold Start Capability

Cat C3.3 DI engine is equipped with cold start capacity as low as -15.7 degrees.

One Side Maintenance

The Cat C3.3 engine offers superior maintenance convenience with its large steel rear door and two large side doors for easy access to all major components and service points.

Serviceability and Customer SupportEasy access and minimal maintenance requirements keep you working.





Excellent Service Access and "One Side Maintenance" Engine

Daily checks and regular service points including fuel and hydraulic oil fill are easily reached via the large steel rear door and two large side doors. The main hydraulic valve and lines are also easily reached through a removable floor plate and side panels.

The new Cat C3.3 engine features "one side maintenance" to offer superior maintenance convenience. The machine has durable steel body panels all around, offering good resistance to impact damage and helping to maintain the machine's appearance and value.

 $S \cdot O \cdot S^{\text{SM}}$ oil sampling valve allows easy sampling of the hydraulic fluid for preventative maintenance.



Customer Support – Unmatched Support Makes the Difference

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Financing packages are flexible to meet your needs
- · Unmatched parts availability keeps you working
- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production
- For more information on Cat products, dealer services and industry solutions, visit www.cat.com

308E Mini Hydraulic Excavator Specifications

Engine	
Engine Model	Cat C3.3 DI Turbo
Net Power @ 2,400 rpm	46.8 kW
Gross Power @ 2,000 rpm	49.7 kW

- Meets U.S. EPA Interim Tier 2 emission requirements.
- Net power rating per ISO 9249 and SAE J1349.
- Gross power rating per SAE J1995.

Operating Pressure – Travel

Operating Pressure – Swing

Digging Force – Bucket

Digging Force – Stick (standard)

Weights	
Operating Weight with Standard Stick*	7160 kg
Operating Weight with Standard Stick and Blade*	7720 kg
Operating Weight with Long Stick**	7190 kg
Operating Weight with Long Stick and Blade**	7760 kg

- *Weight with cab, 3.7 m boom, 1.82 m stick, 0.38 m³ bucket (945 mm width) and 450 mm shoes.
- **Weight with cab, 3.7 m boom, 2.21 m stick, 0.31 m³ bucket (820 mm width) and 450 mm shoes.

(020 mm width) and 150 mm shoes	•
Engine Dimensions	
Bore	94 mm
Stroke	120 mm
Displacement	3.3 L
Swing System	
Machine Swing Speed	10.8 min ⁻¹
Swing Torque	16.3 kN·m
Hydraulic System	
Load Sensing Hydraulics with Variab	ole Displacement Piston Pump
Pump Flow at 2,000 rpm	147 L/min
Operating Pressure – Equipment	28 000 kPa

28 000 kPa

24 000 kPa

38.9 kN

57.1 kN

Travel System	
Travel Speed – High	5.1 km/h
Travel Speed – Low	3.2 km/h
Maximum Drawbar Pull	56.9 kN
Gradeability (maximum) – High	30 Degrees

Electrical System

Type

• 60-amp alternator.

Standard Stick Length

• 12-volt, heavy-duty batteries.

Service Refill Capacitie	es ·
Cooling System	12.1 L
Engine Oil	11.2 L
Fuel Tank	135 L
Hydraulic Tank	51 L
Hydraulic System	94 L
Front	
Boom Length	3700 mm

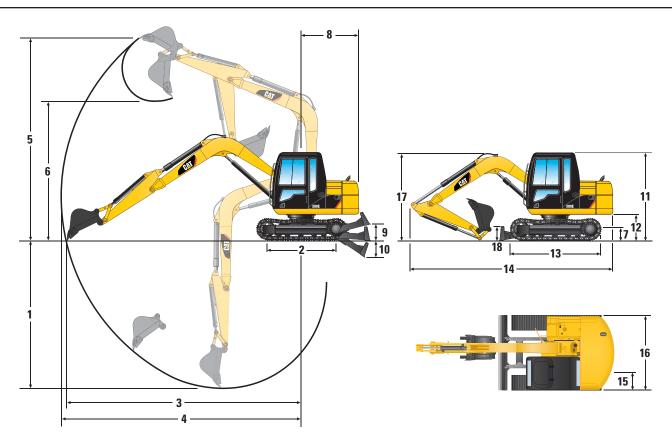
Long Stick Length	2210 mm
Blade	
Width	2300 mm
Height	450 mm
Dig Depth	350 mm
Lift Height	390 mm

1820 mm

Track	
Track Shoe Width (standard)	450 mm
Track Length	2910 mm
Ground Pressure	30.5 kPa
Number of Track Rollers (each side)	5
Number of Carrier Rollers (each side)	1

308E Mini Hydraulic Excavator Specifications

Dimensions



Stick	Standard	Long	Stick	Standard	Long
1 Maximum Digging Depth	4210 mm	4600 mm	10 Blade Down	350 mm	_
2 Length of Track on Ground	2280 mm	_	11 Cab Height	2560 mm	_
3 Maximum Reach at Ground Line	6290 mm	6660 mm	12 Ground Clearance, Counterweight	750 mm	
4 Maximum Reach of Working Range	6420 mm	6780 mm	13 Track Length	2910 mm	
5 Maximum Cutting Height	7330 mm	7610 mm	14 Shipping Length	6080 mm	6030 mm
6 Maximum Dump Height	5300 mm	5590 mm	15 Track Shoe Width	450 mm	
7 Ground Clearance, Frame	370 mm	_	16 Shipping Width	2320 mm	2320 mm
8 Tail Swing Radius	1750 mm	1750 mm	17 Shipping Height	2700 mm	3100 mm
9 Blade Up	390 mm	_	18 Blade Height	450 mm	_

Lift Capacities at Ground Level*

	Lift Point Radius	3000	mm	Maximum Radius		
Lift Point Height		Front	Side	Front	Side	
Ground Line	kg	3100	2400	1100	900	
−3.0 m	kg	2100	2100	1600	1600	

^{*}The above loads are in compliance with hydraulic excavator lift capacity rating standard ISO 10567: 2007 and they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity. The excavator bucket weight is not included on this chart. Lifting capacities are for standard stick.

308E Standard Equipment

Standard Equipment

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

- Diesel engine, C3.3 with electrical governor
- Two speed travel with manual shift
- Cat one key security system
- · Door locks and cap locks
- Signaling/warning horn
- · GPS ready
- · Muffler with cover
- Radial seal air filter, double element
- Stacked cooling package
- Auxiliary hydraulic valve (one)
- Straight line travel
- Accumulator

- Cab:
- Operable front windshield with assist device
- Removable lower windshield with in cab storage bracket
- Windshield wiper and washer
- Interior lighting
- -Coat hook
- Ashtray
- Radio mounting (meet DIN size)
- Two stereo speakers
- Antenna
- -Cup holder
- -Storage pocket
- Mounting for front and top guard (mounting boss)

- Color LCD monitor
- Hour meter
- Retractable seat belt (50 mm width)
- Hydraulic activation control lever (lock out) for all controls
- Two travel control hand levers
- Capability to install one additional pedal for auxiliary hydraulic control
- Seat with suspension
- 450 mm triple grouser track shoes with holes (for rubber pad)
- Towing eye on base frame
- Rearview mirror, mounted on right hand side of upper frame

308E Optional Equipment

Optional Equipment

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

- Blade
- Long stick
- $\bullet \ Lighting-cab$
- Control PTO, auxiliary hydraulic lines from main auxiliary valve to boom foot plus auxiliary control pedal
- Lines Group PTO, auxiliary hydraulic lines from boom foot to stick, stop valves
- Travel alarm
- Heavy duty swivel guard

- Cab front guard
- Drain-oil pan (ecology)
- Heater, water jacket

Notes

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

© 2014 Caterpillar All rights reserved

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

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission. AEHQ7268 (05-2014) (GN1)

